

Ministry of Defence
Major Project Reports 2002



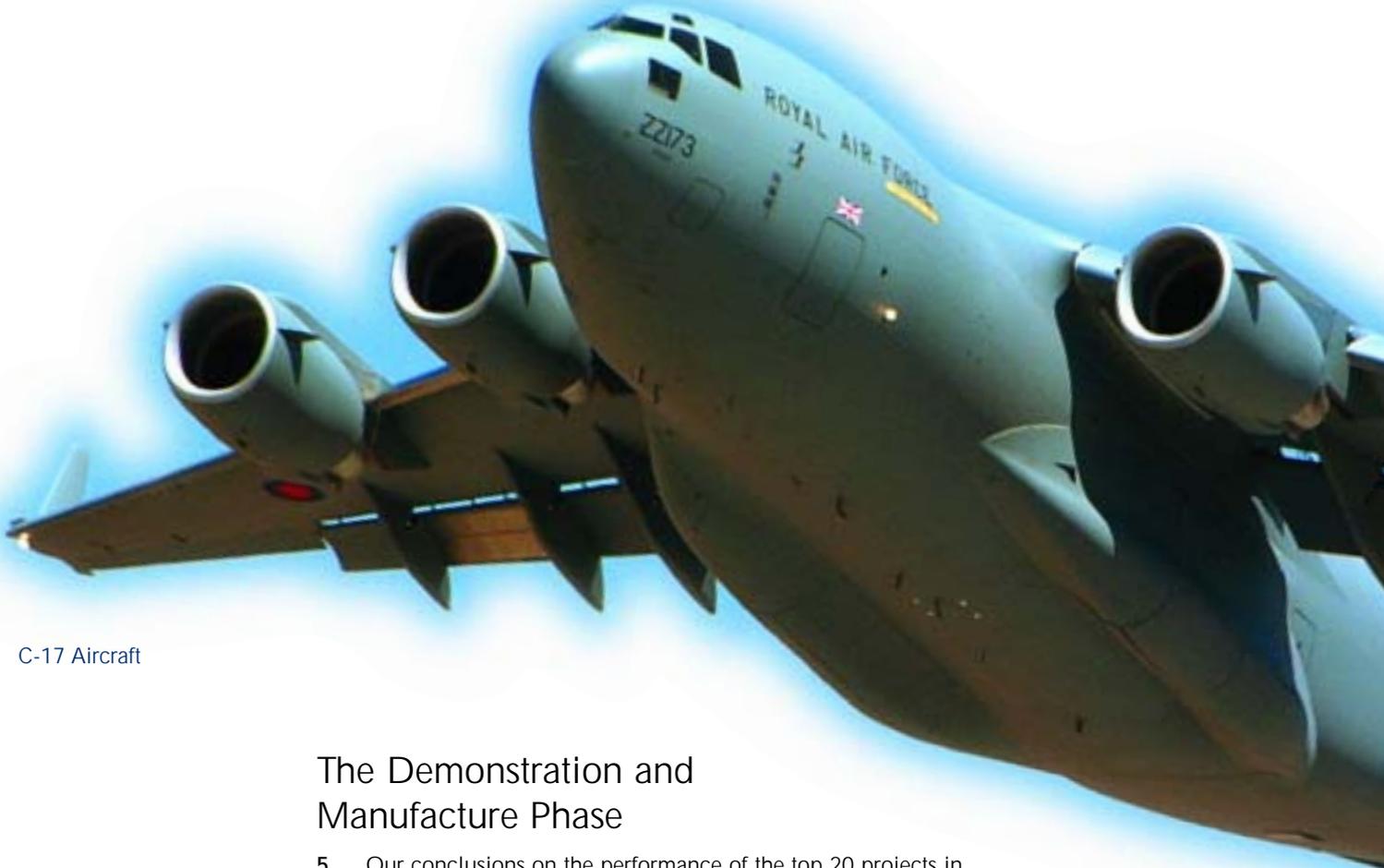
REPORT BY THE COMPTROLLER AND AUDITOR GENERAL
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Summary

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- 1 Each year since 1984, the Ministry of Defence (the Department) has reported to Parliament on its progress in procuring major defence equipments. Prior to 1991, the Department classified much of the data submitted to Parliament and our analyses of the key themes and trends emerging were therefore not published. The Major Projects Report 2002 is the eleventh that we have published since the level of classification was reduced.
- 2 The Major Projects Report 2002 covers the 12 month period to 31 March 2002 and provides cost, time and technical performance data for 30 projects split, in accordance with Smart Acquisition principles, between the 20 largest projects on which the main investment decision has been taken (post-Main Gate) and the 10 largest projects yet to reach that point (pre-Main Gate). In future, the range of data we report will be expanded to include Cost of Ownership information (see Appendix 6). The population of projects included in this year's Report differs significantly from that of previous years with 10 new projects entering the report. This change and the inclusion of the "Risk Differential" for newly approved projects means that direct comparisons with previous Major Projects Reports is difficult.
- 3 Before the introduction of Smart Acquisition, the Department approved projects and managed the equipment programme on the basis of estimates of time and cost that it was 50 per cent confident of achieving. Ten of the Major Projects Report 2002 projects (the "Legacy" projects) were approved using this baseline. Under Smart Acquisition the Department still budgets on the basis of estimates that it is 50 per cent confident of achieving. However, projects are now approved on the basis of time and cost figures that it is 90 per cent confident of achieving.
- 4 Our overall conclusion is that there is a continuing improvement in project performance, especially regarding cost control, but that maintaining this improvement will be the challenge. Notably, there are encouraging indications that Smart Acquisition is resulting in innovation in the design of programmes to deliver equipment capabilities faster, cheaper and better. Messages on the management of individual programmes to time and cost once they are underway are more varied. Our specific conclusions are summarised below.



C-17 Aircraft

The Demonstration and Manufacture Phase

- 5 Our conclusions on the performance of the top 20 projects in the Demonstration and Manufacture phase are outlined below:
 - i The Department expects to meet 98 per cent of Key User Requirements. This is a significant achievement;
 - ii Under the new approvals process, total overall forecast costs are within total approved costs and have fallen again in-year;
 - iii Cost and time performance across the majority of factors responsible for variation has improved. Exchange rates, which are outside the Department's ability to influence, are a major cause of in-year cost increase;
 - iv In the past year, 14 of the 20 post-Main Gate projects have suffered adverse movement in either time or cost performance. Of these, two projects are showing adverse movement in more than one area; and
 - v The Department is showing signs of improvement on the management of slippage but overall there is still forecast time variation beyond approval.
- 6 Our analysis of historical data suggests that the majority of cost variation tends to be reported in the middle of the procurement cycle while time variation has historically been reported either early in the procurement cycle or towards the end. The challenge for the Department and Smart Acquisition will be to break this mould and to improve the management of projects to cost and time. However, we also recognise it is unrealistic to expect that such a challenge will result in uniform success straight away, and the Department may experience some setbacks. Future Major Projects Reports will provide a better indication of the success of Smart Acquisition in this area.

The Assessment Phase

7 Our conclusions on the top ten projects in the Assessment Phase are:

- i There have been improvements in the quantification of risk. Three-point estimates are being used more comprehensively, Technology Readiness Levels are being introduced and Assessment Phase expenditure has increased.
- ii Assessment Phase timescales are often over-optimistic. This can have a knock-on effect through the Demonstration and Manufacture Phase and lead to unplanned capability gaps. There are also indications that wider risks to timescale achievement are being under-estimated during the Assessment Phase. Addressing the cultural and systemic factors that have contributed to such over-optimism will be key to the Department and its partners in making better-informed decisions and using the quantified risk-assessment techniques referred to above.

Case studies

8 The values and beliefs underpinning Smart Acquisition involve much more than improving the performance of projects once they are underway. They also encourage the adoption of new and innovative ways of improving the acquisition process to deliver enhanced equipment capability faster and cheaper. We examined three case studies which provide evidence of achievement in delivering against these aspirations and highlight the importance of carefully managing the associated risks. Notably:

- i **C-17 Heavy lift aircraft:** Has been acquired to a short timescale under a leasing deal to meet a capability gap identified during the Strategic Defence Review. Both the leasing deal itself and the way in which the lease has been funded are significant innovations.
- ii **Type 45 Destroyer:** Is being procured using incremental acquisition techniques and an innovative procurement strategy. BAE Systems Electronics is acting as the prime ship build contractor responsible for managing a shared programme of work with two sub-contractors, BAE Systems Marine and Vosper Thornycroft, building the first six vessels in "blocks". The Department's relationship with BAE Systems Electronics is based on partnering principles.
- iii **Skynet 5 Satellite Communications System:** Is being delivered under a Private Finance Initiative agreement using innovative methods to maximise value for money on the deal and with substantial risk transferred largely to the contractor.

There is continued improvement in project performance, maintaining this will be the challenge

