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# Defence Statistics 1998

The main aim of this paper, which updates research paper 97/135, is to bring together the more commonly used statistics relating to defence expenditure and manpower and to explain some of the problems involved in using such statistics, particularly when making international comparisons.

Readers will also wish to consult a forthcoming Library Research Paper *Defence Employment 1996-97* which sets out some statistics on defence employment and manpower.

Bryn Morgan

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## **Summary of main points**

- The UK Defence Budget has fallen from 5.3% of GDP in 1984/85 to 2.6% in 1998/99 and is planned to fall to 2.3% by 2001/02.
- There has been a 31% fall since 1990 in the size of UK regular armed forces although the number of regular reserves is slightly above the 1990 level.
- The total number of armed forces personnel in NATO countries has fallen by more than a fifth since 1990.
- Since 1992/93 salaries of senior officers have increased at a faster rate than other ranks. The increases seen in ranks up to corporal were lower than for average earnings in the whole economy.

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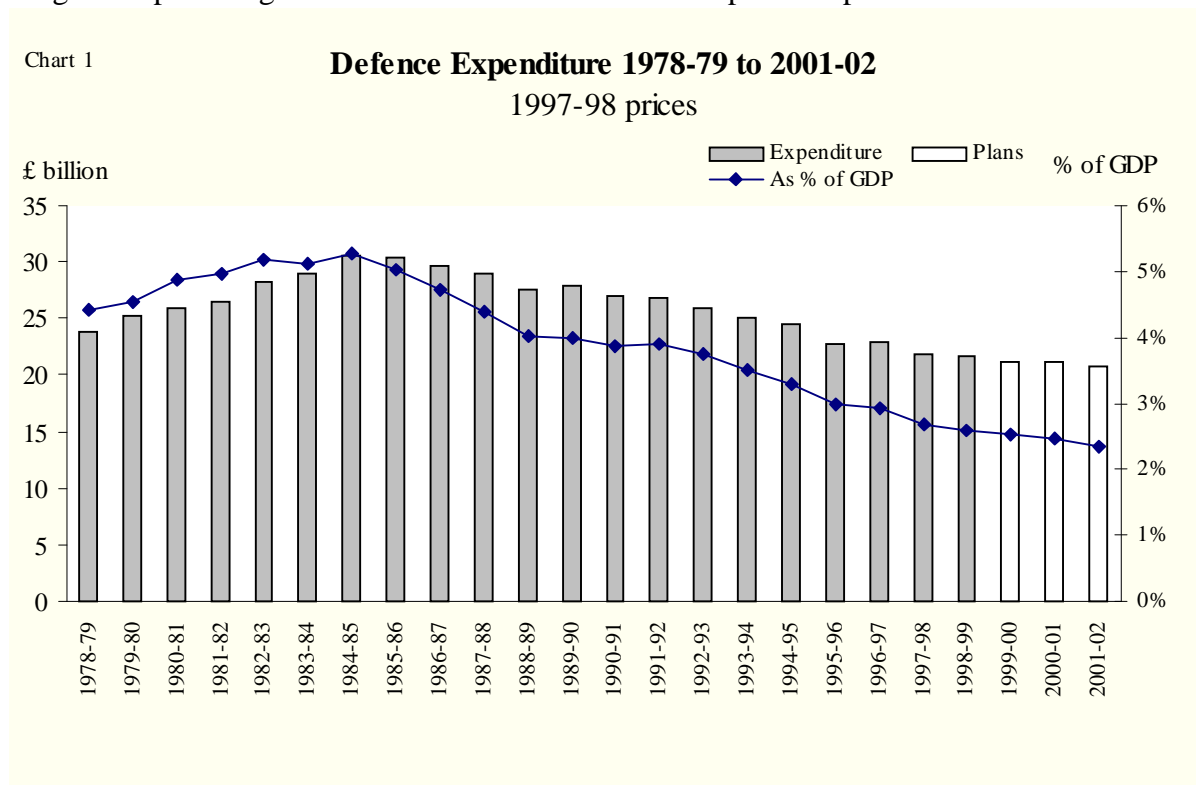
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# I Defence Expenditure

## A. UK Defence Expenditure

The principal measure of defence expenditure in the United Kingdom is the Defence Budget, which covers all expenditure on the Ministry of Defence's programme, and is met from three votes within the Supply Estimates (Class I, Votes 1 to 3). These votes are individually cash limited, but together they form the block defence cash limit and are managed as a block budget. Expenditure incurred against Class I, Vote 4 on pensions for retired members of the Armed Forces falls outside the Defence Budget and is not cash limited.

The Defence Budget for the years 1979/80 to 1997/98 is shown in Table 1 and Chart 1, together with MoD planned defence expenditure to the financial year 2001/02. The figures are given at both outturn prices and constant 1997/98 prices (revalued using the adjusted GDP deflator). The figures at 1997/98 prices should be regarded more as a guide to what that expenditure could have purchased in other sectors of the economy (i.e. the opportunity cost), rather than as a guide to the volume of defence services/equipment purchased. The table also shows the Defence Budget as a percentage of Gross Domestic Product and of public expenditure.



There are a number of points to note when looking at trends in defence expenditure over the period shown:

- Figures for 1990/91 and 1991/92 are net of other countries' contributions to the costs of the Gulf War of £498 million and £1,525 million respectively.
- Figures prior to 1992/93 include expenditure for the security and intelligence services.

- For 1992/93 to 1994/95 the Defence Budget includes the net present value of extra costs associated with early payment to Armed Forces personnel of both pension lump sums and annual pensions, which are non-voted, in addition to expenditure voted in Supply Estimates. The amounts are £54 million, £105 million and £84 million respectively.
- Figures for 1996/97 and 1997/98 are net of the element of receipts from the sale of married quarters that have been or will be appropriated onto Defence Votes. These amounts are £304 million and £700 million respectively. The amount for 1996/97 is lower than the total receipts of £945 million included within the control total by function.
- In 1996/97 £244 million was drawn down from the reserve to cover the additional costs of operations in the former Yugoslavia.
- The planned expenditure figures to 2001/02 are net of defence estate disposals which should exceed £700 million over the next four years.<sup>1</sup>

Table 2 looks at the defence budget according to the New Management Strategy which was introduced on 1 April 1991. This comprises a system of management planning centred on the Departmental Plan which established targets for managers throughout the Department and the armed forces, and a system of budgets which provide managers with a cash allocation with some flexibility in the way in which they use it.

Table 3 looks at the Defence Budget broken down by principal heading. The expenditure total shown in this table differs from that in Table 1 as it shows expenditure at outturn prices. Also, other countries' contributions to the cost of the Gulf War are excluded from this table, so expenditure in 1990/91 in 1991/92 in this table is higher than in Table 1. Although the percentage of total expenditure spent on personnel, equipment and other items has varied from year to year, no consistent trend is displayed.

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<sup>1</sup> HC Deb 23 July 1998 c605w

Table 1					
<b>Defence Budget: 1979/80 to 1999/00</b>					
		£ billion	£ billion at 1997/98 prices <sup>(a)</sup>	As per cent of GDP	As per cent of GGE(X) <sup>(b)</sup>
1979-80	<i>outturn</i>	9.4	25.1	4.5%	10.8%
1980-81	<i>outturn</i>	11.5	26.0	4.9%	11.0%
1981-82	<i>outturn</i>	12.8	26.4	5.0%	11.0%
1982-83	<i>outturn</i>	14.6	28.2	5.2%	11.4%
1983-84	<i>outturn</i>	15.7	29.0	5.1%	11.5%
1984-85	<i>outturn</i>	17.4	30.5	5.3%	11.8%
1985-86	<i>outturn</i>	18.2	30.3	5.0%	11.7%
1986-87	<i>outturn</i>	18.4	29.7	4.7%	11.3%
1987-88	<i>outturn</i>	18.9	29.0	4.4%	10.9%
1988-89	<i>outturn</i>	19.2	27.6	4.0%	10.6%
1989-90	<i>outturn</i>	20.8	27.9	4.0%	10.5%
(c) 1990-91	<i>outturn</i>	21.7	27.0	3.9%	10.0%
(c) 1991-92	<i>outturn</i>	22.9	26.8	3.9%	9.6%
1992-93	<i>outturn</i>	22.9	26.0	3.7%	8.7%
1993-94	<i>outturn</i>	22.8	25.1	3.5%	8.2%
1994-95	<i>outturn</i>	22.6	24.6	3.3%	7.8%
1995-96	<i>outturn</i>	21.5	22.8	3.0%	7.1%
(d) 1996-97	<i>outturn</i>	22.3	22.9	2.9%	7.2%
(d) 1997-98	<i>estimates</i>	21.8	21.8	2.7%	6.9%
1998-99	<i>estimates</i>	22.2	21.6	2.6%	6.7%
1999-00	<i>plans</i>	22.3	21.2	2.5%	6.4%
2000-01	<i>plans</i>	22.8	21.1	2.5%	6.2%
2001-02	<i>plans</i>	23.0	20.8	2.3%	5.9%
Notes: (a) Adjusted using the adjusted GDP deflator as at 3 November 1998					
(b) General government expenditure excluding privatisation proceeds and expenditure out of proceeds of the National Lottery and net of receipts of interest and dividends from public corporations and the private sector.					
(c) Figures for 1990/91 and 1991/92 are net of other countries contributions to the cost of the Gulf War of £498m and £1,525m respectively.					
(d) Figures for 1996/97 and 1997/98 are net of the element of receipts from from the sale of married quarters that have been or will be appropriated onto Defence Votes, £304m and £700m respectively. The figures for these years including these amounts are given below:					
	1996-97	22.0	22.0	2.9%	7.1%
	1997-98	21.1	20.6	2.6%	6.7%
Sources: <i>Defence Statistics 1998 (DASA) Table 1.2</i>					
<i>Ministry of Defence: The Government's Expenditure Plans: 1998/99, Cm 3902</i>					
<i>Public Expenditure: Statistical Analyses 1998-99, Cm 3901</i>					
<i>Comprehensive Spending Review: New Public Spending Plans 1999-2002</i>					

Table 2

<b>The Defence Budget by budgetary area: 1995-96 to 1998-99</b>				£ million
Vote Section	1995-96 <i>outturn</i>	1996-97 <i>outturn</i>	1997-98 <i>estimated outturn</i>	1998-99 <i>planned</i>
	<b>1,155</b>	<b>1,155</b>	<b>1,103</b>	<b>1,115</b>
1A	1,155	1,155	1,103	1,115
	<b>3,515</b>	<b>3,475</b>	<b>3,396</b>	<b>3,420</b>
1B	475	505	517	526
1C	3,040	2,970	2,879	2,894
	<b>1,759</b>	<b>1,701</b>	<b>1,674</b>	<b>1,729</b>
1D	1,759	1,701	1,674	1,729
	<b>2,496</b>	<b>2,527</b>	<b>2,156</b>	<b>2,155</b>
1E	678	632	530	512
1F	1,049	1,082	1,041	1,065
1G	769	813	585	578
	<b>4,662</b>	<b>4,901</b>	<b>4,695</b>	<b>4,674</b>
2A	2,080	2,117	2,048	2,057
2B	989	1,125	1,075	1,001
2C	1,593	1,659	1,572	1,616
	<b>2,093</b>	<b>2,428</b>	<b>2,462</b>	<b>2,298</b>
1H	741	711	614	571
1I	1,352	1,717	1,848	1,727
	<b>783</b>	<b>788</b>	<b>734</b>	<b>716</b>
3A	797	790	734	716
3B	-14	-2	0	0
	<b>4,553</b>	<b>4,794</b>	<b>5,195</b>	<b>5,712</b>
3C	393	345	366	549
3D	781	840	845	779
3E	758	897	816	785
3F	803	697	823	948
3G	780	924	1,276	1,476
3H	676	674	613	680
3I	362	417	456	495
3J	<b>484</b>	<b>531</b>	<b>457</b>	<b>459</b>
3K	17	16	-32	-29
1J	0	27	-3	-8
	0	-304	-700	0
3M	0	0	1	
	<b>21,517</b>	<b>22,041</b>	<b>21,135</b>	<b>22,240</b>
4A	828	1,076	1,122	1,191

Sources: Ministry of Defence, *The Government's Expenditure Plans: 1998/99, Cm 3902*



Table 3

## Principal Headings of the Defence Budget: 1979/80 to 1998/99

£ billion

		Total Expenditure as per cent of total												
		Expenditure on personnel					Expenditure on equipment					Other expenditure		
		Total	<i>of the Armed Forces</i>	<i>of the retired Armed Forces</i>	<i>of civilian staff</i>	Total	<i>Sea</i>	<i>Land</i>	<i>Air</i>	<i>Other</i>	Total	<i>Works, buildings and land</i>	<i>Misc. stores etc</i>	
Expenditure (outturn/ estimates prices) <sup>(a)</sup>														
1979-80	<i>outturn</i>	9.2	42.6%	22.9%	5.0%	14.8%	39.7%	12.1%	8.1%	15.5%	4.0%	17.7%	6.5%	11.2%
1984-85	<i>outturn</i>	17.1	34.9%	18.9%	4.8%	11.2%	45.8%	13.0%	9.6%	20.3%	2.9%	19.3%	7.4%	11.9%
1985-86	<i>outturn</i>	17.9	35.6%	19.6%	5.0%	11.0%	45.7%	13.9%	10.5%	18.4%	2.8%	18.8%	7.9%	10.9%
1986-87	<i>outturn</i>	18.2	37.9%	20.9%	5.4%	11.7%	43.4%	13.7%	9.7%	17.0%	3.0%	18.6%	8.2%	10.4%
1987-88	<i>outturn</i>	18.9	38.2%	21.4%	5.7%	11.1%	43.9%	14.8%	9.0%	17.1%	2.9%	17.8%	7.7%	10.2%
1988-89	<i>outturn</i>	19.1	39.7%	22.5%	5.6%	11.6%	42.1%	13.8%	8.1%	16.2%	4.0%	18.2%	7.4%	10.8%
1989-90	<i>outturn</i>	20.8	39.0%	21.8%	5.8%	11.4%	41.1%	13.9%	8.4%	14.9%	3.9%	19.9%	9.2%	10.7%
1990-91	<i>outturn</i>	22.3	39.5%	21.6%	6.3%	11.6%	39.6%	13.3%	8.6%	14.3%	3.4%	20.9%	9.3%	11.6%
1991-92	<i>outturn</i>	24.6	40.5%	22.4%	6.6%	11.5%	39.7%	12.8%	8.8%	14.5%	3.6%	19.8%	8.5%	11.3%
1992-93	<i>outturn</i>	23.8	44.2%	23.7%	8.2%	12.3%	36.7%	12.2%	7.8%	13.3%	3.4%	19.1%	7.5%	11.6%
1993-94	<i>outturn</i>	23.4	42.0%	29.5%	(c)	12.5%	39.3%	11.0%	7.7%	13.9%	6.7%	18.7%	8.9%	9.8%
1994-95	<i>outturn</i>	22.5	41.3%	28.8%	(c)	12.5%	39.2%	10.9%	7.3%	14.1%	6.9%	19.5%	10.7%	8.8%
1995-96	<i>outturn</i>	21.5	39.6%	28.6%	(c)	11.0%	39.7%	9.8%	7.3%	15.6%	7.0%	20.7%	9.6%	11.1%
1996-97	<i>outturn</i>	22.0	39.8%	28.9%	(c)	10.9%	39.4%	9.3%	7.4%	16.1%	6.6%	20.8%	8.7%	12.1%
1997-98	<i>estimates</i>	21.1	39.2%	28.4%	(c)	10.8%	42.5%	9.5%	7.2%	19.3%	6.5%	18.3%	5.7%	12.6%
1998-99	<i>estimates</i>	22.2	37.1%	27.3%	(c)	9.9%	44.0%	10.6%	7.7%	19.8%	6.0%	18.9%	8.1%	10.7%

Notes: (a) Figures for 1990/91 and 1991/92 exclude overseas contributions to the cost of the Gulf War.

(b) Using the GDP deflator and forecasts given in the Financial Statement & Budget Report 1995-96.

(c) Pension payments to retired service personnel are outside the new public expenditure control total and are excluded from the defence budget.

Sources: UK Defence Statistics 1997 and earlier editions, Table 1.2

## **B. International comparisons**

There are problems when making international comparisons of military expenditure. One of the most important of these is the suitability of the exchange rates used when expenditures in national currencies are converted to a common basis. The use of current exchange rates can lead to substantial distortions when comparing defence expenditures. This is because the official exchange rates of currencies are often not an accurate reflection of the internal purchasing power of the respective currencies - rates of exchange may be fixed by administrative decree, or in the case of a floating rate, by forces reflecting many factors, such as the movement of capital or expectations about the future. Also, the national definitions of military spending may vary.

These problems mean, then, that international comparisons of defence expenditure tend to be crude measures which should be treated with a substantial amount of caution. Differences of a fraction of a percentage point should not be used as a basis for argument.

Furthermore, the basis of payment through which the military sector acquires resources can also differ between countries. If, for example, conscription takes place in a country, the total cost of the armed forces in that country is likely to be lower than in a country with a similar size of force which is fully professional<sup>2</sup>.

Tables 4 and 5 show international comparisons of Defence Expenditure based on the NATO definition of defence expenditure. This includes all spending on military forces, military aid to another nations, military pensions, host government expenses for NATO tenant forces, NATO infrastructure and civilian staff costs; but excludes spending on paramilitary forces. In view of the differences between this and national definitions, the figures may diverge considerably from those which are quoted by national authorities or given in national budgets, although for the UK the difference is minor<sup>3</sup>.

Table 4 shows expenditure as a percentage of Gross Domestic Product, while Table 5 shows expenditure in terms of US dollars per capita.

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<sup>2</sup> although the professional force may well be more effective i.e. the size of professional force necessary to perform a specific defence role may be smaller than that required with conscripts

<sup>3</sup> Only around £2 million in 1998/99 made up of expenditure on support services outside the defence budget (mainly provided by the National Audit Office).

Table 4								
<b>Defence Expenditure as % of GDP<sup>(a)</sup></b>								
Country	Average 1975-79	Average 1980-84	Average 1985-89	1990	1994	1995	1996	1997 <sup>(b)</sup>
NATO countries								
Belgium	3.2	3.3	2.8	2.4	1.7	1.7	1.6	1.6
Denmark	2.4	2.4	2.1	2.0	1.9	1.8	1.8	1.7
France	3.8	4.1	3.8	3.6	3.3	3.1	3.0	3.0
Germany <sup>(c)</sup>	3.4	3.4	3.0	2.8	1.8	1.7	1.7	1.6
Greece	5.6	5.4	5.1	5.8	4.4	4.4	4.5	4.6
Italy	2.1	2.1	2.3	2.1	2.0	1.8	1.9	1.9
Luxembourg	0.9	1.1	1.0	1.1	0.9	0.8	0.8	0.8
Netherlands	3.1	3.1	2.9	2.6	2.1	2.0	2.0	1.9
Norway	2.9	2.7	2.9	3.2	2.8	2.3	2.4	2.2
Portugal	3.4	3.0	2.8	3.1	2.6	2.7	2.5	2.6
Spain	..	2.4	2.2	1.8	1.5	1.5	1.5	1.4
Turkey	4.4	4.0	3.3	3.5	4.1	3.9	4.1	4.3
United Kingdom	4.9	5.2	4.5	4.1	3.4	3.1	3.0	2.8
<b>NATO Europe</b>	<b>..</b>	<b>3.6</b>	<b>3.3</b>	<b>3.0</b>	<b>2.4</b>	<b>2.3</b>	<b>2.3</b>	<b>2.2</b>
Canada	1.9	2.1	2.1	2.0	1.8	1.6	1.5	1.3
United States	5.0	5.8	6.3	5.6	4.3	4.0	3.7	3.6
<b>NATO Total</b>	<b>..</b>	<b>4.6</b>	<b>4.8</b>	<b>4.1</b>	<b>3.3</b>	<b>3.0</b>	<b>2.9</b>	<b>2.8</b>
Notes: (a) NATO definition of defence expenditure as a proportion of gross domestic product (based on current prices). Figures are for financial year with most months in fiscal year i.e 1996 is 1996/97 for UK.								
(b) 1997 figures are estimates.								
(c) These percentages have been calculated without taking into account the expenditure for Berlin.								
Sources: NATO press release M-DPC-2(97)147 - 'Financial & Economic Data Relating to NATO Defence' Table 3								

Table 5									
<b>NATO Defence Expenditures Per Capita In US \$ (1990 prices &amp; exchange rates)<sup>(a)</sup></b>									
Country	1975	1980	1985	1990	1994	1995	1996	1997 <sup>(b)</sup>	
Belgium	405	483	478	466	352	342	337	340	
Denmark	450	493	498	515	488	480	476	482	
France	588	695	740	751	710	673	659	663	
Germany	606	644	671	669	385	376	369	360	
Greece	356	343	438	380	374	379	399	419	
Italy	332	344	392	412	399	360	386	383	
Luxembourg	137	184	203	253	275	263	269	272	
Netherlands	442	457	494	496	424	407	414	409	
Norway	564	631	758	800	803	700	760	746	
Portugal	199	156	147	189	184	195	186	203	
Spain	..	226	246	233	201	207	201	197	
Turkey	65	74	71	95	96	95	100	102	
United Kingdom	690	697	770	688	564	517	512	491	
<b>NATO Europe</b>	<b>..</b>	<b>464</b>	<b>494</b>	<b>484</b>	<b>399</b>	<b>378</b>	<b>379</b>	<b>374</b>	
Canada	313	327	414	415	360	335	302	274	
United States	987	987	1,265	1,225	971	914	863	838	
<b>NATO Total</b>	<b>..</b>	<b>652</b>	<b>779</b>	<b>761</b>	<b>610</b>	<b>576</b>	<b>556</b>	<b>543</b>	
Notes:	(a) 1997 population data have been calculated by applying the average annual growth over previous ten years to 1996 figures.								
	(b) 1997 figures are estimates.								
Sources:	NATO press release M-DPC-2(97)147 - 'Financial & Economic Data Relating to NATO Defence' Table 4								

## II Defence Manpower

### A. Armed Forces Manpower

There have been large-scale reductions in the size of UK regular and reserve force since 1990. These follow from the restructuring set out in *Britain's Defence for the 90s* and the *Defence Costs Study*. Between 1990/91 to 1996/97 there were 34,600 redundancies in the UK Armed Forces, with almost half of these in the Army<sup>4</sup>.

Tables 6 and 7 provide a simple analysis of the strength of UK regular and reserve forces since 1980. Between 1 April 1990 and 1 April 1998, the number of UK regular forces fell by 31% to 210,100. Over the same period the number of regular reserves has risen by 2% whilst the number of volunteer reserves and auxiliary forces has fallen by 31%.

At 1 April 1998, the strength of the UK cadet forces was 127,600. This is around 8,400 below the strength in April 1990.

The Strategic Defence Review proposed that the establishment of the regular Army should increase by 3,300 posts to 111,300. The Royal Naval Reserve (RNR) and Reserve Air Forces are to see minor expansions while in contrast, the Territorial Army will see a significant reduction from 57,000 to "around 40,000".<sup>5</sup>

The SDR also set targets of full manning of the Royal Air Force by 2000, of the Royal Navy by 2002, and of the Army. Table 8 shows the trained strength and establishment of UK regular forces at 1 April 1996, 1997 and 1998.

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<sup>4</sup> HC Deb 4 June 1997 c183w

<sup>5</sup> Strategic Defence Review, Essay 7, Para 16

Table 6

**UK Regular Armed Forces Manpower** <sup>(a) (b)</sup>

	1 April 1980	1 April 1990	1 April 1993	1 April 1994	1 April 1995	1 April 1996	1 April 1997	1 April 1998	1 October 1998	% Change since April 1990
<b>Royal Navy/Royal Marines</b>	<b>71,900</b>	<b>63,200</b>	<b>59,400</b>	<b>55,800</b>	<b>50,900</b>	<b>48,300</b>	<b>45,100</b>	<b>44,500</b>	<b>44,000</b>	<b>-30%</b>
Officers	10,100	10,100	9,800	9,200	8,800	8,400	7,900	7,800	7,800	-23%
Other ranks	61,800	53,000	49,600	46,600	42,100	39,900	37,200	36,700	36,200	-32%
<b>Army</b>	<b>159,000</b>	<b>152,800</b>	<b>134,600</b>	<b>123,000</b>	<b>111,700</b>	<b>108,800</b>	<b>108,800</b>	<b>109,800</b>	<b>110,100</b>	<b>-28%</b>
Officers	17,100	17,400	16,200	14,800	14,000	13,800	13,700	13,900	13,700	-21%
Other ranks	142,000	135,400	118,400	108,200	97,700	95,100	95,100	95,900	96,500	-29%
<b>Royal Air Force</b>	<b>89,600</b>	<b>89,700</b>	<b>80,900</b>	<b>75,700</b>	<b>70,800</b>	<b>64,700</b>	<b>56,900</b>	<b>55,800</b>	<b>55,400</b>	<b>-38%</b>
Officers	14,800	15,200	14,400	13,500	12,800	12,000	11,000	11,000	10,900	-28%
Other ranks	74,800	74,400	66,400	62,200	57,900	52,700	45,800	44,900	44,600	-40%
<b>Total Officers</b>	<b>42,000</b>	<b>42,900</b>	<b>40,400</b>	<b>37,500</b>	<b>35,500</b>	<b>34,100</b>	<b>32,700</b>	<b>32,600</b>	<b>32,300</b>	<b>-25%</b>
<b>Total Other Ranks</b>	<b>278,600</b>	<b>262,900</b>	<b>234,400</b>	<b>217,000</b>	<b>197,800</b>	<b>187,800</b>	<b>178,100</b>	<b>177,500</b>	<b>177,300</b>	<b>-33%</b>
<b>Total Regular Forces</b>	<b>320,600</b>	<b>305,700</b>	<b>274,800</b>	<b>254,500</b>	<b>233,300</b>	<b>221,900</b>	<b>210,800</b>	<b>210,100</b>	<b>209,600</b>	<b>-31%</b>

Notes: (a) Excludes locally entered personnel and Gurkhas.

(b) Figures may not sum to totals shown due to rounding.

Sources: *Defence Statistics 1998 (DASA) Table 2.8**MoD Statistical Bulletin TSP1 (October 1998)*

Table 7

**UK Reserves & Auxiliary Forces**

	1 April 1980	1 April 1990	1 April 1993	1 April 1994	1 April 1995	1 April 1996	1 April 1997	1 April 1998	% change since 1990
<b>Regular Reserves</b>	<b>192,300</b>	<b>250,800</b>	<b>258,300</b>	<b>262,200</b>	<b>264,100</b>	<b>264,600</b>	<b>259,500</b>	<b>254,700</b>	<b>+2%</b>
<b>Volunteer Reserves &amp; Auxiliary Forces</b>	<b>77,100</b>	<b>90,600</b>	<b>76,100</b>	<b>71,300</b>	<b>64,900</b>	<b>6,200</b>	<b>62,500</b>	<b>62,400</b>	<b>-31%</b>
Split by:									
<b>Naval Service</b>	<b>35,100</b>	<b>34,200</b>	<b>27,600</b>	<b>27,900</b>	<b>27,000</b>	<b>27,400</b>	<b>27,700</b>	<b>28,500</b>	<b>-17%</b>
<i>Royal Fleet Reserve</i>	<i>14,200</i>	<i>13,600</i>	<i>9,700</i>	<i>9,800</i>	<i>9,800</i>	<i>10,200</i>	<i>10,000</i>	<i>10,600</i>	<i>-22%</i>
<i>Individuals liable to recall</i>	<i>15,000</i>	<i>13,600</i>	<i>12,400</i>	<i>13,500</i>	<i>13,500</i>	<i>13,700</i>	<i>14,100</i>	<i>14,200</i>	<i>+4%</i>
Total regular reserves	29,200	27,200	22,000	23,300	23,300	23,900	24,100	24,800	-9%
Volunteer Reserves & Auxiliary Forces <sup>(a)</sup>	5,900	7,000	5,600	4,600	3,700	3,500	3,600	3,700	-47%
<b>Army</b>	<b>203,500</b>	<b>265,400</b>	<b>258,900</b>	<b>257,500</b>	<b>255,200</b>	<b>252,800</b>	<b>247,700</b>	<b>243,000</b>	<b>-8%</b>
<i>Army reserve</i>	<i>71,400</i>	<i>65,800</i>	<i>57,400</i>	<i>54,900</i>	<i>53,400</i>	<i>48,500</i>	<i>41,200</i>	<i>36,600</i>	<i>-44%</i>
<i>Individuals liable to recall</i>	<i>61,400</i>	<i>117,700</i>	<i>132,700</i>	<i>137,600</i>	<i>141,900</i>	<i>147,000</i>	<i>148,900</i>	<i>149,300</i>	<i>+27%</i>
Total regular reserves	132,800	183,500	190,200	192,500	195,300	195,500	190,100	186,000	+1%
Territorial Army <sup>(b)</sup>	63,300	72,500	68,500	65,000	59,900	57,300	57,600	57,000	-21%
Ulster Defence Regiment <sup>(c)</sup>	7,400	6,200	*	*	*	*	*	*	*
Home Service Force <sup>(d)</sup>	*	3,200	200	*	*	*	*	*	*
<b>Royal Air Force</b>	<b>30,800</b>	<b>41,900</b>	<b>47,900</b>	<b>48,200</b>	<b>46,800</b>	<b>46,400</b>	<b>46,700</b>	<b>46,900</b>	<b>+12%</b>
<i>Royal Air Force Reserve</i>	<i>3,600</i>	<i>10,100</i>	<i>15,900</i>	<i>16,300</i>	<i>15,900</i>	<i>16,000</i>	<i>16,300</i>	<i>15,400</i>	<i>+52%</i>
<i>Individuals liable to recall</i>	<i>26,700</i>	<i>30,100</i>	<i>30,200</i>	<i>30,100</i>	<i>29,600</i>	<i>29,200</i>	<i>29,000</i>	<i>28,500</i>	<i>-5%</i>
Total regular reserves	30,300	40,200	46,100	46,400	45,500	45,200	45,300	45,300	+13%
Volunteer Reserves & Auxiliary Forces	500	1,700	1,800	1,800	1,300	1,200	1,400	1,600	-6%

Notes: (a) The Royal Naval Auxiliary Service are not included in this table. They were disbanded on 31 March 1994.

(b) The figures for the TA include Non-Regular Permanent Staff of which there were around 1,400 at 1 April 1997

(c) On 1 July 1993 the UDR merged with the Royal Irish Rangers and are now counted as regular forces.

(d) By 1 April 1994 the Home Service Force had become fully amalgamated with the Group A of the TA.

Source: Defence Statistics 1998 (DASA) Table 2.13; TSP 7, 1 April 1998, DASA

Table 8										
<b>Strengths and requirements of UK Regular Forces: at 1 April</b>										Thousands
	Naval Service			Army <sup>(a)</sup>			Royal Air Force			
	1996	1997	1998	1996	1997	1998	1996	1997	1998	
Trained requirement	44.3	42.9	41.9	108.0	106.4	105.8	63.7	56.4	54.5	
Trained strength	45.5	41.7	40.4	103.8	101.5	101.1	62.5	54.2	52.7	
Variation	+1.2	-1.2	-1.6	-4.2	-4.8	-4.7	-1.2	-2.2	-1.8	
Untrained strength	2.8	3.5	4.1	9.5	11.2	12.4	2.2	2.7	3.2	
Total UK regular forces	48.3	45.1	44.5	113.3	112.7	113.5	64.7	56.9	55.9	
(a) Includes Gurkhas										
<i>Ministry of Defence Performance Report: 1997/98, Cm 4170</i>										

## B. Civilian Manpower

Figures are given in Table 9 showing that by 1 April 1997, the total of UK and locally engaged civilian personnel had fallen by 47,400 or 28% since 1 April 1990. This reduction was greatest amongst locally employed civilians in Germany and amongst HQ staff.

Table 9

### Civilian manpower at 1 April

	1980	1990	1995	1996	1997	1998
UK Personnel	239,800	141,400	116,100	109,900	109,200	104,200
Locally Engaged	36,400	30,900	17,100	16,900	15,700	15,000

*Defence Statistics 1998 (DASA) Table 2.1*

## C. International Comparisons

The numbers of military personnel in each NATO country are set out shown in table 8. Once again, this method of international comparison is very crude. Different organisations quote varying figures for the size of the armed forces for certain countries, depending on what definition is used. For example, figures could include or exclude paramilitary forces. The NATO figures given in Table 9 include paramilitary forces.



Table 10									
<b>NATO Armed Forces Personnel</b>									Thousands
Country	1975	1980	1985	1990	1992	1995	1996	1997 <sup>(a)</sup>	% change 1990-97
Belgium <sup>(b)</sup>	103	108	107	106	79	47	46	43	-59%
Denmark	34	33	29	31	28	27	28	29	-6%
France	585	575	563	550	522	504	501	475	-14%
Germany <sup>(c)</sup>	491	490	495	545	442	352	337	335	-39%
Greece	185	186	201	201	208	213	212	206	2%
Italy	459	474	504	493	471	435	431	419	-15%
Luxembourg	1	1	1	1	1	1	1	1	0%
Netherlands	107	107	103	104	90	67	64	57	-45%
Norway	38	40	36	51	36	38	38	36	-29%
Portugal	104	88	102	87	80	78	75	72	-17%
Spain	..	356	314	263	198	210	203	196	-25%
Turkey	584	717	814	769	704	805	803	820	7%
United Kingdom	348	330	334	308	293	233	227	218	-29%
NATO Europe	..	3,504	3,603	3,510	3,154	3,010	2,964	2,907	-17%
Canada	78	82	83	87	82	70	65	66	-24%
United States	2,146	2,050	2,244	2,181	1,919	1,620	1,585	1,554	-29%
<b>NATO Total</b>	<b>..</b>	<b>5,636</b>	<b>5,930</b>	<b>5,778</b>	<b>5,154</b>	<b>4,700</b>	<b>4,614</b>	<b>4,527</b>	<b>-22%</b>
Notes:	(a) 1997 figures are estimates.								
	(b) Decrease from 1992 military strength reflects the decision by the Belgian government to demilitarise the Gendarmerie.								
	(c) Figures for Germany refer to Germany up to and including 1990 and to united Germany from 1991.								
Source:	NATO press release M-DPC-2(97)147 - 'Financial & Economic Data Relating to NATO Defence' Table 6								

### **III Formation of the armed forces**

Table 11 gives information on the formation of the armed forces in terms of numbers of aircraft, ships and army units since 1975.

Changes to the formation of forces arising from the Strategic Defence Review were discussed in chapter VI of Library Research Paper 98/91 *The Strategic Defence White Paper*.



Table 11 (continued)												
<b>Formation of the armed forces</b>												
			1975	1980	1985	1990	1993	1994	1995	1996	1997	1998
<b>Royal Air Force</b>												
Strike/attack	Squadrons		13	15	11	11	8	6	6	6	6	6
Offensive support	Squadrons		6	5	5	5	5	5	5	5	5	5
Reconnaissance	Squadrons		5	5	3	3	5	5	5	5	5	5
Maritime patrol	Squadrons		5	4	4	4	3	3	3	3	3	3
Air defence	Squadrons		9	9	9	9	7	6	6	6	6	6
Airborne Early Warning	Squadrons		1	1	1	1	1	1	1	2	2	2
Air transport, tankers and helicopters	Squadrons		17	11	14	15	16	15	14	14	13	14
Search and Rescue	Squadrons		2	2	2	2	2	2	2	2	2	2
<b>RAF regiments</b>												
Surface to air missiles	Squadrons		6	8	8	7	5	5	5	6	6	6
Ground defence	Squadrons		5	5	5	6	5	5	5	5	5	5
<b>Royal Auxiliary Air Force</b>												
Ground defence	Squadrons		..	3	6	6	6	5	5	5	5	5
<b>Support units</b>												
<b>Royal Navy and Royal Fleet Auxiliary Service</b>												
Support ships	Vessels		8	9	10	8	2	1	1	1	1	
Survey ships	Vessels		13	13	9	8	6	6	6	6	6	5
Ice patrol ships	Vessels		1	1	1	1	1	1	1	1	1	1
Tankers	Vessels		..	15	14	13	10	9	9	9	9	9
Fleet replenishment ships	Vessels		..	4	4	4	5	5	5	5	5	4
Aviation training ship	Vessels		..	..	..	..	1	1	1	1	1	1
Landing ships	Vessels		..	6	7	5	5	5	5	5	5	5
Forward repair ships	Vessels		..	..	1	1	1	1	1	1	1	1
<b>Royal Marines</b>												
Logistic unit	Regiments		1	1	1	1	1	1	1	1	1	1
<b>Regular Army</b>												
<b>Combat service support</b>												
Equipment support	Battalions		..	..	..	..	..	5	5	5	5	6
Logistics	Regiments		23	17	23	27	25	26	26	26	24	24
Field ambulances/field hospitals	Number		11	8	14	16	16	13	13	12	12	12
<b>Territorial Army</b>												
<b>Combat service support</b>												
Equipment support	Battalions		..	..	..	..	..	4	4	5	5	5
Logistics	Regiments		13	8	12	12	12	11	11	11	19	19
Field ambulances/field hospitals	Number		15	13	18	17	17	17	17	18	18	18
<i>Sources: Defence Statistics 1998(DASA) Table 3.1</i>												

## IV Armed Forces Salaries

Military salaries for ranks in the armed services are quite complex as they often relate to bands, scales and classes according to employment classification, length of service, nature of specialisation etc. For example, there are nine pay rates for Majors in the Army on the main Officer pay scale according to the length of service in that rank.

The tables shown here look at illustrative military salaries for officers and servicemen, based on Army ranks. Table 12 compares indices based on average military salaries for different ranks with the Average Earnings Index. The table shows that salaries of senior officers have risen faster than those of other ranks (by 78% between 1988/89 and 1998/99 compared with 68% for ranks up to corporal). The table also shows the average annual percentage change in salaries for different periods. For average earnings in 1998/99, a forecast increase of 4.5% has been used.<sup>6</sup>

Table 13 looks at average military salaries for different ranks for various years since 1980/81. It also shows real terms changes calculated by converting the cash salaries to constant 1997/98 prices using the Retail Prices Index. The change in the RPI for 1998/99 has been calculated using the latest forecast given in the Pre-Budget Report<sup>7</sup>.

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<sup>6</sup> *Forecasts for the UK Economy*, HM Treasury, November 1998

<sup>7</sup> *Pre-Budget Report*, HM Treasury, November 1998

Table 12						
<b>Military Salary Index: 1988-89=100</b>						
	All Ranks <sup>(a)</sup>	Senior Officers (Major General and above)	Officers (Up to Brigadier)	Other ranks (Sergeant and above)	Other ranks (Up to Corporal)	Average earnings (whole economy)
1978-79	37	33	33	35	39	37
1979-80	49	42	44	48	52	44
1980-81	57	51	52	56	59	52
1981-82	63	55	59	62	65	58
1982-83	66	63	64	66	68	63
1983-84	71	67	69	71	72	68
1984-85	75	73	73	74	76	73
1985-86	82	80	81	82	83	79
1986-87	87	90	86	86	88	85
1987-88	94	95	93	93	94	92
1988-89	100	100	100	100	100	100
1989-90	107	109	107	107	107	109
1990-91	115	117	115	114	115	120
1991-92	131	131	131	130	131	129
1992-93	139	138	139	138	139	135
1993-94	141	142	141	140	141	140
1994-95	145	150	145	144	145	146
1995-96	150	157	151	150	149	150
1996-97	157	164	157	156	156	157
1997-98	163	168	164	163	163	164
1998-99	168	178	169	168	168	171
Average annual % change						
1978-79 to 1998-99	7.9%	8.7%	8.5%	8.1%	7.6%	7.9%
1988-89 to 1998-99	5.3%	5.9%	5.4%	5.3%	5.3%	5.5%
1992-93 to 1998-99	3.2%	4.3%	3.3%	3.3%	3.2%	4.0%
Notes: (a) Indices cover adult male UK regular forces and are based on the average rate of basic pay through the						
Sources: Defence Statistics 1998 (DASA) and earlier editions						
ONS Database; Incomes Data Services						

Table 13

**Illustrative Rates of Military Salary (in terms of Army ranks) <sup>(a)</sup>**

		1980/81	1985/86	1990/91	1994/95	1996/97	1997/98	1998/99	Average annual change in real terms <sup>(b)</sup>				
									80/81 -85/86	85/86 -90/91	90/91 -98/99	97/98 -98/99	80/81 -98/99
General		£30,999	£51,558	£76,489	£95,050	£100,579	£103,510	£106,098	3.6%	2.0%	1.2%	0.0%	2.1%
Brigadier		£18,250	£29,401	£41,682	£55,271	£59,872	£62,351	£64,554	3.0%	1.1%	2.6%	1.0%	2.3%
Colonel	after 4 years in the rank	£16,151	£25,711	£36,598	£47,427	£51,402	£53,511	£55,366	2.7%	1.1%	2.3%	0.9%	2.1%
Lieutenant Colonel	after 4 years in the rank	£13,750	£22,170	£31,750	£40,728	£44,225	£46,040	£47,632	3.0%	1.3%	2.2%	0.9%	2.1%
Major	after 4 years in the rank	£11,001	£16,976	£24,109	£30,284	£32,823	£34,138	£35,251	2.1%	1.1%	1.8%	0.7%	1.7%
Captain	after 3 years in the rank	£8,501	£13,202	£18,819	£23,598	£25,441	£26,468	£27,351	2.2%	1.2%	1.8%	0.8%	1.7%
Lieutenant	after 2 years in the rank	£6,650	£10,209	£14,395	£18,036	£19,443	£20,222	£20,882	2.0%	0.9%	1.7%	0.7%	1.6%
Second Lieutenant		£5,201	£7,490	£10,389	£12,960	£13,976	£13,802	£15,006	0.7%	0.6%	1.7%	6.1%	1.1%
Warrant Officer I	band 6, scale C, after 18 years	£8,983	£13,505	£18,888	£24,133	£26,119	£27,153	£28,032	1.6%	0.8%	2.0%	0.7%	1.6%
Warrant Officer II	band 6, scale C, after 18 years	£8,593	£12,786	£17,935	£22,909	£24,789	£25,769	£26,602	1.4%	0.8%	2.0%	0.7%	1.5%
Staff Sergeant	band 5, scale C, after 18 years	£7,669	£11,169	£15,620	£19,588	£21,190	£22,026	£22,739	0.9%	0.8%	1.8%	0.7%	1.3%
Sergeant	band 5, scale C, after 12 years	£7,173	£10,417	£14,616	£18,344	£19,847	£20,631	£21,297	0.9%	0.8%	1.8%	0.7%	1.3%
Corporal	class 1, band 2, scale C	£6,482	£9,289	£13,066	£16,367	£17,587	£18,296	£18,911	0.6%	0.9%	1.7%	0.8%	1.2%
Lance Corporal	class 1, band 1, scale C	£5,344	£6,953	£9,614	£12,066	£13,010	£13,533	£13,988	-1.3%	0.6%	1.8%	0.8%	0.6%
Private	class 2, band 1, scale C	£4,453	£6,081	£8,249	£10,439	£11,237	£11,685	£12,086	-0.4%	0.2%	1.9%	0.9%	0.8%

Notes: (a) In the illustrative rates for officers, the mid-point of the incremental scales has been used. For servicemen, the pay bandings have been selected which contain the largest number at each rank. Within each rank servicemen are divided for the purposes of pay into classes, bands and scales according to their employment classification, the nature of their specialisation and the period of commitment to serve. All forms of additional pay, eg flying pay, diving pay etc are excluded since they are not paid to the majority of Service personnel. In each year the rates are calculated using a weighted average of the salaries in that year.

(b) Conversions to constant prices are made using the retail prices index. For 1998/99 a forecast increase of 2.5% has been used.

Sources: *Defence Statistics 1998 (DASA)*  
*ONS CSDB database series CHAW, CBAB & CZVJ*

## Appendix: Tri-Service and Civilian Personnel information published by DASA

Number	Title	Frequency
TSP1	UK Regular Forces strengths and changes	Monthly
TSP2	Trained requirements and strengths of service personnel	Quarterly
TSP4	UK Regular Forces quarterly press release	Quarterly
TSP5	UK Regular Forces premature voluntary release	Quarterly
TSP6	Global deployment of service personnel	Six-monthly
TSP7	Reserve and Cadet Forces	Yearly
TSP8	Age distribution of UK Regular Forces	Yearly
TSP9	Rank structure of UK Regular Forces	Quarterly
TSP10	UK Regular Forces deployment in UK by local authority area	Yearly
TSP11	Male UK Regular Forces marital status and family statistics	Yearly
TSP13	UK Regular Forces servicemen age on entry	Yearly
TSP15	UK Service Personnel on loan to other countries	Quarterly
TSP16	UK Regular Forces disciplinary convictions	Yearly
TSP18	UK Servicemen wastage during first six months of training	Yearly
TSP19	UK Regular Forces intake and outflow by age	Yearly
TSP20	Male Regular Forces outflow by rank	Yearly
TSP22	UK Regular Forces comparative statistics	Yearly
TSP24	Strength of uniformed medical staff	Yearly
SCPS1	UK service and civilian personnel by sector and TLB	Monthly
CPS1	Permanent UK-based civilian personnel by grade equivalent, type and area of work	Quarterly
CPS2	Regional analysis of resignations for admin and science group staff	Quarterly
	UK Defence Statistics	Annual