Appendix 6E. US military expenditure and the 2001 Quadrennial Defense Review

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I. Introduction

US defence budgets have been increasing since 1998, after almost a decade in which levels of real US military expenditure declined every year, with the exception of 1992.¹ The initial increases were modest. Outlays by the Department of Defense (DOD) increased by \$15.6 billion between fiscal years (FYs) 1998 and 2001 (at constant, FY 2003, prices²) or by 3 per cent in real terms over the three years.³

The Administration of President George W. Bush requested and received an additional \$5.5 billion for FY 2001, almost entirely for operations and maintenance (O&M), and an additional \$18.4 billion for FY 2002. The latter increase was mostly for personnel—to improve pay, housing and other incentives—for O&M, and for research, development, testing and evaluation (RDT&E), including a substantial increase for missile defence. The resulting budget request for FY 2002 was 7 per cent higher, in real terms, than the FY 2001 budget request of the Administration of President Bill Clinton.⁴

No increases were requested for weapons procurement in the FY 2001 budget. The Bush Administration had promised a far-reaching revision of US military strategy in the Quadrennial Defense Review (QDR), scheduled for release at the end of FY 2001 (30 September). This was followed, in early February 2002, by the administration's budget request for FY 2003 and its projections for future years. Defense Secretary Donald Rumsfeld had indicated that a large increase in military spending was unlikely and that the QDR was likely to result in scaled back US military requirements and possibly in the postponement or cancellation of some major weapon systems in order to free resources for a transformation and modernization of the military. During the 2000 presidential election campaign, Bush had indicated that his administration would consider skipping a generation of weapons in order to free funding for a major transformation of the US military.

The prospect for holding down weapons expenditure was reinforced by the release of the mid-year reports of the Office of Management and Budget (OMB), an agency of the executive branch, and the Congressional Budget Office (CBO), a research arm of the Congress—both of which projected a sharp decline in the expected budget

¹ The data described and analysed in this appendix are national defence data provided by the US Department of Defense. These data differ significantly from the data provided by NATO and used for the SIPRI tables on military expenditure in chapter 6 and appendix 6A. These figures cannot be compared because they are calculated according to different definitions and thus do not have the same coverage.

coverage.

² All budget figures cited in this appendix are expressed at base year FY 2003, as presented by the US Department of Defense in its budget for FY 2003. For sources see table 6E.

³ US Department of Defense, 'National defense budget estimates for FY2003', Office of the Under Secretary of Defense (Comptroller), Mar. 2002, table 6-11, URL http://www.defenselink.mil>.

⁴ Belasco, A. and Daggett, S., *Appropriations and Authorization for FY2002: The Defense Budget*, RL31005 (Congressional Research Service, Library of Congress: Washington, DC, updated 14 Dec. 2001).

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surplus as a result of the large tax cut and the weakening US economy.⁵ With the tightening of US federal finances, a large increase in military spending was thought to be even less likely. Indeed, Secretary Rumsfeld was rumoured to be encountering severe conflicts within the DOD as he sought to impose stricter ceilings on budget

The 11 September 2001 terrorist attacks in the United States changed this outlook. With the near-unanimous consent of the Congress, President Bush declared a 'war on terrorism' that was expected to be long-lasting and near-global in scope. Congress authorized a supplementary appropriation of \$40 billion to be applied immediately to anti-terrorism activities, half in FY 2001 and half in FY 2002. About \$20 billion was expected to be allocated to the DOD, although the exact disposition of the entire supplemental package was to be determined in future appropriations legislation. Congress quickly accepted the earlier Bush add-ons to the FY 2002 budget, as the Democratic Party-controlled Senate shelved any objections. Rather than postponing any large projects, administration officials indicated that the existing procurement projects would be retained, along with improvements in readiness and personnel expenditures and further commitments to transformative technologies, in its budget request for FY 2003 and in its programme for future years. Indeed, the administration had in August given its approval for continued development of the F-22, a supersonic, stealth fighter, and in October selected Lockheed Martin to be the prime contractor for the Joint Strike Fighter (JSF) programme. Both of these 'legacy' programmes had been widely reported as candidates for drastic reduction or even cancellation. Thus, the United States was poised to begin a major expansion of its military spending.

Section II of this appendix describes the post-World War II trends in US military spending and the US defence budget. Section III summarizes the 2001 Quadrennial Defense Review and analyses its relevance for future US military spending. Section IV comments on the US defence budget for FY 2003 and on future trends in spending, and section V offers the main findings of this appendix.

II. The US defence budget in the long-term perspective

Since the end of World War II, US military spending has undergone a series of cycles associated with actual or perceived major shifts in the security environment, but it has not exhibited any sustained long-term growth. When measured in constant, FY 2003, prices, the DOD outlays, that is, expenditure, of \$333.5 billion in FY 2002 are considerably below the peaks reached in 1953 during the Korean War (\$389 billion), in 1968 during the Viet Nam War (\$434 billion), and in 1987 and 1989 at the end of the build-up of the Administration of President Ronald Reagan (\$425 billion). Since the US economy has grown considerably over the past half-century, the defence burden—military spending as a share of gross domestic product (GDP)—has dropped. With the exception of the peaks reached during build-ups, the defence burden declined from about 10 per cent of GDP in the second half of the 1950s to about 3 per cent by the end of the 1990s (table 6E). To illustrate this shift, even those arguing for a substantial growth in military spending envisaged an increase to 4 per cent of GDP, which was only slightly higher than the low point reached after the Viet Nam War.

⁵ Executive Office of the President, Office of Management and Budget, 'Mid-session review, budget of the United States Government', 22 Aug. 2001, URL http://www.whitehouse.gov/omb/budget/ fy2002/index.html>; and US Congressional Budget Office, 'The budget and economic outlook: an update', Congressional Budget Office, Washington, DC, Aug. 2001, URL http://www.cbo.gov>.

The decline in US military spending after the end of the cold war, while substantial in real terms, was consistent with the pattern observed throughout the post-World War II period. US military expenditure in real terms dropped by a quarter between FYs 1989 and 1998, with DOD spending on procurement and on RDT&E declining by 42 per cent.

The composition of the DOD budget has also undergone cyclical shifts but has been remarkably steady over time (see table 6E for the period 1955–2003). Personnel costs were at a steady level until the end of the cold war and declined only with the post-cold war downsizing of the active-duty military. O&M costs increased to a higher level in the 1970s as the USA expanded its global military presence in response to rising tensions in the Middle East, but these outlays have not shown a general tendency to rise since the mid-1980s. Procurement expenditures have fluctuated sharply but when combined with RDT&E—together they comprise what is usually referred to as the 'investment' accounts—the fluctuations have been less marked. With the exception of the build-up in the 1980s, fluctuations in procurement and RDT&E expenditures have tended to offset each other, and the size of revenue flows to the arms industry has been reasonably stable. (If military exports are included, the stability trend is reinforced since exports also tend to fluctuate in a manner that offsets the fluctuations in DOD procurement.)

The decline in the defence burden

The decline in the defence share of GDP reflects an important constraint on the future growth of US military spending. The US defence budget is determined by a complex process. It involves the military services; the Secretary of Defense, who must adjudicate the spending priorities of the various services; the president, working primarily via the OMB, which must adjudicate military and non-military spending requests; both houses of Congress and relevant congressional armed services and budget committees; the voting public; and various interest groups that seek to influence decision makers. Over time, this set of actors and activities has yielded a result whereby defence budgets have not grown, and the defence burden has declined. The long-term decline in the defence burden is the result of two sets of factors.

The first factor is the growing importance of civilian priorities. One of these priorities is an increase in spending for both public and private civilian consumption. A prominent example is US expenditure on health care, which grew from 5.1 per cent of GDP in 1960 to 13.6 per cent of GDP in 1997. Social security, a public-sector expenditure, has also grown. While social security is a transfer payment and not a direct claim on GDP, it is a claim on tax revenues and it competes with national defence for public sector resources. The widespread preference for tax cuts, or at least limits on tax increases, also reflects a desire to protect and expand private consumption and investment.

Another civilian priority is a sound macroeconomic environment. At several points in the post-World War II years—in the late 1950s, the 1970s and the 1990s—limitations on the growth of military spending were a component of a broader macroeconomic policy. In the 1980s and 1990s, the national objective to eliminate the federal budget deficit led to a hardening of the ceilings on military spending. Congress adopted a more centralized procedure for determining spending levels in the 1980s.

The amounts allocated for each of the discretionary spending categories, 6 including defence, were established at the beginning of the budget cycle and could not be altered except in the event of a national security emergency. In the absence of such an emergency, changes in military spending could be accomplished only if an increase in one defence account were accompanied by a decrease in another. This procedure effectively removed significant power for determining spending levels from the congressional committees responsible for defence authorizations and appropriations and gave greater power to the budget committees.⁷

The second set of factors that explains the declining defence burden is a consequence of both the successes and the failures of military spending. The successes are reflected in the fact that the defence budget has purchased a large, powerful and technologically dominant military apparatus. This has been clear in the four major military confrontations in which the USA has been involved since the end of the cold war: the Persian Gulf War in 1991, the conflicts in the former Yugoslavia in 1995 and 1999, and the 2001-2002 conflict in Afghanistan as part of the 'war on terrorism'. The USA has had clear military superiority in the application of technology and mobility in relation to its opponents and in comparison with its allies.8 Even during the cold war, many observers believed that the USA and its allies held overall superiority in weaponry, mobility and skills in comparison with the Soviet Union and its allies.

The failures of US military spending are reflected in the fact that the DOD has had difficulty in efficiently managing the funds it has received. There have been numerous examples of excess profits and bloated procurement programmes. Newspaper accounts of the high prices of standard items in the 1980s contributed to congressional and public dissatisfaction with important aspects of the Reagan Administration's build-up. The DOD has long sought, not entirely successfully, to reduce its infrastructure of unneeded military bases. Despite ongoing efforts to reform procurement and management, the DOD has not been able to make sufficient progress.9 In this context, many among the electorate and policy makers are reluctant to add to DOD budgets, except during major shifts in the security environment.

Pressures to increase the defence budget

These pressures to constrain military spending often conflict with the pressures to expand the defence budget. Changes in national security objectives are one source of

- ⁶ In US budget terminology there are 2 types of spending: 'discretionary', or budgetary resources provided in appropriations acts; and 'mandatory', sometimes called 'direct', or spending controlled by laws other than the appropriation acts. These laws, such as those governing social security and Medicare, are changed infrequently, and spending for these items is determined by pre-existing formulae and eligibility criteria. Thus, it is only discretionary spending that is determined in the annual budgetary
- Gold, D., 'Could we have done better? A retrospective on the peace dividend of the 1990s', ed. A. Markusen, America's Peace Dividend (Council on Foreign Relations (CFR) and Columbia International Affairs Online (CIAO): New York, 2000), available only online, at URL http:// wwwc.cc.Columbia.edu/sec/dlc/ciao/book/markusen/>.
 - ⁸ Alexander, M. and Garden, T., 'The arithmetic of defence policy', *International Affairs*, July 2001.
- ⁹ US General Accounting Office, Best Practices: Better Matching of Needs and Resources Will Lead to Better Weapon System Outcomes, GAO-01-288 (US Government Printing Office: Washington, DC, Mar. 2001); and Walker, D., Comptroller General of the United States, DOD Financial Management: Integrated Approach, Accountability, Transparency, and Incentives Are Keys to Effective Reform, GAO-02-497T (US Government Printing Office: Washington, DC, Mar. 2002), available at URL <www. gao.gov>.

pressure to increase the defence budget, and they occur either because national security needs change, often rapidly, or because policies change, as, for example, with the election of a new administration that seeks to alter the policies of its predecessor.

A second source of pressure emanates from demands from different constituencies within the national security establishment. The separate services push for weapons and forces that they believe are required for them to carry out their missions, and in the competition for budgetary resources this sometimes conflicts with what other services perceive as their needs. Congressional, business, labour and regional interests advocate expenditures for weapon programmes and infrastructure largely to preserve or provide a flow of resources. In addition, an administration often has to cater to the interests of constituents within the electorate and among elites, especially because of the need to raise substantial sums of money to conduct an election campaign in the United States.

During the recent period of shrinking overall budgets, the DOD has maintained its R&D activities at a high level and kept its entire plan for future procurement on the drawing board. Thus, major weapon systems—including those for both national (NMD) and theatre missile defence (TMD); the F-18E/F, F-22 and JSF tactical aircraft; the V-22 Osprey rotor-lift aircraft for the Marine Corps; the Army's Crusader mobile artillery system; new attack submarines and aircraft carriers; and so on remained in the R&D and procurement pipeline. Personnel and O&M costs were often squeezed. There was some success in reducing infrastructure and lowering future infrastructure maintenance costs with the closure of military bases, and procurement reforms and the adjustment of internal management practices also produced savings. However, the fundamental conflict between weapons and readiness costs in the context of strict budget ceilings has continued to dominate defence budget planning. By the end of the Clinton Administration in 2001, there was growing agreement that there was a mismatch between stated force requirements and budgetary resources, but there was less agreement as to whether it was the force structure or the budget that should bear most of the burden of adjustment. This mismatch, along with the expectation that substantial additional resources would be needed for new technologies, contributed to the view that some weapon systems that were legacies of the cold war could be dropped.

III. The Quadrennial Defense Review and US military strategy

The QDR is prepared by the DOD in response to a legislative mandate of the Congress. The first QDR was issued in 1997, when a majority in Congress, supported by many within the DOD and in the larger defence community, were dissatisfied with the pace and quality of the transformation of the military after the cold war. A number of official analyses and annual reports of the Secretary of Defense had failed to yield an overall vision that was thought to be sufficiently transformative in the light of a rapidly evolving global security situation. In the context of authorizing the defence budget for FY 1997, Congress required the preparation of the first QDR and made this mandate permanent in 1999, with the second QDR due for delivery in 2001 and subsequent QDRs to be issued every four years. Ongress also mandated that the

¹⁰ Brake, J. D., *Quadrennial Defense Review (QDR): Background, Process, and Issues*, CRS Report for Congress RS20771 (Congressional Research Service, Library of Congress: Washington, DC, 21 June 2001).

initial QDR be followed by an evaluation by a panel of outside experts, the National Defense Panel. This evaluation process was not included in the mandate for the second QDR.

The first major post-cold war review resulted in the 'Base Force structure' formulated by Chairman of the Joint Chiefs of Staff Colin Powell and Secretary of Defense Cheney in the 1989–93 Administration of President George Bush. The Base Force was not a single document but was contained in a series of planning efforts and public statements. It established the ability to fight and win two major theatre wars simultaneously as the primary military objective of the United States. The model was clearly the Gulf War, and the two most likely regional contingencies were thought to be the Persian Gulf and North-East Asia.¹¹ Defense Secretary Les Aspin led the Bottom-Up Review (BUR) in 1993,¹² the first year of the Clinton Administration. The BUR essentially re-affirmed the ability to fight and win two major theatre wars as the primary objective of the US military, although it indicated that such an objective could be met with a smaller force and lower spending levels than those advocated by the Base Force.

Budget ceilings dominated the first QDR. At the beginning of the process, General John Shalikashvili, then Chairman of the Joint Chiefs of Staff, the body with responsibility for drafting the report, ordered his staff to prepare the document taking into account the strict budgetary ceilings.¹³ The 1997 QDR re-affirmed the basic elements of the two-theatre war strategy and contained detailed descriptions of the force structure needed to implement the strategy. This force structure essentially ratified the structure that was in place and the existing procurement programme. The National Defense Panel evaluation criticized the strategy and force structure as being unrealistic, in the light of both the budget constraints and the changing global security situation, but these criticisms had little effect on explicit DOD strategy or on budget requests.

During the 2000 election campaign, presidential candidate Bush criticized the Clinton Administration for failing to transform the military and indicated that his administration might 'skip a generation' of weapons in order to free resources for the necessary transformation in technology and personnel.

The 2001 QDR, released less than three weeks after the 11 September attacks in the USA and the declaration of a 'war on terrorism', articulated a shift in US military strategy. 14 Instead of basing force structure on the ability to meet specific and explicit threats, the focus would be on developing forces with a range of capabilities to meet both unforeseen and predictable threats. This, it is argued, represents a shift from a

¹¹ Jaffe, L. S., The Development of the Base Force 1989–1992 (Joint History Office, Office of the Chairman of the Joint Chiefs of Staff: Washington, DC, 1993). General Powell began formulating the Base Force in 1989, fully a year before Iraq invaded Kuwait. Powell, C., My American Journey (Random House: New York, 1995).

¹² On the BUR see Aspin, L., Report on the Bottom-Up Review (US Department of Defense: Washington, DC, Oct. 1993); and Gunzinger, M., 'Beyond the Bottom-Up Review', ed. M. A. Sommerville, *Essays on Strategy XIV* (Institute for National Strategic Studies, National Defense University Press: Washington, DC, 1996), available at URL http://www.ndu.edu/inss/books/ essa/essabtbu.html>. The Base Force, the BUR and the 1997 QDR are analysed in Larson, E. V., Orletsky, D. T. and Leuschner, K., Defense Planning in a Decade of Change: Lessons From the Base Force, Bottom-Up Review, and Quadrennial Defense Review (Rand Corporation: Santa Monica, Calif., 2001), available at URL http://www.rand.org/publications/MR/MR1387.

¹³ Wilson, G. C., This War Really Matters: Inside the Fight for Defense Dollars (Congressional Quarterly Press: Washington, DC, 2000), chapters 2 and 3.

¹⁴ US Department of Defense, 'Quadrennial Defense Review report', 30 Sep. 2001, URL http:// www.defenselink.mil/pubs/qdr2001.pdf>.

'threat-based' strategy to a 'capabilities-based' strategy, with a wide range of capabilities called for to address the range of possible and unforeseen threats. This emphasis on a capabilities-based strategy represents a strengthening of a number of trends, including the expanded use of information technology in the Revolution in Military Affairs, the development of defences against asymmetric threats and the renewal of attention to homeland defence. The QDR states that the ability to protect the US homeland from a variety of threats will become one of the two main pillars of the new force structure.

The second pillar is the ability to wage and win two theatre wars in overlapping time frames. Thus, the new force-sizing strategy does not make a sharp break with the past. The QDR states that 'U.S. forces will remain capable of swiftly defeating attacks against U.S. allies and friends in any two theaters of operation in overlapping timeframes'. In addition, 'U.S. forces will be capable of decisively defeating an adversary in one of the two theaters . . . This capability will include the ability to occupy territory or set the conditions for a regime change if so directed'. ¹⁵

Thus, while making the military objectives and requirements more flexible, the QDR retains a two-theatre war requirement. One of these wars could be a global war against terrorism.

The main thrust of the 2001 QDR is to give primacy to the development, introduction and deployment of the transformative technologies and strategies that will allow the USA to maintain its military supremacy. However, it contains very little guidance as to the new force structure or budget requirements. It eschews the type of detailed descriptions of forces and spending levels that dominated the 1997 QDR. Despite Secretary Rumsfeld's numerous statements that budgetary resources would be shifted to accommodate and accelerate the necessary transformation, the 2001 QDR supports the existing force structure and suggests that expansions and improvements in existing forces will be needed to meet the new requirements, along with technological transformation. This apparent contradiction soon brought forward criticisms from the DOD that the QDR did not provide the guidance needed to move forward. It also meant that the difficult decisions regarding spending levels and the allocation of funds would have to await the FY 2003 budget submissions and congressional debates.

IV. US military spending in FY 2002 and beyond

President Bush formally introduced his administration's budget for FY 2003 (1 October 2002 to 30 September 2003) on 4 February 2002. The budget request for the defence function emphasized a substantial increase over the budget approved for FY 2002, largely in the context of prosecuting the war in Afghanistan and the global war against terrorism. The administration had used most of its first year in office to conduct a major review of US defence policy, which was released in the 2001 QDR, and had postponed major changes in the Clinton Administration's defence programme until the FY 2003 budget.

Following accepted practice, the US federal budget, which includes detailed expenditure plans for each of the government's functions and for each government

¹⁵ US Department of Defense (note 14), p. 21.

¹⁶ Fulgham, D. A., 'QDR became "pabulum" as decisions slid', *Aviation Week & Space Technology*, 8 Oct. 2001.

department and agency, is introduced eight months before the start of the fiscal year to allow sufficient time for Congress to exercise its legislative oversight function.¹⁷ As a first step, following the budgetary reforms enacted in the 1980s, the House of Representatives and the Senate establish spending ceilings for the discretionary portion¹⁸ of the budget and its major components, including the defence function. Once established, the ceilings on discretionary spending can be exceeded only in an emergency. This occurred after the 11 September terrorist attacks when the president requested and received \$20 billion in supplementary appropriations for FY 2001 and \$20 billion for FY 2002. In the absence of an emergency, a breach of the ceiling for the defence function, for example, because of unanticipated cost growth in a procurement programme, leads to a sequestration process whereby the DOD must find cuts in other programmes of equal amounts before the larger expenditure to cover the cost overrun can be approved. This may be the most important way in which the budget process has transferred budgetary power away from the military-oriented committees of Congress.

The defence spending request is then debated in the relevant committees of the House of Representatives and the Senate. The budget for the DOD itself represents most of the funding for defence, but the defence function also includes spending for nuclear warhead research and production in the Department of Energy, military functions of the Coast Guard in the Department of Transportation, and other, smaller defence activities outside the DOD. In addition, some activities of the DOD, most prominently the work of the Army Corps of Engineers in maintaining civilian rivers and harbours, are not part of the defence function. Spending legislation is split between budget authority, which establishes the legal basis for the government to make contractual commitments, and budget appropriations, which represent the spending commitments for a given year. Changes in budget authority tend to lead to changes in appropriations, since some contractual commitments involve appropriations that are spread out over several years. Outlays are what is actually spent and may differ from appropriations because of differences in the timing of planned and actual spending. Thus, there is often confusion regarding the different totals; press accounts and many scholarly analyses rarely make distinctions between the different types of defence expenditure figures, as provided by the DOD, nor state which type of figure they are citing.

The Bush Administration budget request for FY 2003 included \$396.8 billion in budget authority for National Defense, an increase of \$48 billion over FY 2002. DOD outlays are expected to reach \$360.7 billion in FY 2003 (table 6E). At the time of writing, congressional opposition to the president's budget request is minimal. If it is approved, the FY 2003 budget will represent an increase over expected FY 2002 DOD outlays of 8.1 per cent, in real terms. Taking DOD outlays in FY 2001 as a base, and assuming that Congress approves the FY 2003 request, the Bush Administration will have added \$54.2 billion to defence outlays, in FY 2003 prices (table 6E). This represents an increase of 17.7 per cent in real terms in only two years, the largest two-year increase since the Viet Nam War. The key question is what this increase will buy.

¹⁷ For explanations of US budget categories and a chronology of the US budgetary processes see Executive Office of the President of the United States, Office of Management and Budget, Budget System and Concepts and Glossary (US Government Printing Office: Washington, DC, 2002), available at URL <www.whitehouse.gov/omb/budget/index.html>.

¹⁸ For explanations of the terms 'discretionary' and 'mandatory' see note 6.

The investment accounts

DOD procurement and RDT&E are projected to jump by 14.4 per cent in real terms from FY 2001, the last budget of the Clinton Administration, to FY 2003, reaching a combined total of \$112.8 billion (table 6E). In the ongoing debate on defence planning, much has been made of the so-called 'procurement holiday' of the 1990s, the period of the post-cold war 'peace dividend'. Supporting this are the data showing a 70 per cent drop in budget authority for arms procurement from FY 1985 to FY 1997. However, outlays for procurement fell by a significantly smaller amount, 50 per cent in real terms over the period FY 1985–97. Moreover, RDT&E funds were used to support some activities that had previously been funded out of procurement accounts. Overall, actual spending on the investment accounts fell by 42 per cent, much less than the drawdowns after the build-ups for the wars in Korea and Viet Nam.

The Bush programme includes funding for weapon systems already in the stage of RDT&E or production. There are no new weapon initiatives, although some programmes, such as those for missile defence, are being expanded. Other programmes, such as the V-22 Osprey, are being reorganized because of their serious testing and management problems, and missile defence has already been reorganized with the aim of avoiding duplication and reducing overhead expenses. Thus, various TMD programmes have been combined with the NMD programme to create a single programme under the Missile Defense Agency of the DOD. Most procurement and RDT&E programmes are continuing along much the same trajectory as they did under the Clinton Administration. The DOD announced that it was cancelling 18 army procurement programmes, along with the US Navy's DD-21 destroyer and Area Missile Defense programme. However, both of the Navy systems continue to receive RDT&E funding: the DD-21—now renamed the DD-X—as a test bed for new naval technologies, and the Area Missile Defense programme under the account of missile defence rather than under the account of Navy systems.

Many of the procurement and RDT&E programmes are controversial. Missile defence is scheduled to absorb 18.4 per cent of the RDT&E funding for FYs 2003 and 2004, and the administration maintains FY 2004 as the target date for initial deployment. However, many questions remain regarding missile defence technical feasibility, military utility and system costs. ²⁰ The F-22 has entered low-rate production, but problems that have led to delays in the past have not been solved and it is considered by outside observers to be a high-risk programme. ²¹ All three of the tactical combat aircraft are projected to be produced at considerably higher unit costs than those of the systems they are replacing. These costs could rise in the future, putting the status of the programmes in doubt. Even if the overall budget is approved fairly easily, these and other systems are likely to be the subject of considerable congressional debate.

¹⁹ US Department of Defense, 'Secretary Rumsfeld briefs the fiscal 2003 DoD budget', 4 Feb. 2002, URL http://www.defenselink.mil/news/Feb2002/t02042002_t0204sd.html. The DOD also announced that it was retiring the Peacekeeper missile, initially known as the MX, which had been a centrepiece of the Reagan Administration's build-up. This weapon programme has not received procurement funding for some time, so the budgetary implications of retiring the missile are quite small.

²⁰ US Congress, Congressional Budget Office, *Estimated Costs and Technical Characteristics of Selected National Missile Defense Systems* (US Congressional Budget Office: Washington, DC, Feb. 2002), available at URL <www.cbo.gov>.

²¹ US General Accounting Office, *Tactical Aircraft: F-22 Delays Indicate Initial Production Rates Should Be Lower to Reduce Risks*, GA0-02-298 (US Government Printing Office: Washington, DC, Mar. 2002), available at URL <www.gao.gov>.

Personnel

Personnel outlays are projected to rise from \$80.8 billion in FY 2001 to \$92.8 billion in FY 2003, and then to \$103.6 billion in FY 2005, all figures in FY 2003 prices. President Bush has made improvement of military pay and benefits a major objective, as a means of offsetting shortfalls in retention and improving morale. However, many of the complaints from enlisted personnel and officers concern issues such as the length of overseas postings, separation from families, and uncertainties as to the nature of missions—not remuneration issues. Some problems of retention surfaced during the strong economic expansion of the late 1990s, but they are not long-term in nature. The quality of US military personnel has risen since the early 1980s, as measured by years of education and performance on standardized tests, and remuneration levels are consistent with civilian occupations with similar skill levels.²² Some inequities, especially at the lower pay scales, need to be rectified, and the Bush programme is seeking to address them.

One of the major budgetary increases is for health care, especially for military retirees. The DOD added \$8 billion in budget authority to fund health care improvements, in response to a congressional mandate. This money is in the O&M portion of the budget, but it is clearly an item designed to benefit personnel. As health care costs are expected to continue to rise for the economy as a whole, this item is likely to absorb significant budgetary resources in the future.

Improving morale is less a budgetary item and more a question of organizational issues. Some of the lessons learned in the early months of the war in Afghanistan, in terms of the importance of mobility and the real-time use of information, may help to generate organizational innovations that make better use of individual skills. Paradoxically, with a clear enemy and continued combat success, the war against terrorism is likely to yield a significant boost to military morale.

Operations and maintenance

O&M funding has been another contentious issue in the debates on military readiness and in the continual attempts by the DOD to reduce its infrastructure expenses by closing excess military bases, outsourcing some activities to private companies and increasing the proportion of supplies purchased through commercial channels in an 'off the shelf' manner. The Clinton Administration's Revolution in Business Affairs did lead to significant savings, although the actual amounts appear to have been lower than projected. The prospects for future savings appear limited, partly because the best opportunities—sometimes called the 'low hanging fruit'—have already been taken.23

Since O&M takes such a large proportion of total DOD resources—39.8 per cent of requested outlays for FY 2003—there will be continued attempts to generate greater economies in these accounts. One area is the closing of redundant military bases, depots and other facilities. The Reagan Administration and Congress established a Base Realignment and Closure (BRAC) process. Previously, it had been nearly impossible to close facilities because congressional representatives of districts with targeted facilities, in coalition with other representatives who feared they would lose

²² Williams, C., 'Our GIs earn enough', Washington Post, 12 Jan. 2000.

²³ Williams, C., 'Holding the line on infrastructure spending', ed. C. Williams, *Holding the Line: US* Defense Alternatives for the Early 21st Century (MIT Press: Cambridge, Mass., 2001).

their facilities, acted to stymie the administration's attempts to close bases. The BRAC process established a commission with members appointed by both Congress and the administration. The commission compiled a list of facilities to be closed, and Congress and the administration were required to accept or reject the entire list without amendment. This de-politicizing of the process was successful and three rounds of base closure were completed. However, when the Clinton Administration sought to keep two facilities open by privatizing their functions, Congress refused to continue the process. The Bush Administration and Congress have agreed to come back to the BRAC process, but not before FY 2005. If that schedule were to be maintained, actual savings would not be available to ease possible budget pressures for some years.

At the same time, readiness needs may increase as the war on terrorism proceeds, given the greater need to maintain troops, equipment and supplies in forward locations. However, the success of the operation in Afghanistan, with resources inherited from the previous administration, suggests that readiness problems may have been overstated and may be resolved more easily than expected.

Homeland security

Homeland security is treated as a separate category in the budget documentation. Although there is an Assistant to the President for Homeland Security in the Office of Homeland Security, established in October 2001 within the Executive Office of the President, the budget for that office is not large. Instead, funding for homeland security is spread over a number of departments and allocated to a number of budgetary categories. The budget request includes \$37.7 billion for homeland security, up from \$18 billion in FY 2002, with 22 per cent of the total earmarked for the DOD, 20 per cent for the Department of Transportation and 19 per cent for the Department of Justice.²⁴

Defence of the US homeland has traditionally been a function shared among a large number of government agencies, including the DOD; the customs service in the Treasury Department; the Federal Bureau of Investigation in the Department of Justice; the Immigration and Naturalization Service in the State Department; the Coast Guard in the Department of Transportation; various federal, state and local agencies dealing with public health issues; and fire, police and emergency medical services run by state, county and city governments throughout the country. The homeland defence activities of the DOD and the Coast Guard have been regarded as a component of the defence function, but the other agencies and activities have not. However, homeland defence also includes a number of civilian activities, such as the support of 'first responders' to attacks on the homeland, which involves local police, fire and emergency medical personnel; defence against biological warfare, which involves both public and private medical personnel; and enhanced security at domestic airports. Thus, a number of civilian activities become defined as components of national defence. While such activities remain under civilian authority, the continuation of the war against terrorism may well blur the distinction in future budgetary and policy discussions.

²⁴ Kosiak, S., 'FY 2003 budget request for homeland security', Center for Strategic and Budgetary Assessments, 8 Feb. 2002, URL <www.csbaonline.org>.

Transformation

The president and the defence secretary have, since entering office, placed increased emphasis on the organizational and technological transformation of the US military, although the details of this transformation have not been spelled out. Most observers have emphasized the need for enhanced applications of information technology designed to transmit real-time information on battlefield conditions in order to accelerate weapons deployment and support tactical adjustments. In discussions of these issues, the emphasis on information technology was often accompanied by the argument that a number of cold war-era weapon programmes should be cancelled, since they were either redundant, having been designed to meet threats that no longer exist, or not suited to the new defence environment. Moreover, it would be necessary to cancel such programmes to find the budgetary resources for transformation. Both the president and the defence secretary made comments to this effect in the months prior to 11 September.

However, the military services, contractors and other interests opposed programme cuts and, with the increase in defence resources made available after the terrorist attacks, these legacy programmes have survived. It was reported that Secretary Rumsfeld had accepted the continuation of legacy programmes as the price for avoiding clashes within the DOD.²⁵ There are no explicit initiatives in the FY 2003 budget request, although substantial technological transformation may occur within existing programmes. In some instances, altering the missions and organization of existing forces can introduce the flexibility required in the new environment. Moreover, the administration has blurred the distinction between legacy and transformation systems by claiming that programmes such as missile defence are part of its transformation initiatives. The absence of more explicit attention to transformation and the continuation of expensive legacy systems suggest that there will continue to be a conflict between the old and the new.26

V. Conclusions

There are many uncertainties in the short-term outlook for US defence spending, the course of the war against terrorism being the most important. The programme put forward by the Bush Administration for the US armed forces, both in its budget requests and in its other statements, most prominently the QDR, also raises uncertainties in terms of its ultimate affordability and its conformity to an overall vision of the role of the US military in the emerging global environment. Issues involving the investment accounts, procurement and RDT&E illustrate these latter uncertainties.

The investment accounts are 'back-loaded', that is, a large part of the funding for the completion of current programmes is concentrated in the later years of the fiveyear projections. Such back-loading assumes that funding will be available when it is needed, but a future budget squeeze would force the DOD to make the choices between programmes that have so far been postponed. The Reagan programme ran into similar difficulties when large federal budget deficits, political opposition to the planned nuclear weapon build-up in the USA and Western Europe, and other economic and political changes forced a slowdown in the procurement programme. DOD

²⁵ 'Old hawk learns new tricks', *The Economist*, 11 Oct. 2001.

²⁶ Keller, B., 'The fighting next time', New York Times, 10 Mar. 2002; and 'Transformation postponed', The Economist, 14 Feb. 2002.

officials have stated that the funding for existing programmes has absorbed the lion's share of available funding. However, they have the authority to make choices among programmes, reducing or cancelling some to shift resources to activities that are deemed more urgent. By continuing the existing set of procurement and RDT&E programmes, they are effectively choosing to make less sharp a break with the past than they stated they would.

In this regard, the 2001 QDR did not provide appropriate guidance. The shift to a capabilities-based emphasis is too open-ended, since it supports any set of capabilities that the USA can produce. The F-22 may provide an example. It is a stealthy, supersonic fighter plane, potentially a technological marvel, but it was designed during the cold war to counter an expected new generation of Soviet aircraft and air defences that never materialized. The F-15, which the F-22 will replace, gives the USA air superiority over any conceivable enemy well into the future. Thus, the F-22 may be a system without a threat to combat; if so, it will absorb resources that could be better used elsewhere.

The 2001 QDR has provoked relatively little discussion, especially when compared with the 1997 QDR. This may be due to the environment that has emerged after the terrorist attacks in the United States, with its emphasis on the steps to be taken in the war against terrorism, specifically in Afghanistan. The failure of the 2001 QDR to articulate a more specific vision of US military policy, and the emphasis in the budget on continuity rather than change, suggests that a major opportunity has been lost. It also suggests that providing the military with substantially more funding, however justifiable in terms of short-term security perceptions, may, over time, prevent the very reforms that leaders claim are needed.