House of Commons

Defence Committee

Helicopter capability

Eleventh Report of Session 2008–09

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Summary

Those who serve the helicopter fleets of all the Services do a superb job, often under difficult and dangerous circumstances. We have been unfailingly impressed by all UK helicopter personnel whom we have met, for their professionalism, dedication and bravery. Helicopters provide many vital capabilities to the modern Armed Forces, from the movement of troops and equipment around the battlefield to the detection and confrontation of submarines at sea. We were concerned both by the proposed reduction in the size of the fleet, and by the emergence of a 'capability deficit' ahead of the introduction of newer helicopters.

The Ministry of Defence currently plans to extend and sustain the lives of several ageing helicopter types in an attempt to minimise this capability deficit. Given the age of both Sea King and Puma and the poor survivability of the Puma, extending their lives at considerable cost is not the best option, either operationally or in terms of the use of public money. We do not believe that these LEPs will provide adequate capability or value for the taxpayer. Only a procurement of new helicopters can meet the original objective of reducing the number of types of helicopter in service within the UK Armed Forces.

In our Report, we describe how the concept of 'helicopter capability' is built upon the four pillars of manning, equipment, training and support. We were told that, of these, it was the manning pillar that was under the most strain. The opportunity to train for some capabilities, in particular amphibious warfare, has suffered as a result of operational demands. The support structures underpinning helicopters seem actually to be something of a success story, with closer working between the MoD and industry paying dividends in terms of available flying hours—one of the key metrics by which the MoD judges performance in-theatre.

Nevertheless, helicopter capability is being seriously undermined by the shortage of helicopters, particularly medium-lift support helicopters, capable of being deployed in support of operations overseas. We believe that the size of the fleet is an issue, and are convinced that the lack of helicopters is having adverse consequences for operations today and, in the longer term, will severely impede the ability of the UK Armed Forces to deploy.

1 Introduction

Our inquiry

1. We decided to inquire into helicopters in October 2008, in the light of the forecast reductions in the size of the fleet in the medium term. Operational experience has firmly established the value of helicopters to a wide range of operations. Indeed, an operational deployment without helicopters would now be very much the exception. Therefore, we wanted to establish whether the forecast reduction in numbers of helicopters would lead to a reduction in overall capability. We soon found that the meaning of 'helicopter capability' varied with its use, and could be used to describe everything from the efficiency with which helicopters are maintained to the operational effect that they produce in-theatre. We set out these different definitions in greater detail below, explain how they relate and how, to some extent, they are interdependent.

2. We announced the terms of reference for our inquiry on 12 March 2009, and we received written evidence from the MoD, industry and learned societies. Before holding oral evidence sessions, we visited the military bases at Middle Wallop and RNAS Yeovilton on 6 May 2009. We spoke to a wide range of personnel from all three Services, from those at Joint Helicopter Command in charge of all battlefield helicopters to the maintenance crew responsible for keeping deployed helicopters in the air. **Our visit to Middle Wallop and Yeovilton proved invaluable and we record our thanks to all those involved. Our discussions that day have informed our oral evidence sessions, and indeed, this Report.** On 19 May 2009, we took evidence from representatives from industry. On 2 June 2009, we took evidence from the Armed Forces, the Minister for Defence Equipment and Support (Quentin Davies MP) and officials.

Why helicopters?

3. In its written memorandum to us, the Royal Aeronautical Society describes helicopters as "one of the most versatile and ubiquitous of military platforms".[1] The RAeS notes further that "from its early roles in medical evacuation and tactical transport, the helicopter has evolved into a formidable offensive aircraft, as well has emerging as a powerful element in the provision of tactical heavy lift."[2] The Minister confirmed in evidence to us that, for the Armed Forces, "Helicopters are absolutely key assets. We could not contend with the challenges in insurgency and counter-insurgency operations like those in Iraq and Afghanistan without helicopters."[3] Put simply, helicopters are key enablers for the Armed Forces to do their job. Recent operations in Iraq and Afghanistan have required extensive use of helicopters, in particular to avoid the threat from roadside Improvised Explosive Devices (IEDs), a practice developed in response to the threat from IEDs in Northern Ireland. Helicopters are not, however, invulnerable. In Afghanistan, the threat from small-arms fire, rocket-propelled grenades and anti-aircraft guns is very real. The risk is mitigated through a combination of defensive aids suites (DAS) and advanced flying

1 Ev 48, para 2

2 *ibid.*

3 Q 147

tactics, but in a case such as a casualty evacuation (CASEVAC) in a hostile environment, the decision taken by a Commander to deploy a helicopter is still finely balanced and requires a great deal of skill and nerve from the pilot and air crew.

4. As well as being an enabling force, helicopters are widely recognised as a force-multiplier that is, a force element which increases the effectiveness of others on the battlefield. In its memorandum, the RAeS argues that "theatre forces without the tempo, mobility and reach provided by helicopters are likely to have to be larger to achieve the same aims and would operate at a higher level of risk."[4] Rear Admiral Tony Johnstone-Burt, Commander of the Joint Helicopter Command, told us that helicopters could "deliver tempo to the ground force commander; in other words, they can ratchet it up or down, manoeuvre and put in fresh troops without breaking contact."[5] Furthermore, the roles played by helicopters are an effective counter to the challenge of so-called 'hybrid warfare', a term coined by Frank Hoffman, an American academic. Hybrid warfare is a mix of conventional and unconventional methods of warfare, which may vary from day to day or even hour to hour. In a recent speech at the 2009 Air League Slessor Lecture, Major General Barney White-Spunner, Commanding Officer of 3rd (UK) Division and former commander of 16 Air Assault Brigade, described the role played by helicopters in meeting the challenge posed by the combination of conventional and unconventional tactics. Rear Admiral Johnstone-Burt described how the modern insurgent "can move at will; he can exploit the dense urban environment and terrain; he can use the local infrastructure and transport facilities to hide, plan, attack and escape at will and use it to his own advantage in dislocating our own forces".[6] His view was that "the battlefield helicopter is the perfect antidote to the hybrid warrior in the sense that the agility, flexibility, versatility and potential lethality of a battlefield helicopter counter the apparent advantages of the hybrid warrior".[7] This has all been brought to the fore by recent events, and has necessitated a very public explanation of what the Government sees as being the role of helicopters in current operations in Afghanistan.

5. The blurring of the hi-tech and more primitive methods in insurgency operations is mirrored to some extent by the convergence of tactical roles played by the helicopters themselves. Older helicopters have adapted to the hybrid battlespace: Chinook, for example, provides both 'heavy lift' of troops and kit and CASEVAC as described above. Newer platforms such as the Apache have been designed with the convergence of tactical roles in mind. Contributing to Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) has become a key task for all helicopters.[8] There are also good cost and efficiency arguments for multi-role helicopters. The large number of types and variants of helicopter in use within the UK Armed Forces leads to inefficiencies and increased costs.[9] The MoD's current plans include the consolidation of several 'legacy' platforms into the Future Medium Helicopter, an issue which arose several times in the

4 Ev 49, para 4

5 Q 134

6 Q 131

7 *ibid.*

8 We are inquiring separately into *The contribution of ISTAR to operations*, and will hold further oral evidence sessions in the autumn.

9 Q 153

course of our inquiry. We were also made aware of the value of the helicopter for the maritime commander, especially in its potential for extending the reach of frigates and destroyers. **Helicopters provide many vital capabilities to the modern Armed Forces and, with the challenge of hybrid warfare, are becoming increasingly relevant to current and contingent operations. Their status as force-multipliers lends further weight to their value. They are a cost-effective means of increasing the operational impact of other force elements and therefore, of operational capability generally. As such, it is essential that the fleet should be 'fit for purpose', both in terms of quality and quantity.**

Helicopters in the UK Armed Forces

6. Each branch of the Armed Forces operates helicopters, which are classified by the capabilities they provide.[10] The MoD identifies three 'core' types: support, find and attack, and search and rescue. Support helicopters, responsible for moving equipment and personnel, are further classified by the 'Maximum All Up Mass' into heavy lift, medium lift and light.[11] Find and attack helicopters differ between the maritime and battlefield environments. On land, targets range from buildings to machine gun emplacements. At sea, helicopters are equipped to locate and attack vessels on or under the water. As further evidence of the convergence of roles, military search and rescue is carried out by both find and attack and support helicopters.[12] Operational control of battlefield helicopters is devolved to the Joint Helicopter Command (JHC). JHC was established in 1999 in order to bring a joint approach to the provision of battlefield helicopters from each of the three Services. It is responsible for the operational control of the Royal Navy's Commando Helicopter Force, the Army Air Corps, and the Royal Air Force's medium and heavy lift fleets.

7. The Royal Navy maintains a maritime patrol capability through two marks of Lynx (Mk 3 and Mk 8) and one of Merlin. The Sea King Mk 7 is used for Airborne Surveillance and Control, and has recently been deployed to Afghanistan. In addition to this 'grey' helicopter fleet, the Royal Navy provides the Royal Marines with an airborne capability through the Commando Helicopter Force (CHF). The CHF uses two marks of Sea King (Mk 4 and Mk 6c) and one of Lynx (Mk 7). The Mk 4 Sea Kings are deployed on an enduring basis in Afghanistan, and the Lynx operate alongside the Lynx flown by the Army Air Corps. Within the UK, the Sea King Mk 5 is used by Search and Rescue.

8. The Army Air Corps provides find and attack capability on the battlefield. Two marks of Lynx (Mk 7 and Mk 9) are used for reconnaissance, direction of fire, light troop transportation and command support. The Apache attack helicopter was deployed to Afghanistan in 2006, since when it has played a critical role in supporting operations through close combat attack. The Gazelle fleet is being run down as it is no longer fit for overseas deployment, but retains some utility for certain training and support tasks in the United Kingdom.

10 Ev 56, paras 1.4–1.16

11 Ev 55, para 1.2

12 UK based search and rescue is delivered by Mk3/3a and Mk5 Sea King.

9. The Royal Air Force supplies the backbone of the support helicopter fleet. The medium and heavy lift aircraft used for moving troops and equipment around the battlefield are the Chinook Mk 2/2a, the Merlin Mk 3/3a and Puma. In the UK and Falklands, the Sea King Mk 3 provides a Search and Rescue capability. The demand for increased flying hours from the Chinook fleet has led to improved in-theatre support arrangements being developed. Above and beyond the now-standard Integrated Operational Support (IOS), the MoD and Boeing have collaborated to develop a system known as Through Life Capability Support (TLCS) for Chinook. David Pitchforth of Boeing told us on 19 May that "When we took that [TLCS] on three years ago we contracted for 12,000 flying hours of Chinook. The RAF had never achieved 12,000 hours at the point when we took over the contract. We are now heading towards 16,000 hours with a target of going even higher than that in the future."[13] In our second evidence session on 2 June, Commodore Russ Harding, Head of Equipment Capability (Air & Littoral Manoeuvre), added that he "and perhaps others sitting here need to look at the other forces because the Chinook model that I hold up needs to be replicated in other places. We need to see how we get that sea change in doing that".[14]

10. Following the drawdown in Iraq, Afghanistan is set firmly as the focus of the MoD and Armed Forces' efforts. One consequence of placing that mission on a 'campaign footing' is that what helicopter assets the UK has there are intended to remain for the foreseeable future. Co-ordinated by Joint Helicopter Command, they are tasked by a Commander Joint Aviation Group in order to produce operational effect for the Commander of Regional Command South.[15] Although "the lion's share of the British helicopter capability" goes towards supporting Task Force Helmand, the capability is held centrally along with those provided by other nations in order to maximise flexibility for operations.[16]

11. Afghanistan's hot and dusty conditions prove very challenging for helicopters designed for use in Europe, the Arctic and sea operations. We were told that serviceability rates were good, but that the older helicopters "find it harder work and more of a challenge than the others, specifically the Sea Kings."[17] It is essential that available flying hours are maximised, and to this end the Sea Kings have been fitted with new rotor blades and a five-rotor tail, which has improved lift. Maintenance issues are central to in-theatre capability. The Minister told us that he was "interested in outputs rather than inputs; I am not interested in counting platforms but buying capabilities."[18] This question of 'inputs' arose the week after our second evidence session of this inquiry, when we took evidence as part of our inquiry into *The Comprehensive Approach* from Brigadier (retired) Ed Butler, a former commander of British Forces in Afghanistan. He explained that the threat from IEDs in Northern Ireland had forced the movement of personnel into helicopters. In 2006 he had advised that deploying more troops to Afghanistan without a commensurate increase in

13 Q 61

14 Q 196

15 Qq 94–95

16 Q 96

17 Q 102

18 Q 171

the amount of tactical lift would lead to severely reduced mobility.[19] **Significant improvements have been made to the availability of key assets such as Chinook. However, in the longer term, increased availability will be no substitute for additional capacity. Adequate capability is also a question of numbers of airframes.** We will return to this later in our Report.

19 Uncorrected transcript of oral evidence taken before the Committee on 9 June 2009 for it's inquiry into *The Comprehansive Approach*, HC (2008–09) 523–i, Q 79

2 Defining capability

The four-legged stool

12. The 'METS principle' describes capability as the combination of Manpower, Equipment, Training and Support. Within the JHC, an analogy has been drawn between helicopter capability and a four-legged stool. In evidence to us, Rear Admiral Johnstone-Burt explained that, for the purposes of planning for between 15 and 20 years of sustainable capability on operations, each leg of the stool (people, support, training and aircraft) "must be as strong and as long as each other; otherwise, the stool will fall over."[20] He added that "there are strengths and fragilities in each stool depending on the aircraft type we are talking about, but one leg that is probably the least robust is the people", by which we took him as meaning manpower levels.[21] We found this analysis persuasive.

Manpower

13. The Rear Admiral's identification of people as 'probably the least robust' did not come as a great surprise. Manning is not a challenge exclusive to the helicopter fleets, but we did learn that the frequency with which personnel are being deployed to high-intensity operations is having an effect on retention. Rear Admiral Johnstone-Burt told us that "The manning situation as a whole for all our crew—air crew, ground crew and engineers—is okay and we are managing, but we are at maximum stretch and there are hot spots in certain areas depending on the fleet we are talking about."[22] He identified Apache pilots and engineering technicians as areas in particular need of improvement. Although each of the Services have different harmony guidelines, the JHC has its own, "a rule of five, so it is one on four off".[23] Rear Admiral Johnstone-Burt instituted the 'rule of five' "because it was sustainable and robust and I could guarantee that with 20% on operations and 80% doing other things I could ensure that was a robust, enduring capability at this tempo for the next 15 to 20 years."[24] The JHC harmony guidelines reflect both the high level of activity and commitment to training and leave, both of which are essential for the purposes of performance and retention. To illustrate the consistently high level of activity, the Chinook fleet has been on operations almost continuously for 25 years.

14. The intensity and tempo of current operations create great demands in terms of support, and keeping helicopters serviceable and available for operations is a key challenge for the MoD to face. Closer working with industry is, by all accounts, paying dividends, but problems do exist with, for example, the number of spares for certain newer helicopters. The National Audit Office's report on *Support to High Intensity Operations* states that over the last two years the MoD has delivered "on average 5% above its target for serviceable helicopters to support operations" but that this has come at the cost of "availability of United Kingdom-based helicopters since 2006 [being] on average 11% below the

20 Q 128

21 *ibid.*

22 Q 108

23 Q 109

24 Q 114

Department's target, reflecting the priority the Department gives to equipment deployed on operations".[25] Rear Admiral Johnstone-Burt commented to us that "we talk about ourselves being on what we call a campaign footing. My focus has been exclusively on delivering success in Afghanistan and Iraq."[26] Such prioritisation is entirely appropriate, but it should be noted that the stretch placed on resources is such that delivering increased capability to theatre is not without cost.

15. One such cost is in the time, manpower and aircraft available for training, particularly larger-scale or more demanding training scenarios. The particular areas identified in the course of the evidence we took where current tempo is impacting upon training were littoral (ship to shore) manoeuvre and large-scale amphibious operations. Rear Admiral Johnstone-Burt said that being able "to land and take off from moving decks in rough seas by day or night" was a "core capability because if necessary we need to do that come what may. We are just keeping the flame alive in that sense, but we need to work at it."[27] It is very difficult to practice moving of large numbers of Royal Marines from sea to shore at a time when demands on their time, and of the necessary helicopters, are so great.

16. This leads to the fourth leg of the stool: the helicopters themselves. Much of the debate around the issue of helicopters takes—as we have done—as its starting point the forecast reduction in the size of the fleet. In its written memorandum to us, the MoD attributes the reduction to "changes in the way the Department delivers battlefield capabilities".[28] The MoD gives three examples. The Gazelle, a light helicopter, has an out of service date (OSD) of 2012 and will not be replaced. The MoD has 22 Gazelle in the fleet. The Search and Rescue Sea Kings (Mks 3/3a and 5) will be replaced by a joint PFI with the Maritime and Coastguard Agency. Lastly, the MoD points to "changes in technology and support solutions […] which allow us to provide greater capability with fewer helicopters or through the use of other assets such as UAVs."[29] The MoD bases its plans for the configuration of the Department's future helicopter fleet on "an assessment of the optimum mix of platforms (both helicopters and other non-rotary platforms) to meet capability requirements."[30]

17. Each of the steps intended to improve the operational capability of helicopters as set out in the MoD's memorandum are quite sensible. However, none of them account for the quite substantial reduction in medium and heavy lift, namely the support helicopters which move troops and equipment around the battlefield. We make an assessment of the future of the support helicopter fleet in the next chapter.

25 National Audit Office, *Support to High Intensity Operations*, HC 508, Session 2008–09, para 1.16

26 Q 122

27 *ibid.*

28 Ev 58, para 1.22

29 *ibid.*

30 *ibid.*

The three elements of helicopter capability

18. The MoD suggests in its memorandum that (in some cases, at least) it will be possible to deliver "greater helicopter capability with fewer helicopters".[31] This rather counter-intuitive type of argument is often brought up during discussions of military technology in terms of firepower. Indeed, the Minister gave the example of the comparison of a Lancaster bomber with a Joint Strike Fighter.[32] He went on to ask

> Does it mean that eventually we can have just one or two combat aircraft or helicopters in operation? Of course not. There comes a point when the graph begins to curve rather sharply and you no longer get advantage by replacing numbers with improved technology and effect.[33]

We are glad that the Minister recognises that improved technology, whilst welcome, is only part of helicopter capability. We set out the three elements of capability in the table below.

Table 1: Three elements of helicopter capability

Capability	Description
Individual	The technical specification of the helicopter, as expressed in terms of its ability to lift, move (in terms of range and speed), and fire (if applicable). In this sense, as technology improves, newer types of helicopter become more capable. Individual capability can be increased by upgrades and new procurements.
Corporate	The ability of the helicopter fleet to support the operations of the UK Armed Forces. It depends on two things: the type capability of the constituent helicopters and the numbers in service and 'effective'. Together with individual capability, corporate capability is the 'input' of helicopter capability. Corporate capability is increased by increasing the size of the effective fleet.
Operational	The ability of deployed helicopters to contribute to operations, or the Minister's 'outputs'. Typically expressed in terms of availability or 'flying hours', operational capability is increased through improving the support arrangements for helicopters through, for example, closer working with industry, greater availability of spare parts or by having more ground crew able to maintain them.

What is 'more'?

19. Brigadier Abraham told us that "Helicopters are like money in your bank account. If you are asked whether you would like some more the answer is always yes. Do you have enough to do what you have to do? The answer is yes."[34] However, 'what you have to do' is a very flexible concept, and several highly credible sources have made clear that the current lack of tactical lift is limiting operations. In its report on *Support to High Intensity Operations*, the NAO expands on the Brigadier's point, stating that "In Afghanistan, senior commanders on the ground have sufficient helicopters to undertake their key tasks, but greater availability of these helicopters would give them more flexibility in the planning of

31 Ev 58, para 1.22

32 Q 178

33 *ibid.*

34 Q 138

deliberate offensive operations."[35] During our inquiry into readiness and recuperation, Lieutenant General Sir Graeme Lamb KBE CMG DSO, Commander Field Army, told us that "if I were a commander in Task Force Helmand and had another five Chinooks I would have a chance to manoeuvre in another way."[36] This may appear to be a mere truism, but over the course of our inquiry we have sensed that senior commanders have been reluctant to admit that manoeuvres in-theatre are in any way being limited by the size of the deployed fleet. In other words, Brigadier Abraham's statement is only true up to a point. The MoD insists that all that is needed is to squeeze a bit more availability out of the fleet and increase the flying hours. However, its duty to make the best use of public money means that the MoD should be doing this anyway – striving to improve availability and efficiency for their own sakes, irrespective of the benefits.

20. We raised the question of numbers and tactics with the Minister, who responded that

> I agree that there are certain minimum numbers that you tend to need for any particular tactical purpose, but I do not agree that two airframes are always better than one. For example, I do not suppose for a moment that two Gazelles are better than one Apache. That would be crazy. One Apache is probably better than 10 Gazelles.[37]

Such a suggestion would indeed be crazy. It would also be a category error, confusing the discrete questions of *individual* and *corporate* capability. In its written memorandum, the RAeS argued that "one helicopter can only be in one place at any one time so a reduction in total numbers of helicopters deployed represents a dilemma for a field commander."[38]

21. **We do not believe that the question of helicopter capability can be properly answered without reference to the size of the fleet. We are concerned that operational commanders in the field today are unable to undertake potentially valuable operations because of the lack of helicopters for transportation around the theatre of operations. We are also concerned that operational commanders find they have to use ground transport, when helicopter lift would be preferred, both for the outcome and for the protection of our forces. Furthermore, we are troubled by the forecast reduction in numbers of medium and heavy lift battlefield helicopters, which will make this worse. We have an additional concern in respect of the apparent lack of training that is taking place for amphibious operations.**

35 National Audit Office, *Support to High Intensity Operations*, HC 508, Session 2008–09, para 1.21

36 Oral evidence taken before the Committee on 3 February 2009 for it's inquiry into *Readiness and recuperation of the Armed Forces*, HC (2008–09) 122–i, Q 103

37 Q 177

38 Ev 49, para 5

3 Aircraft and support

Aircraft

Types and marks

22. Table 1 in the MoD's written evidence to us sets out the helicopters currently in use with the Armed Forces.[39] Of the types of helicopter in service, several have subset marks. There are, for example, four different marks of Lynx, three of Merlin and five of Sea King. Beyond this, as additional equipment is added through the Urgent Operational Requirement (UOR) process, the coherence of the fleet is reduced further, which impacts upon how easily they can be maintained. Mr Nick Whitney of AgustaWestland told us that

> Where you get problems I think is when you modify smaller batches of aircraft within those fleets. That is when you get the problems in terms of support. You get a different mark of aircraft and this is particularly relevant when you are on operational deployment and you are looking to fit certain pieces of equipment for operations that you will not fit to the rest of the fleet. That can give difficulties in terms of support and maybe training and other areas and lines of development.[40]

23. Several of the organisations which submitted written evidence to us argued that a fleet with fewer types of helicopters would be more capable, easier to support and cheaper to run. The Society of British Aerospace Companies wrote that "a fleet which consists of a wide variety of aircraft is likely to incur significant costs in terms of maintenance and support. A more standardised fleet maximises value for money and introduces broad cost savings across all the lines of development."[41] This point was echoed by Mr Nick Whitney of AgustaWestland in oral evidence, when he said that

> There is a fixed cost associated with operating aircraft. The more aircraft you have, the more you spread that fixed cost across your fleet. Equally, the points you raise about having small fleets, the training burden and the additional cost that that incurs, the problems that that incurs can all be solved by having reduced numbers. You need the budget to be able to make that happen.[42]

24. The MoD is planning to reduce the number of different helicopter types through a programme of retiring some obsolete models and consolidating others. The introduction of Future Lynx will reduce the number of Lynx helicopters from four sub-types to two, and plans for a 'Future Medium Helicopter' (FMH) will, if proceeded with, consolidate Sea King Mk 4 and Puma into one type with battlefield and maritime marks. Other helicopter types such as Chinook and Apache have plenty of life left in them and can have their OSDs pushed back through a mixture of capability sustainment (CSP) and life extension (LEP)

39 Ev 60, table 1

40 Q 6

41 Ev 46, para 3.1

42 Q 8

programmes. Enclosure 1 to Section 2 of the MoD's written memorandum to us illustrates the current plans for the provision of helicopter capability in the medium term.[43]

Extending and sustaining

25. If the life of one type of useful platform can be extended by replacing and upgrading particular parts at a reasonable cost, then it is entirely sensible as a general principle. There are, however, cases when life extension programmes are not the right choice. During the inquiry into *Future Capabilities* conducted by our predecessor Committee, the then Chief of the Air Staff (now Chief of the Defence Staff) Air Chief Marshal Stirrup said that

> In terms of the overall efficiency of the helicopter force, the sooner we can reduce the overall numbers of types, the more output we will get from the force as a total. It is not just a case of extending old types in service to meet the requirement, that is not necessarily the most efficient way of doing it.[44]

26. The MoD currently plans to extend the lives of the Puma and Sea King Mk 4 fleets, in order to bridge the gap between now and the introduction of FMH between 2017 (for the maritime version replacing Sea King Mk 4) and the early 2020s (for the battlefield version replacing Puma). We raised specific concerns with industry witnesses on 19 May with reference to the proposed extension to the life of the Puma fleet. Answering the general question of how the decision to extend a legacy airframe or not is taken, Mr Nick Whitney from AgustaWestland explained that

> Industry will have a requirement to upgrade an aircraft and we will upgrade that to within the design specification that is laid upon us. That may or may not prove possible. If you require full crashworthiness on an old aircraft that may not be possible because physically the structure is incapable of being upgraded to that point.[45]

27. On the specific question of the Puma LEP, Mr Derek Sharples from Eurocopter told us that the project would "see the aircraft re-engined; new avionics systems; new digital autopilot; it will see new engine control systems; new tail rotor blades; a strengthened tail."[46] These improvements would undoubtedly make Puma a better helicopter, but would not affect the aircraft's crashworthiness and aspects of survivability. At our second session on 2 June, the Minister said that he "did not like the sound" of using crashworthiness as a factor, as he "would not dream of flying any helicopter that we were not absolutely certain was as safe as it possibly could be".[47] This sounded to us as if the MoD had begun to share our doubts as to whether extending the lives of both Sea King Mk 4 and Puma would really be a sensible course of action to take, taking account of the age of the Sea King and the survivability of passengers in the Puma in the event of an uncontrolled landing. The

43 Ev 70

44 Defence Committee, Fourth Report of Session 2004–05, *Future Capabilities*, HC 45–II, Q 223

45 Q 42

46 Q 46

47 Q 160

Minister admitted that proceeding with the LEP would result in "extended exposure to risk"[48].

28. The Minister acknowledged this possible risk when he revealed that in fact, he had

> asked for a complete re-examination of this matter which admittedly is at the eleventh hour. It does not mean to say that we are to go in a different direction; we may go back to the model that I have just set out which is the formal position of the department today. We do not have any consents from the Treasury or anywhere else to go in any other direction and I may not seek them. It may be that we shall decide to go in another direction even at the eleventh hour but we shall do it without holding up matters at all, so we shall take decisions very rapidly. The alternative, which I want to ensure we fully explore, is the possibility of dispensing with the need to spend the taxpayers' money on upgrading aircraft which have reached a certain age. The Pumas must be 30 years' old."[49]

He went on to expand on this statement, saying that what was being discussed was "bringing forward the future medium helicopter procurement which would then certainly need to be done on a modified off-the-shelf basis".[50] If it went ahead, it would "not be quite a UOR but possibly not the rather laborious full-scale classic international tender which up to now has been the policy and formally remains the procurement policy for the future medium helicopter".[51] Finally, he said that he wanted "to make absolutely sure we have fully explored the alternative before we sign contracts. In any event we shall be signing contracts in the course of this year."[52] **While we are grateful to the Minister for raising with us his uncertainties about the decision to extend the life of Puma, we do not feel that we were given the full picture on this issue by other witnesses. We very much regret this.**

The next ten years

29. In 2004, the National Audit Office produced a report on *Battlefield Helicopters* in which it calculated that there was a 38%. deficit in available helicopter lift, which would continue until 2017/2018.[53] Over the course of our inquiry, it became evident that the biggest long term challenge was in the support helicopter fleet. The deficit emerges in the form of the Sea King Mk 4 and Puma fleets. Battlefield lift is predominantly provided by the RAF in the form of Puma, Merlin, and Chinook. The CHF provides the Sea King Mk 4, which is capable of both battlefield and seaborne amphibious support. Over the next ten years, numbers of Mk 3 and 3a Merlin are expected to remain the same, as long as the Capability Sustainment Programme is agreed to. If the Chinook fleet suffers no losses, it too will remain the same, but will be augmented by the addition of the eight 'reverted' Chinook Mk 3 procured in the early nineties.

48 Q 161

49 Q 157

50 Q 159

51 *ibid.*

52 *ibid.*

53 National Audit Office, *Battlefield Helicopters*, HC 486, Session 2003–04, figure 13

30. It is worth noting that, even with the LEP, there is a serious question mark over whether Puma, even in its upgraded form, would be of limited utility in combat operations. **Given the age of both Sea King and Puma and the poor survivability of the Puma, extending their lives at considerable cost is not the best option, either operationally or in terms of the use of public money. We do not believe that these LEPs will provide adequate capability or value for the taxpayer. Only a procurement of new helicopters can meet the original objective of reducing the number of types of helicopter in service within the UK Armed Forces.**

Support

Urgent Operational Requirements

31. In its written memorandum, the MoD explains that

> Whereas the Equipment Programme is designed to deliver long-term core capabilities that can be employed globally to meet a range of potential future threats, the intention of UORs is to adapt and respond quickly to unforeseen requirements specific to particular operational environments and emerging threats—for example as a result of the enemy forces' developing techniques, tactics and procedures.[54]

In our Report on *Defence Equipment 2009*, we concluded that "the Urgent Operational Requirement (UOR) process has continued to prove highly effective in enabling vital equipment to be provided in quick time to our Armed Forces in Afghanistan and Iraq."[55] The helicopter fleet has benefited from significant improvements delivered through the UOR process, for example:

- the fitting of improved Defensive Aids Suites;
- the upgrading to 'Carson' rotor blades on the Sea King Mk 4;
- the fitting the Merlin Mk 3 with the British Experimental Rotorcraft Programme (BERP) Mk 4 blades;
- the addition of Display Night Vision Goggles to the Sea King Mk 4 and Merlin Mk 3; and
- the upgrading of the engines of 22 Lynx Mk 9 with the Rolls-Royce T800 engine.[56]

32. All of these are welcome. The National Audit Office notes that "[n]one of the helicopter types were designed specifically to undertake missions in hot and dusty countries such as Iraq and Afghanistan",[57] and furthermore, that "[t]he mountainous nature of Afghanistan also means that helicopters are forced to fly at higher altitudes where the air is thinner and greater engine and rotor-blade performance is required."[58] The improvements to rotor-

54 Ev 75, para 3.27

55 Defence Committee, Third Report of Session 2008–09, *Defence Equipment 2009*, HC 107, para 29

56 Ev 75, para 3.30

57 National Audit Office, *Support to High Intensity Operations*, HC 508, Session 2008–09, para 1.18

58 *ibid.*

blades and engines will doubtless decrease the frequency of occasions on which it is simply too hot to get a helicopter off the ground with the required load on board, but it remains to be seen just how much of a difference it makes over the hottest part of the year.

33. Over the course of our written and oral evidence-taking, two primary concerns on the issue of UORs emerged: the first, their impact upon coherency, and the second, the question of 'theatre-entry standards'. SELEX Galileo drew attention in its written memorandum to the procurement of Defensive Aids Suites (DAS) as an example of a time when a less disruptive strategy could have been adopted.[59] In her evidence to us, Dr Beatrice Nicholas from SELEX Galileo explained that she believed the specification for the UOR was "often interpreted extremely narrowly", which had implications for future coherency.[60] We raised the question of the impact of UORs upon coherency and the creation of so-called 'fleets within fleets' with the Minister, and he admitted that

> UORs always do raise the issue of coherence because the theory is that you are buying something for just one particular campaign and operation and may not want to have it as part of your core defence capability. That is the theory of it, but in practice you may well say that there are other insurgency-type operations in similar conditions and that something you have purchased for one particular UOR ought to be kept in permanent inventory and you should maintain the support, spares, training and so forth accordingly.[61]

34. The question over theatre-entry standards arose in the course of our visit to Middle Wallop and Yeovilton. Both air and ground crew told us that there were significant differences between the aircraft available in the UK for training and familiarisation and those deployed in-theatre. However, when we put this to the Minister, he went to great length to assure us that

> [I]t is an absolute principle when we buy new equipment under the UOR, apart from the core defence programme, that we buy sufficient number to ensure people can be trained on exactly that type of equipment. This goes across the board; it is not just helicopters. We always specify the numbers and amounts of equipment we need to procure taking into account the training programme so we do not have anybody going out to theatre who has not been trained on the type of equipment, whether it is weapons, communications equipment, armoured vehicles or what have you, with which they will then be working in Afghanistan. In the best run organisation something sometimes may just fall between the cracks. I trust that has not happened on this occasion. We will pursue it. That is an absolute principle. Sometimes I have expressed frustration because we cannot get more of something out into theatre—I will not say what it is—and I am told, "No, Minister; we really need this number here for training." We have that dialogue the whole time. We take the training requirement very seriously and do not want our men and women to go out to Afghanistan and run any risk at all because they are suddenly confronted with something on which they have not already been properly trained. It is an absolute

59 Ev 40, paras 13–17

60 Q 82

61 Q 180

> principle that before we send anybody out to a war zone they are given the best possible training on exactly the kit they will use in theatre.[62]

35. **We welcome the Minister's assurance that he is committed to minimising the difference between the equipment standards on an Apache in the UK and an Apache in Helmand. The MoD should commit to making training aircraft as close to the theatre-entry standard as is affordable, and we realise that this might be achieved by fitting improved systems on training aircraft in the United Kingdom or by teaching key pilotage techniques on unmodified aircraft.**

Industry's role

36. The MoD's relationship with the helicopter industry is described in the Defence Industrial Strategy (DIS)], published in December 2005.[63] In our Report on *Defence Equipment 2009*, we recorded that "[a] key objective of the DIS was to move to a Through Life Capability Management (TLCM) approach to acquiring and managing defence equipment programmes",[64] but noted that "some industry representatives have raised concerns that the TLCM approach has not been fully embedded".[65] We took evidence on both the current status of DIS and TLCM in the course of our inquiry.

37. It was clear to us from the evidence that we took that Industry's position on DIS is best characterized as anticipatory. It was striking both how easily industry referred to DIS in the past tense, and how there seemed to be consensus that a new version was necessary. Mr David Pitchforth told us that Boeing, which works with the MoD on the highly successful Chinook TLCM programme,

> embraced the Defence Industrial Strategy as a good thing, which gave clarity to industry; and we have invested because of it and we would actually like to see that strategy reinvigoured and picked up and moved forward again so we can continue to use it as a roadmap to how we should be engaging with the Ministry of Defence.[66]

He later added that

> I think there is another version of the Strategy which is imminent, I guess, and we would be interested to know what that says about some of these other points that would need addressing.[67]

38. This perspective was consistent with the written evidence submitted by the RAeS which expressed concern that "ambiguity in the Defence Industrial Strategy and associated Defence Technology Strategy might lead to a long term erosion of the UK's rotorcraft defence technological and industrial base."[68] The recent Ministerial reshuffle within the

62 Q 186

63 Ministry of Defence, *Defence Industrial Strategy*, CM 6697, December 2005, pp. 90–94

64 HC (2008–09) 107, para 196

65 *ibid*., para 197

66 Q 57

67 Q 59

68 Ev 50, para 13

MoD saw the return of Lord Drayson as Minister of State for Strategic Defence Acquisition Reform, with responsibility for Defence Acquisition Reform, Defence Science and Technology and the Defence Industrial Strategy. Whether this indicates a revitalisation of the long-awaited DIS 2.0 remains to be seen, but it seems unlikely that any progress on DIS will be completed before the Minister's deadline of "the end of the year" for signing contracts on either the medium-lift LEPs or a modified-off-the-shelf-FMH substitute. **We were concerned to hear from industry that the Defence Industrial Strategy, so far as it relates to helicopters, needs to be 'picked up and moved forward again'. The loss of momentum in relation to the Defence Industrial Strategy may lead to significant acquisitions in this sector taking place without sufficient reference to the DIS. This would be regrettable if it prevented greater rationalisation of helicopter types for the reasons we set out above. We urge the MoD to avoid this if at all possible.**

39. On the positive side, closer working between the MoD and industry has proven highly beneficial. Integrated Operational Support and Through-Life Capability Management have both paid dividends in terms of available flying hours. Mr Nick Whitney from AgustaWestland explained to us that "[w]ith the new contracting methods, there is incentivisation on the industry to improve the product through-life. Previously that has not happened […] These long-term support contracts equally allow that to happen with much greater urgency and much greater effect."[69] He concluded that "[b]usiness needs predictability; and the Ministry of Defence obviously needs flexibility and it is a balance. I think the IOS arrangements allow us to strike the right balance with improved value for money."[70] Mr David Pitchforth gave us an example of the benefit that Boeing had been able to deliver, when he said that "[w]hen we took that [TLCS] on three years ago we contracted for 12,000 flying hours of Chinook. The RAF had never achieved 12,000 hours at the point when we took over the contract. We are now heading towards 16,000 hours with a target of going even higher than that in the future."[71]

40. An additional benefit of IOS and TLCM is the opportunity it provides for contractor staff to work in-theatre as part of a CONDO (Contractors ON Deployed Operations) scheme. Mr Paul O'Hara from Rolls-Royce explained to us that "[i]f you have deployed service engineers forwards with the units that are actually utilising the equipment you can actually stop something that would be coming back and therefore could be quite a costly rejection."[72] Dr Beatrice Nicholas from SELEX Galileo described CONDO operations as "very motivating for our staff".[73] Mr Declan O'Shea told us that Vector Aerospace had

> people in Afghanistan as we speak. In December we were requested to assist through the project team and Boeing with people in Afghanistan and in early March we deployed eight people to there. We did the proper due diligence, the duty of care and we asked for volunteers and got many people who volunteered and we rotate those every four months for as long as we are required there. Certainly it is a motivational issue for our staff; they feel that they are part of the system that is being deployed.

69 Q 24

70 Q 61

71 *ibid.*

72 Q 77

73 *ibid.*

> They see the aircraft in action as well as in the hangars and we are delighted to be involved in it.[74]

41. At our second session, Rear Admiral Johnstone-Burt confirmed that the Vector team was "making a tangible difference".[75] **On support, closer working between the military and industry through IOS and TLCM programmes is clearly the way forward. We were impressed by the reports we had from companies of CONDO operations, particularly with regard to their consequences for process improvement and cost effectiveness through early interventions. We encourage the MoD to capitalise upon lessons learned from the success of the Chinook Through Life Capability Service programme.**

Spare parts

42. One area where support has struggled, however, has been in the provision of spare parts. The NAO recorded in its report on *Support to High Intensity Operations* that shortages of spare parts were particularly affecting Merlin and Apache, as "[t]he initial procurement of spares for both helicopters is still being delivered from industry and as a consequence there are some key components in short supply."[76] This led to the MoD having to cannibalise helicopters based in the UK—a decision very much of last resort—in an effort to keep those helicopters deployed on operations in the air. Mr Derek Sharples from Eurocopter told us that "[i]t is quite common for 80% of all spares to be on stock for more than three years and never called. So you have a very small number of high rotating parts, and a very large percentage of slow movers."[77] Mr Nick Whitney from AgustaWestland explained why these shortages had arisen, when he told us that

> I think the simple answer why is that there are insufficient spares that have been procured in first instance. We are operating aircraft in theatres that are more challenging than the assumptions that were taken. If you certainly take the case of Apache, it is fielded in theatre many years ahead of that which was planned. Inevitably you work on the basis that you are going to have an increasing training and flying burden, and you plan your spares procurement around that accordingly. In the instance of Apache you ramp that up, as a result of the conflicts that we are currently in, significantly above that which was planned.[78]

43. The NAO wrote in its report that the MoD judged that "the benefits of deploying Apache early outweighed the risk posed by the lack of spare parts."[79] **The urgent action being taken within the MoD to improve the acquisition and delivery of spares to all helicopters in theatre needs to be given top priority.**

74 Q 92

75 Q 94

76 National Audit Office, *Support to High Intensity Operations*, HC 508, Session 2008–09, para 1.17

77 Q 14

78 Q 19

79 National Audit Office, *Support to High Intensity Operations*, HC 508, Session 2008–09, para 1.17

4 People and training

People

Harmony

44. We noted previously Rear Admiral Johnstone-Burt's identification of people as the 'least robust' leg of the 'capability stool'. The deployment of personnel on operations is governed within each of the services by 'harmony guidelines', which aim to provide sufficient time within an extended cycle to cater for operations, training and leave. Each of the services have, largely for historical reasons, different guidelines. We were told that not all fleets were achieving the JHC target of a 'rule of five', that is, one tour on followed by four tours off. The Sea King and Apache fleets are currently operating on rules of three and four, which does not allow for adequate decompression, training, leave and preparation for the next tour. Nor has the pressure of repeated deployments been without consequence in terms of retention. Nevertheless, the Admiral told us that he had found that

> Retention is not as bad as I thought it would be. At the moment, compared with the service averages in the Army and Royal Air Force it is very small. We talk about the premature voluntary release (PVR) rate; in other words, the rate at which people resign earlier than they would otherwise. For the Army and RAF it is a fraction, which is surprising. For the Navy it is slightly higher than the average for officers and about average for the other ranks.[80]

Retention

45. In evidence, the Minister told us that he had been consulting with regard to "what we can do to improve retention and recruitment and we are making some substantial changes in those areas".[81] This was something that the Admiral had already alluded to in his earlier evidence

> We are also looking at ways to retain our senior NCO air crew who are gold dust with massive hours of experience and are fabulous pilots. We are looking at ways to improve their pay scales and pension rights to encourage them to stay on longer than they might otherwise. In terms of the engineering shortages again we are looking across all three services and all my fleets at the moment. It is interesting that the Royal Navy and Air Force are overmanning us in terms of our engineering support in order to enable us to cope with the gaps and shortfalls, but that means drawing people from the rest of their core area. As far as the Army Air Corps is concerned the Royal Electrical and Mechanical Engineers are helping us by doing a review—the Apache, Lynx and also UAVs are our top priority—to make sure we get them fully manned as best we can.[82]

80 Q 111

81 Q 195

82 Q 109

46. Rear Admiral Simon Charlier, who told us that "[w]hen we have surge operations, particularly in this joint environment, it is quite right to place a priority on that and take the hit elsewhere in the Navy."[83] **Operations in Afghanistan have now been made the highest priority, what is known as a 'campaign footing', but this has stretched the manning of the helicopter fleet. It is therefore unfeasible to surge helicopters into theatre. Joint Helicopter Command is to be commended for its efforts in delivering trained manpower to the front line, and then giving personnel sufficient time to do all the things at home that enable them to go back for repeat tours. However, we believe it essential that the parent Services examine the basic manning levels to enable personnel from all three Services to be deployed and rested on an equitable basis.**

Training

Training pipelines

47. The MoD's memorandum states that the three Armed Services maintain full command of the recruitment and training of their helicopter personnel.[84] Aircrew applicants for all three Services are subjected to medical screening, aptitude testing and flying grading before attending a selection board.[85] All aspiring pilots begin with elementary flying training, first jointly for six weeks at RAF Cranwell and then for between 13 and 26 weeks with their 'home' Service, before being divided into either the Fast-Jet, Rotary or Multi-Engine streams. Rotary pilots then go on to the joint Defence Helicopter Flying School at RAF Shawbury. In its written memorandum to our inquiry into *Recruiting and retaining Armed Forces personnel*, the MoD wrote that "the situation with Support Helicopter crewmen is also finely balanced, although action taken recently to streamline the training regime has released crewmen to the front-line earlier".[86]

48. The early stages of pilot training have been "the subject of several reviews".[87] Training at Shawbury comprises a combination of Ground School and flying training—all pilots are trained in both Single Engine Basic Rotary Wing and Single Engine Advanced Rotary Wing flying, with RAF pilots being given further training on Multi-Engine Advanced Rotary Wing—before transferring to Operational Conversion Units, where they are trained on the specifics of the aircraft they will fly in theatre and in the tactics and techniques required to support the full range of flying required of a helicopter pilot. Having completed OCU, pilots are designated 'Limited Combat Ready', and progress to full 'Combat Ready' whilst with their Units. Training for technicians is far more diverse, and covered in detail in the MoD's memorandum.[88]

83 Q 116

84 Ev 71, para 3.2

85 *ibid.*, para 3.3

86 Defence Committee, Fourteenth Report of 2007–08, *Recruiting and retaining Armed Forces personnel*, HC 424, Ev 106

87 Q 125

88 Ev 73, paras 3.15–3.26

Theatre-entry standards

49. The question of the difference between the aircraft that are used for training in the UK and those equipped with all the latest UORs which are deployed in theatre arose during our visit to Middle Wallop and RNAS Yeovilton. We described this problem in the context of the UORs earlier in this Report, where we also noted the Minister's commitment to minimise the gap. We also took evidence on this issue during our session with industry. On the question of the difference between training and theatre-entry standard aircraft, Mr Derek Sharples from Eurocopter told us that "it would not be cost-effective to use the same aircraft for training, in particular for basic training, as is used front line, because of course these are very expensive and sophisticated weapons systems."[89] However, he seemed later to concede that some familiarity would be beneficial, saying "you should where possible familiarise on systems which are similar to those you will operate in-theatre. It is clearly cost-effective; it is clearly more efficient training; and it clearly brings to the pilot more familiarisation with the systems that they will ultimately be asked to operate in battle."[90] This point was echoed by Mr Alex Sharp from Sikorsky, who commented simply that "the more commonality you have in training, clearly gives you benefits in the field – no question".[91] **Increased joint working between the three Services has shown benefits in the same way that increasingly close working between the military and industry has done. We recommend that the MoD presses ahead with its programmes to consolidate and make more common the various schemes in place for training helicopter air and ground crew. The MoD should take steps to eliminate the time lag between delivery of UORs in theatre and the upgrading of equipment at home. In this respect, it is unacceptable for personnel to encounter new equipment for the first time in theatre.**

89 Q 8

90 Q 10

91 Q 11

5 Towards a Strategic Defence Review

50. On 7 July, the Secretary of State made a written ministerial statement in which he set out the Government's proposals for a new strategic defence review to take place early on in the next Parliament.[92] He announced the publication of a Green Paper in early in 2010 which would, amongst other things, consider lessons "learned from recent operations and the changing character of conflict", "technological changes in defence", and "the modern day requirements on and aspirations of our armed forces personnel".

51. **We welcome the Government's announcement of a strategic review of defence, the need for which has long been apparent. The case for better resourcing of helicopters has however, already been made clear. The MoD should not use the announcement of the strategic review to delay the important decision which needs to be taken in relation to the acquisition of the Future Medium Helicopter, albeit on a modified off-the-shelf basis. The time has come to appreciate fully the role of helicopters in modern operations. We expect the Government to stop equivocating over the separate concepts of 'capability', 'capacity', and 'availability'. The MoD should seize the opportunity to recognise the importance of helicopters to current and contingent operations, and work towards strengthening all aspects of capability: the number of helicopters in the fleet, the support structure that underpins their operations, manning, both in the air and on the ground, and finally, the training for the full spectrum of capabilities described by the review itself.**

[92] HC Deb, 7 Jul 2009, Col 39WS

Conclusions and recommendations

Our inquiry

1. Our visit to Middle Wallop and Yeovilton proved invaluable and we record our thanks to all those involved. Our discussions that day have informed our oral evidence sessions, and indeed, this Report. (Paragraph 2)

Why helicopters?

2. Helicopters provide many vital capabilities to the modern Armed Forces and, with the challenge of hybrid warfare, are becoming increasingly relevant to current and contingent operations. Their status as force-multipliers lends further weight to their value. They are a cost-effective means of increasing the operational impact of other force elements and therefore, of operational capability generally. As such, it is essential that the fleet should be 'fit for purpose', both in terms of quality and quantity. (Paragraph 5)

Helicopters in the UK Armed Forces

3. Significant improvements have been made to the availability of key assets such as Chinook. However, in the longer term, increased availability will be no substitute for additional capacity. Adequate capability is also a question of numbers of airframes. (Paragraph 11)

What is more?

4. We do not believe that the question of helicopter capability can be properly answered without reference to the size of the fleet. We are concerned that operational commanders in the field today are unable to undertake potentially valuable operations because of the lack of helicopters for transportation around the theatre of operations. We are also concerned that operational commanders find they have to use ground transport, when helicopter lift would be preferred, both for the outcome and for the protection of our forces. Furthermore, we are troubled by the forecast reduction in numbers of medium and heavy lift battlefield helicopters, which will make this worse. We have an additional concern in respect of the apparent lack of training that is taking place for amphibious operations. (Paragraph 21)

Aircraft

5. While we are grateful to the Minister for raising with us his uncertainties about the decision to extend the life of Puma, we do not feel that we were given the full picture on this issue by other witnesses. We very much regret this. (Paragraph 28)

6. Given the age of both Sea King and Puma and the poor survivability of the Puma, extending their lives at considerable cost is not the best option, either operationally or in terms of the use of public money. We do not believe that these LEPs will provide adequate capability or value for the taxpayer. Only a procurement of new

helicopters can meet the original objective of reducing the number of types of helicopter in service within the UK Armed Forces. (Paragraph 30)

Support

7. We welcome the Minister's assurance that he is committed to minimising the difference between the equipment standards on an Apache in the UK and an Apache in Helmand. The MoD should commit to making training aircraft as close to the theatre-entry standard as is affordable, and we realise that this might be achieved by fitting improved systems on training aircraft in the United Kingdom or by teaching key pilotage techniques on unmodified aircraft. (Paragraph 35)

8. We were concerned to hear from industry that the Defence Industrial Strategy, so far as it relates to helicopters, needs to be 'picked up and moved forward again'. The loss of momentum in relation to the Defence Industrial Strategy may lead to significant acquisitions in this sector taking place without sufficient reference to the DIS. This would be regrettable if it prevented greater rationalisation of helicopter types for the reasons we set out above. We urge the MoD to avoid this if at all possible. (Paragraph 38)

9. On support, closer working between the military and industry through IOS and TLCM programmes is clearly the way forward. We were impressed by the reports we had from companies of CONDO operations, particularly with regard to their consequences for process improvement and cost effectiveness through early interventions. We encourage the MoD to capitalise upon lessons learned from the success of the Chinook Through Life Capability Service programme. (Paragraph 41)

10. The urgent action being taken within the MoD to improve the acquisition and delivery of spares to all helicopters in theatre needs to be given top priority. (Paragraph 43)

People

11. Operations in Afghanistan have now been made the highest priority, what is known as a 'campaign footing', but this has stretched the manning of the helicopter fleet. It is therefore unfeasible to surge helicopters into theatre. Joint Helicopter Command is to be commended for its efforts in delivering trained manpower to the front line, and then giving personnel sufficient time to do all the things at home that enable them to go back for repeat tours. However, we believe it essential that the parent Services examine the basic manning levels to enable personnel from all three Services to be deployed and rested on an equitable basis. (Paragraph 46)

Training

12. Increased joint working between the three Services has shown benefits in the same way that increasingly close working between the military and industry has done. We recommend that the MoD presses ahead with its programmes to consolidate and make more common the various schemes in place for training helicopter air and ground crew. The MoD should take steps to eliminate the time lag between delivery

of UORs in theatre and the upgrading of equipment at home. In this respect, it is unacceptable for personnel to encounter new equipment for the first time in theatre. (Paragraph 49)

Towards a Strategic Defence Review

13. We welcome the Government's announcement of a strategic review of defence, the need for which has long been apparent. The case for better resourcing of helicopters has however, already been made clear. The MoD should not use the announcement of the strategic review to delay the important decision which needs to be taken in relation to the acquisition of the Future Medium Helicopter, albeit on a modified off-the-shelf basis. The time has come to appreciate fully the role of helicopters in modern operations. We expect the Government to stop equivocating over the separate concepts of 'capability', 'capacity', and 'availability'. The MoD should seize the opportunity to recognise the importance of helicopters to current and contingent operations, and work towards strengthening all aspects of capability: the number of helicopters in the fleet, the support structure that underpins their operations, manning, both in the air and on the ground, and finally, the training for the full spectrum of capabilities described by the review itself. (Paragraph 51)

Formal minutes

Tuesday 14 July 2009

AFTERNOON SESSION

Members present:

Mr James Arbuthnot, in the Chair

Mr David Crausby	Mr Bernard Jenkin
Linda Gilroy	Mr Brian Jenkins
Mr David Hamilton	Robert Key
Mr Mike Hancock	Richard Younger-Ross
Mr Dai Havard	

Draft Report (*Helicopter capability*), proposed by the Chairman, brought up and read.

Ordered, That the Chairman's draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 51 read and agreed to.

Summary agreed to.

Resolved, That the Report be the Eleventh Report of the Committee to the House.

Ordered, That the Chairman make the Report to the House.

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

Written evidence was ordered to be reported to the House for printing with the Report, together with written evidence reported and ordered to be published on 19 May and 7 July.

[Adjourned till Monday 20 July at 4.00 pm

Witnesses

Tuesday 19 May 2009

Page

Mr Nick Whitney, Senior Vice President, UK Government Business Unit, AgustaWestland **Mr David Pitchforth** Managing Director, Boeing UK Rotorcraft Support, **Mr Derek Sharples,** Vice President of Customer Support, Eurocopter and **Mr Alex Sharp,** Regional Sales Manager – Europe, Sikorsky Aircraft Corporation Ev 1

Tuesday 2 June 2009

Rear Admiral Simon Charlier, Chief of Staff, Carrier-Strike and Aviation, **Rear Admiral Tony Johnstone-Burt OBE,** Commander, Joint Helicopter Command, and **Brigadier Kevin Abraham,** Head of Joint Capability, Ministry of Defence Ev 17

Mr Quentin Davies MP, Minister for Defence Equipment and Support, **Mr Adrian Baguley,** Head of Helicopters 2, and **Commodore Russ Harding,** Head of Equipment Capability (Air & Littoral Manoeuvre), Ministry of Defence Ev 25

List of written evidence

List of Reports from the Committee during the current Parliament

The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

Session 2008–09

First Report	Winter Supplementary Estimates 2008–09	HC 52[A]
Second Report	The work of the Committee 2007–08	HC 106
Third Report	Defence Equipment 2009	HC 107 *(HC 491)*
Fourth Report	Spring Supplementary Estimate 2008–09	HC 301[B]
Fifth Report	Ministry of Defence Annual Report and Accounts 2007–08	HC 214 *(HC 534)*
Sixth Report	The UK's Defence contribution to the UK's national security and resilience	HC 121
Seventh Report	Defence Support Group	HC 120
Eighth Report	Service Complaints Commissioner for the Armed Forces: the first year	HC 277
Ninth Report	Ministry of Defence Main Estimates	HC 773
Tenth Report	Russia: a new confrontation?	HC 276

[A] *Government response published as a Memorandum in the Committee's Fourth Report (HC 301)*

[B] *Government response published as a Memorandum in the Committee's Ninth Report (HC 773)*

Session 2007–08

First Report	UK land operations in Iraq 2007	HC 110 *(HC 352)*
Second Report	Costs of operations in Iraq and Afghanistan: Winter Supplementary Estimate 2007–08	HC 138[A]
Third Report	UK/US Defence Trade Cooperation Treaty	HC 107 *(HC 375)*
Fourth Report	The Iran hostages incident: the lessons learned	HC 181 *(HC 399)*
Fifth Report	Ministry of Defence Annual Report and Accounts 2006–07	HC 61 *(HC 468)*
Sixth Report	The work of the Committee in 2007	HC 274
Seventh Report	Medical care for the Armed Forces	HC 327 *(HC 500)*
Eighth Report	Operational costs in Afghanistan and Iraq: Spring Supplementary Estimate 2007–08	HC 400[B]
Ninth Report	The future of NATO and European defence	HC 111 *(HC 660)*
Tenth Report	Defence Equipment 2008	HC 295 *(HC 555)*
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[A] *Government response published as Memorandum in the Committee's Eighth Report (HC 400)*

[B] *Government response published as Memorandum in the Committee's Eleventh Report (HC 885)*

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