

Ministry of Defence  
**Battlefield Helicopters**

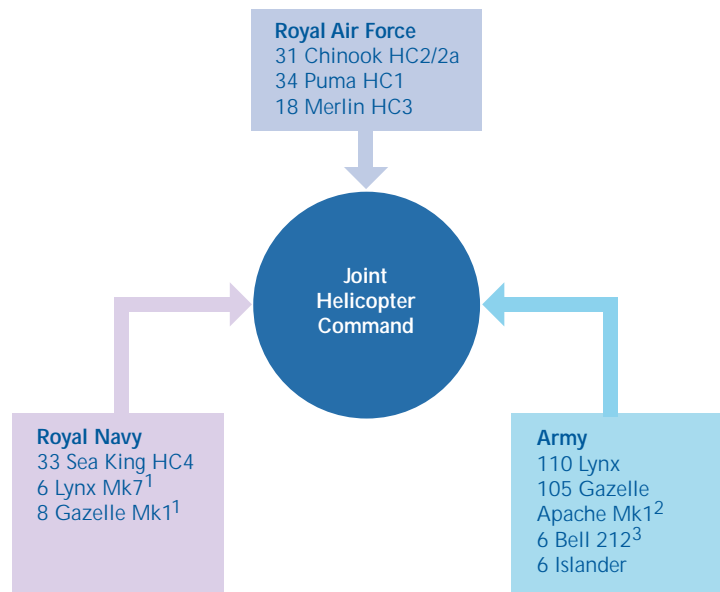


REPORT BY THE COMPTROLLER AND AUDITOR GENERAL  
HC 486 Session 2003-2004: 7 April 2004

# executive summary

1 The United Kingdom's armed forces operate battlefield helicopters in support of land, amphibious, and Special Forces' operations. In 1998, the Ministry of Defence (the Department) published its Strategic Defence Review, which proposed the formation of the Joint Helicopter Command to bring all battlefield helicopters under one organisation. The Joint Helicopter Command was formally established in October 1999. Its aim is to deliver and sustain battlefield helicopters and air assault forces in support of the Department's objectives. **Figure 1** shows the number of helicopters, by Service, under the operational command of the Joint Helicopter Command.

## 1 Helicopters under the operational command of the Joint Helicopter Command



### NOTES

- 1 Operated by the Royal Navy but owned by the Army with fleet management the responsibility of the Joint Helicopter Command.
- 2 67 delivered to the United Kingdom but not yet available for operations. Anticipated Initial Operating Capability - August 2004.
- 3 Contractor Owned, Military Registered aircraft.

Source: National Audit Office

- 2 This Report examines the progress made since the inception of the Joint Helicopter Command. The methodology we adopted is set out in Annex A.
- 3 The Report shows that battlefield helicopters are a key capability in fulfilling the majority of the Department's objectives as defined in its Military Tasks. Since it was formed, the Joint Helicopter Command, which reports to Commander-in-Chief Land, has made significant progress in delivering efficiencies and a more joined up approach, despite a background of high tempo operations. However, on its own calculations, the Department is some 38 per cent short of its required battlefield helicopter fleet, and on present plans, the overall shortage will not be overcome until 2017. Moreover, this will be affected by ongoing work to determine future force structures and changes to the Department's equipment programme. This Report suggests ways of reducing the gap between requirements and capabilities by using the present fleet of battlefield helicopters more productively. The question of purchasing additional helicopters beyond present plans is a policy matter, which is outside the remit of the National Audit Office.

### Battlefield helicopters are a key capability

- 4 Battlefield helicopters play a major role in the United Kingdom's military operations. The battlefield helicopter fleet, arguably the most capable helicopter force in Europe, has recently operated in a wide variety of theatres, including urban and rural areas in Northern Ireland, the Iraqi desert, the mountains of Afghanistan, and the jungles of Sierra Leone.
- 5 Battlefield helicopters contribute to a wide range of roles from anti-armour operations to casualty evacuation. These roles were demonstrated during Operation "TELIC" in Iraq when 77 battlefield helicopters were deployed, the largest ever operation managed by the Joint Helicopter Command. For example, the Royal Air Force's Support Helicopter Force and the Royal Navy's Commando Helicopter Force worked together successfully to support the assault on the Al Faw peninsula during one of the most significant helicopter operations of the campaign.
- 6 Battlefield helicopters will continue to be a key capability in the future. The introduction into service of the Apache helicopter greatly increases this capability, and with a greater emphasis on manoeuvre warfare, the helicopter is set to play an even more central role in most future operations.

### Progress has been made by the Joint Helicopter Command

- 7 Significant progress has been made since the formation of the Joint Helicopter Command in 1999. The Command gives more focus to the joint employment of battlefield helicopters. It can draw on equipment and personnel from each of the three Services to provide tailored packages to meet particular operational demands. This addresses some of the inefficiencies that were apparent when all three Services deployed helicopters separately. For example, the Department estimates that, in Bosnia in 1996, the separate Services deployed some 40 per cent too many helicopters, often duplicating facilities, particularly combat service support.





- 8 The Department has also made progress in harmonising operating and engineering standards across the Services. It has recently introduced a more comprehensive joint publication on military flying regulations, which incorporates a number of standard operating procedures. Moreover, the Joint Helicopter Command has provided additional impetus to the Department's initiative to harmonise engineering standards and helicopter engineering training. For example, all three Services are bringing together their engineering policies and procedures.
- 9 In 1997, the Defence Helicopter Flying School, which reports to the Royal Air Force's Personnel and Training Command, was formed to provide a tri-Service focus for helicopter flying training. Both the Joint Helicopter Command and the Defence Helicopter Flying School have been instrumental in developing a more coherent, tri-Service approach to helicopter flying training. Generally, all three Services are satisfied with the School's output. Despite recent high operational tempo, the flying training pipeline has continued to operate. Collective training is also benefiting from joint exercises, which ultimately underpin joint operations.

### There is scope for further enhancements to maximise battlefield helicopter efficiency

- 10 Further enhancements can potentially be made to maximise the efficiency of battlefield helicopters in training, airworthiness processes, rank structure, and procurement.

#### Training

- 11 There remain a number of areas where further improvements in training arrangements could be made. These might include further developing a joint approach to initial training to reduce the time it takes to train pilots, and developing the best balance of training undertaken on operational helicopters, training helicopters, and fixed-wing aircraft. It is also important that training is appropriately resourced. Currently, both individual and collective training have suffered as a result of operational commitments and a lack of available helicopters, with some Army pilots unable to maintain the recommended NATO minimum level of 15 flying hours per month.

#### Airworthiness

- 12 Although the regulations for ensuring that helicopters are airworthy are joint, responsibility for applying them is delegated separately by the Secretary of State for Defence to each of the three Services. In practice, there are different interpretations of the regulations. For example, the Services differ in the execution of trials work on their aircraft. The Royal Navy operates some Army aircraft marks and has streamlined the process of regulating airworthiness in conjunction with the Army, thereby showing that there is scope for greater efficiency if a more consistent approach is applied. Tri-Service airworthiness issues are now well in-hand with scope for further streamlining.



## Aircrew Ranks

- 13** Almost two-thirds of the Army's aircrew are non-commissioned officers, whereas the Royal Navy and the Royal Air Force use only officer pilots and navigators/observers. Historically, the perceived complexity of Royal Navy and Royal Air Force helicopters has supported this position. However, Army non-commissioned officers are now flying the complex Apache Mk1. In addition, other forces, for example in the United States, use non-commissioned officers to fly Apache, and also aircraft such as the Chinook, which are exclusively flown by officers in the United Kingdom. The bringing together of helicopters into one command throws these issues into sharp relief. Separately, in its Report on the Apache,<sup>1</sup> the Committee of Public Accounts recommended that the Department examine the possibility of using non-commissioned officers as aircrew across all three Services.

## Learning procurement lessons

- 14** Flawed procurement of eight Chinook HC3 helicopters means that, although they were delivered to specification by the contractor in December 2001, they cannot yet be used operationally, principally because there is insufficient evidence to demonstrate that the avionics software meets United Kingdom Defence standards. This is primarily because the programme was not de-risked prior to investment decisions being taken; nor did the contract specify that the software should be analysed in accordance with United Kingdom Defence standards. Other user requirements categorised as essential have not been delivered because, for a variety of reasons, they too were not included in the contract. To bring the helicopters broadly up to the standard of the existing Chinook fleet would require approximately £127 million, over and above the £259 million originally estimated, and would mean the helicopter would enter service in mid-2007 - some nine years later than the original In-Service Date, although this latter was re-defined in March 1998 to June 2002.

## The shortfall in battlefield helicopter capability will continue

- 15** Even if improvements to efficiency and effectiveness are made, there will still be a shortfall in helicopter capability. A recent Departmental study concluded that there is currently a 38 per cent shortfall in overall battlefield support helicopter lift, which includes an 87 per cent shortfall in ship-optimised support helicopter lift. Primarily, the latter deficit is a manifestation of a changed strategic environment over the past decade, which has generated a greater requirement to undertake littoral operations. According to the Department, the shortfall in ship-optimised lift will remain until 2018, while overall battlefield lift will remain inadequate until 2017.
- 16** In addition, the nature of the legacy fleet means that many platforms are not fully equipped to undertake missions in certain operational and environmental conditions, including those recently experienced in Afghanistan and Iraq. The helicopter force has a number of critical capability shortfalls, some of which can only be addressed by expensive modifications. Owing principally to a lack of resources, these capability shortfalls are often met by Urgent Operational Requirements. For example, part of the current Chinook fleet has acquired the necessary capabilities to meet operational demands. However, this process has often not only been costly but it is essentially short-term in nature.

<sup>1</sup> *Forty-sixth Report from the Committee of Public Accounts, Ministry of Defence: Building an Air Manoeuvre Capability - The Introduction of the Apache Helicopter, HC 533, Session 2002-03.*

# KEY RECOMMENDATIONS

- a Streamline flying training consistent with the maintenance of flying standards, where possible considering the overall single-Service training requirements.
- b Continue to work towards a common approach to airworthiness that overcomes the inconsistencies in having three separate channels of delegation.
- c Consider implementing the Army practice of using non-commissioned pilots in battlefield helicopters through examining the impact of such an initiative on flexibility in operating the helicopter fleet, and potential cost savings.
- d Reduce the current shortfall in battlefield helicopters by eliminating incorrect specifications and slippages in deliveries.
- e Secure adequate platform capability across the spectrum of present and potential operations, and anticipated operating environments.