



# THE EMPLOYMENT CONSEQUENCES OF A BAN ON ARMS EXPORTS

by Ian Goudie

This study was carried out by Ian Goudie of Defence and Aerospace Analysts on behalf of the Campaign Against Arms Trade (CAAT)

**PUBLISHED IN THE UK BY  
CAMPAIGN AGAINST ARMS TRADE,  
11 GOODWIN STREET, LONDON N4 3HQ  
ISBN 0 9506922 9 8**

September 2002

# Table of contents

<b>Executive summary</b>	2
<b>Introduction</b>	3
The employment impact of a ban on arms exports	3
Impact on suppliers	3
Loss of disposable income	3
The impact on the local labour market	3
<b>Employment</b>	4
Unemployment	4
Claimant count	4
Propensity to unemployment	4
<b>UK military export dependency</b>	5
Military exports as a proportion of manufacturing jobs	5
Military-related companies	5
BAE Systems	6
BAE Systems' business groups	7
BAE Systems' UK dependency on military exports	8
Export of military equipment	8
Aerospace	8
Shipbuilding	9
<b>Regional and local military employment</b>	10
Regional analysis of the impact of military export job losses	10
The South West	10
AgustaWestland, Yeovil	11
Plymouth	12
Bristol	12
Wiltshire	12
The South East	12
The North West	13
The West Midlands	13
The North East	14
Yorkshire and Humberside	14
Scotland	15
Wales	15
Northern Ireland	16
Summary of impact of military export jobs losses on UK regions	16
<b>Redundant military workers surveys</b>	17
Most useful advice or assistance	18
<b>Company redundancy programmes</b>	18
Thales	18
Rolls Royce	18
Vickers	18
BAE Systems - British Aerospace; Hertford	19
BAE Systems - British Aerospace; Preston	19
<b>The role of policy initiatives</b>	19
The Prestwick Task Force	19
The Clyde Shipyards Task Force	20
Rolls Royce, Derby	21
The Rapid Response Service	21
Partnership at Work Fund	22
Role of Regional Development Agencies	22
KONVER	22
Defence Diversification Agency	22
<b>Summary</b>	23
<b>Conclusions</b>	23
References	24

# Executive summary

## Introduction

### ► **The aim of the study is to assess the impact of a UK ban on the export of military equipment on labour markets throughout the UK**

The central element of the study is an analysis of the dependence on military exports in the various regions throughout the United Kingdom.

## Military exports

### ► **45,000 UK jobs are directly dependent on the export of military equipment**

345,000 jobs are dependent on military expenditure and equipment exports (UK Defence Statistics 2001). However only 45,000 (13%) of these are directly dependent on military exports. A further 45,000 are indirectly dependent on military exports.

### ► **There is limited information on the regional dependence of military exports**

There is no up-to-date, accurate and reliable information on regional employment dependent on military exports. This study relies on a variety of sources of information including previous studies, MoD Statistics, House of Commons Library Research Papers, Parliamentary Questions and a postal questionnaire.

### ► **Employment dependent on military exports is concentrated in the South East and South West regions**

Between them the South East and the South West regions account for some 65.5 per cent of all UK jobs dependent on the export of military equipment. The North West also has a significant concentration, accounting for some 17.8 per cent of military export jobs.

### ► **BAE Systems**

Aerospace equipment accounts for over 80 per cent of total UK military exports. One company, BAE Systems, accounts for two thirds (30,000) of all UK employees directly dependent on military exports.

## The impact of a ban on military exports

### ► **0.3 per cent of total UK employment**

At 90,000, total UK employment dependent on the export of military equipment accounts for only 0.3 per cent of total UK employment, much less than the 240,000 people who leave the unemployment register each month.

### ► **Unemployment is at its lowest level for 25 years**

At 3.0 per cent, UK unemployment is extremely low. The South East and the South West have almost full employment with rates of 1.5 per cent and 2.0 per cent respectively.

### ► **A few towns and counties are particularly dependent on military exports**

The effects of a ban on military exports would be sharper in a few individual localities, in particular Yeovil and Brough.

### ► **Propensity to unemployment depends on a range of factors**

As well as the unemployment rate and the availability of employment vacancies, a number of other factors such as age, sex and occupation have an impact on the propensity of redundant workers to 'sign on', to gain further employment or to leave the labour market.

### ► **Previous military redundancies**

There have been a limited number of studies of the effects of military-related redundancies. The studies cover a variety of experiences, but there are a number of general conclusions that can be drawn.

### ► **Unemployment or inactivity is short for many but long for few**

Many redundant military workers cease to be unemployed or economically inactive within a short period, typically within a few months of being made redundant. However those who remain unemployed are likely to do so for a long time, and many accept lower skilled work with lower pay.

### ► **The way companies manage redundancy exercises is important**

The way in which a company handles redundancy makes a significant difference to the well-being of those made redundant.

### ► **Public policies can play a major role in helping redundant workers find new employment**

National, regional and local initiatives aimed at assisting redundant workers to find new employment have been successful, in some cases achieving over 90 per cent re-employment within a year.

# Introduction

► Whilst a number of reports have addressed the economic costs and benefits of UK military spending on the export of UK military equipment, this paper considers the jobs front. It considers the likely impact of a total arms export embargo on those workers who are dependent on the export of arms for their livelihood. The paper does not seek to assess the jobs question for all of those in the UK whose jobs either directly or indirectly depend on military expenditure but only on those whose jobs are dependent on arms exports.

The literature relating to plant closure and the local economy in regional development studies spans the theoretical and methodological spectrum (Tomaney et al, 1997). This study does not address the abstract level theories but attempts to consider the temporary distortions to the local economy resulting from redundancies and closures.

This paper seeks to address the maximum job loss scenario in considering the immediate ban of all UK arms exports. The paper assumes that such an immediate ban on arms exports would result from a political decision. We do not consider the impact of a partial ban resulting from increased restrictions, nor do we consider the impact of a phased ban over a number of years. Furthermore we do not include any assessment of any financial penalties, which may arise from the cancellation of existing orders.

## The economic impact of a ban on arms exports

This paper seeks to indicate the likely impact of a ban on arms exports on local economies which have become dependent on the sale of arms to foreign countries. This impact would be in three areas:

- On suppliers of raw materials, components and services to companies exporting arms;
- The loss of disposable income;
- The local labour market.

### **Impact on suppliers**

Although a limited number of surveys into military supplier chains have been undertaken, it is not possible to provide detailed information on the precise effects of any loss of business to companies supplying goods or services to prime contractors exporting arms. However MoD figures contain direct and indirect employment at the UK level for employment dependent on military exports.

### **Loss of disposable income**

As well as the loss of income of those becoming unemployed, retired or in receipt of sickness benefit or further training, those in work also experience a loss of disposable income. A survey of military industry redundancies in the South West for example, found that 61.5 per cent of redundees in employment were receiving a lower salary in their new job (Hooper et al, 1996). This result was supported by a study undertaken in Fife at the same time, which revealed that 56 per cent indicated that their salary was lower than before. A survey of redundant workers in Strathclyde helped to quantify the decrease by revealing that the average income was 15 per cent less than had been received in the military industry in the region (Goudie, 1996). A study in the North East revealed that redundant shipyard workers who had secured new employment in the locality had accepted an average 8.5 per cent decrease in wages (Tomaney et al, 1997).

### **The impact on the local labour market**

It is the jobs issue which concentrates the minds of many in the debate over arms exports, particularly in those localities which have a high dependency on military employment. The main focus of this study is the employment issue; the impact that a ban on arms exports could have on the national, regional and local labour markets. To that end, this study attempts to quantify the dependence on military exports of the UK and its regions and, where appropriate, specific counties, cities or towns. The study then assesses the potential impact a ban on the export of arms could have.

# Employment

▷ Employment in the UK is on an upward trend. There are two ways of looking at employment: the number of people in employment or the number of jobs, note these two are different as one person can have more than one job. The UK employment rate was 74.5 per cent among people of working age in the July–September 2001 period. This represents 28.15 million, up 159,000 on the same period a year earlier. Workforce jobs, which include self-employment, HM Forces and government-supported trainees, have also been on the increase, up by 165,000 over the year to 29.23 million in June 2001. However manufacturing jobs, which would include military export jobs, at 3.80 million are down by 123,000 compared with a year ago.

## Unemployment

Unemployment figures are important in assessing the relative health of local economies. The principal official measure of unemployment is the monthly ‘claimant count’, which measures the number of people out of work and in receipt of unemployment-related benefits, Job Seekers Allowance (JSA) and National Insurance Credits. These figures are published by region, by Travel To Work Areas (TTWAs), by counties and local authority areas and by parliamentary constituencies. Published claimant count figures therefore provide a comparative source of information on unemployment in local economies and will be used throughout this study. However it should be noted that there is a further group of people who are unemployed but not included in the claimant count figures. These include those on sickness-related benefits, those in early retirement and those on government schemes.

### Claimant count

Unemployment is at its lowest level for 25 years. The claimant count unemployed and workforce unemployment percentage rates are provided in Table 1.

### Propensity to unemployment

It should be noted that the MoD does not provide information on the age, sex or occupation of those employed in the military industry. These factors would have an impact on the propensity of redundant workers to ‘sign on’, to gain employment or to leave the labour market. For example older people are less likely to gain employment and more likely to take early retirement; females are significantly more likely than males to find work; males are more likely to become self-employed; professional, clerical, secretarial and sales occupations have a significantly higher chance of getting a job than semi and unskilled manual workers. We know that the majority of workers in manufacturing are male. A report on job losses at Rolls Royce, Derby in 1993 indicated that 88 per cent of the workforce was male.

Precise information on these factors would, however, be available to those agencies tasked with responding to large-scale redundancy announcements.

The unemployment rate and the availability of employment

opportunities are also factors in securing new employment. It is estimated that there are around one million unfilled vacancies in the UK. Whilst official UK labour market statistics, provided by Nomis, have traditionally included information on vacancies, this has been deferred due to substantial distortions in the data caused by the introduction of Employer Direct, as part of Modernising the Employment Service. In the majority of cases we have therefore had to rely solely on the claimant count rate, those receiving JSA, as a measure of the local labour market.

The majority of those joining the claimant count leave it very quickly – 50 per cent leave the claimant count within three months of joining and over 80 per cent within twelve months. Those experiencing redundancy have a similar experience; according to the Labour Force Survey some 46 per cent (80,000) of the 172,500 made redundant or taking voluntary redundancy in the summer of 2001 were in employment within three months.

Table 1 UK claimant count 2001

AREA	CLAIMANT COUNT	RATE %
<b>United Kingdom</b>	<b>918,400</b>	<b>3.0</b>
Great Britain	880,500	3.0
North East	59,000	5.1
North West	115,600	3.5
Yorkshire and the Humber	89,400	3.7
East Midlands	58,300	2.9
West Midlands	92,900	3.5
East	51,700	2.0
London	155,700	3.3
South East	63,200	1.5
South West	48,800	2.0
Wales	46,800	3.6
Scotland	99,200	4.0
Northern Ireland	37,900	4.8

Note 1: As at October 2001, Labour Market Trends 2001

Note 2: Claimant Count Rate – Calculated by expressing the number of claimants as a percentage of the estimated total workforce (the sum of claimants, employees in employment, self-employed, HM Forces and participants on work-related government schemes).

# UK military export dependency

► Military export dependency is a term used to indicate the share of a locality's employment, expenditure or output that is directly related to the export of military equipment. Although much remains to be done in order to assemble a comprehensive and accurate profile of regional military export dependency in the United Kingdom, we have been able to build upon previous official measures of such dependency in this research project.

The UK military industry has experienced dramatic changes in employment since the 1980s as a consequence of both economic and geopolitical factors. The end of the Cold War and the need to meet Maastricht criteria have led to large cuts in military spending, resulting in massive workforce downsizing and industrial consolidation. There has also been a trend towards the internationalisation of production supply chains. However possibly the most important factor in shaping the military industry in Europe has been the rapid integration of the US military industry, the "mega mergers" of the 1990s (Sefarti, 2001).

UK employment dependent on military spending and exports has more than halved since 1980 when some 740,000 jobs were reported as being dependent on such spending. The Ministry of Defence now estimates that some 345,000 jobs are dependent on military expenditure and equipment exports (UK Defence Statistics 2001). However only 26 per cent (90,000) of these are reported as being dependent on the export of military equipment. Furthermore military-dependent employment includes those jobs dependent on 'equipment' and 'non-equipment' and those jobs which are 'indirectly' dependent on military expenditure as well as those that are 'directly' dependent on such spending. Official MoD statistics indicate that there are only 45,000 UK jobs directly dependent on the export of military equipment, see Table 2. On this basis only 13 per cent of UK jobs dependent on military spending and exports are directly dependent on military exports.

Direct and indirect employment relates to those working for defence contractors and sub-contractors respectively. Sub-contractors tend to have a number of customers and are therefore often less dependent on sales to any particular customer.

It should be noted that the MoD are reviewing their methodology on the estimation of employment figures dependent on UK military expenditure and exports. *UK Defence Statistics 2001* does not contain any new figures on employment. The Defence Analytical Service Agency (DASA) expects to publish provisional employment estimates in September 2002.

Substantial military job losses have taken place during the last twenty years. 395,000

military-dependent jobs have been lost in this period, 70,000 of these in the last two years (1995/96-1997/98). As far as jobs dependent on military exports are concerned, some 45,000 direct jobs and 40,000 indirect jobs have been lost in the last two years.

## Military exports as a proportion of manufacturing jobs

Although the military industry is often quoted as representing a major part of the UK manufacturing base, it should be noted that direct military exports account for just over 1 per cent of all UK manufacturing jobs. Total employment supported by military exports, direct and indirect, accounts for 2.1 per cent of all manufacturing jobs. The importance of military exports to manufacturing varies from region to region, see Table 3.

The Government accepts that it has a responsibility to help the UK manufacturing sector. This includes supporting people and communities through change by helping those made redundant to find new, quality jobs (*Opportunity for all in a world of change: Manufacturing, DTI*).

## Military-related companies

The DTI report that there are in excess of 3,500 military and aerospace companies in the UK. The vast majority of such companies are located in the South West and South East regions but there is also a significant number in the North West of England.

The MoD's 2000/01 expenditure with individual contractors, paid £5m or more, is presented in Table 4.

Table 2 UK employment dependent on military expenditure and exports THOUSANDS

	19-80/81	85/86	90/91	95/96	96/97	97/98	98/99
<b>Total employment</b>	<b>740</b>	<b>625</b>	<b>555</b>	<b>410</b>	<b>415</b>	<b>355</b>	<b>345</b>
Direct	405	345	295	205	210	175	175
Indirect	335	280	260	205	205	180	170
<b>Employment from MoD expenditure</b>	<b>600</b>	<b>515</b>	<b>405</b>	<b>265</b>	<b>240</b>	<b>225</b>	<b>255</b>
Direct	330	285	220	135	120	110	130
Indirect	270	230	185	130	120	115	125
<b>Split by: Equipment expenditure</b>							
Direct	230	200	140	85	75	70	85
Indirect	190	160	130	90	80	80	85
<b>Non Equipment expenditure</b>							
Direct	100	85	80	55	45	40	45
Indirect	80	70	60	40	45	35	40
<b>Employment from military exports</b>	<b>140</b>	<b>110</b>	<b>150</b>	<b>145</b>	<b>175</b>	<b>130</b>	<b>90</b>
Direct	75	60	75	70	90	65	45
Indirect	65	50	75	75	85	65	45

Source: DASA (Procurement)

## Table 3 Employment in manufacturing, by region

AREA	EMPLOYMENT IN MANUFACTURING (1999)	MILITARY EXPORT EMPLOYMENT (1997)	MILITARY EXPORT EMPLOYMENT AS % OF MANUFACTURING EMPLOYMENT
West Midlands	555,000	6,030	1.1
North West	537,000	16,020	3.0
East of England	375,000	2,160	0.002
Yorkshire & Humber	430,000	270	0.06
East Midlands	433,000	450	0.1
Scotland	319,000	3,600	1.1
London	311,000	included in South East	
South East	492,000	38,340	4.8
Wales	217,000	450	0.2
South West	332,000	20,610	6.2
North East	194,000	270	0.14
Northern Ireland	110,000	1,890	1.7
<b>UK</b>	<b>4,305,000</b>	<b>90,000</b>	<b>2.1</b>

Source: based on Institute for Employment Research [2001] and House of Commons Library

A significant number of contractors provide 'non-equipment' to the MoD. Only 60 per cent (142,500) of the 245,000 jobs dependent on MoD expenditure are related to military production. The success or otherwise of overseas sales of military equipment can often rely on the ability of UK companies to sell their equipment initially to the MoD. As can be seen from Table 4, the major military company in receipt of orders from the MoD is BAE Systems.

## BAE Systems

Formed from the merger of British Aerospace and GEC's military operations (MES) in 1999, BAE Systems is a prime contractor and systems integrator in the air, land and sea military market sectors. The company is the UK's largest exporter and Europe's largest aerospace and military

company. It has an order book of £41bn (\$65.6bn) (year-end 2000), sales of £12.2bn (\$19.52 bn), nearly 100,000 employees (including all Joint Venture employees) and customers in more than 129 countries.

Any analysis of UK arms exports would therefore need to contain an analysis of BAE establishments and the number of jobs dependent on the export of military equipment. However whilst BAe and GEC could be regarded as UK-based companies, BAE Systems regards itself as a global business. Indeed with the Government's recent change in policy to allow foreign investors to own more than 50 per cent of the company, the majority shareholding in BAE Systems is now non-UK.

BAE Systems has refocused its market and shifted from being heavily dependent on the UK and Middle East exports,

## Table 4 MoD's expenditure listed by the value of payments made with

CONTRACTORS LISTED IN ORDER OF SIZE OF PAYMENT

### OVER £250 MILLION (11 CONTRACTORS)

Defence Evaluation and Research Agency ▶ NETMA ▶ BAE Systems Electronics Ltd ▶ BAE Systems (Operations) Ltd ▶ Devonport Royal Dockyard Ltd ▶ Westland Group PLC ▶ Matra BAE Dynamics (UK) Ltd ▶ Rolls Royce PLC ▶ Lockheed Martin Corp ▶ AWE Management Ltd ▶ BAE Systems Marine Ltd

### £100–£250 MILLION (16 CONTRACTORS)

British Telecommunications PLC ▶ Serco Group PLC ▶ Hunting PLC ▶ Royal Ordnance PLC ▶ Building and Property Defence Ltd ▶ BAE Systems Avionics Ltd ▶ Alenia Marconi Systems Ltd ▶ Other UK Government Departments ▶ Babcock International Group PLC ▶ EDS Defence Ltd ▶ John Mowlem and Co PLC ▶ ICL PLC ▶ Annington Receivables Ltd ▶ W S Atkins Ltd ▶ Thales Defence Ltd ▶ Vickers Engineering PLC

### £50–£100 MILLION (16 CONTRACTORS)

Price Waterhouse Coopers ▶ BFS Group Ltd ▶ Meteorological Office ▶ Fleet Support Ltd ▶ BAE Systems (Defence Systems) Ltd ▶ The British Petroleum Co PLC ▶ IBM United Kingdom Holdings Ltd ▶ British Aerospace Aircraft Group ▶ ESSO UK PLC ▶ Alvis PLC ▶ BAE Systems Defence Ltd ▶ CRND National Savings Fund ▶ Vosper Thornycroft Holdings Ltd ▶ Thales Air Defence Ltd ▶ Flagship Training Ltd ▶ Cobham PLC

### £25–£50 MILLION (28 CONTRACTORS)

Matra-Hatchette SA ▶ Reserve Forces and Cadets Association ▶ The Peninsular & Oriental Steam Navigation Co ▶ Ultra Electronic Holdings PLC ▶ British Airways PLC ▶ The Shell Transport and Trading Co PLC ▶ BAE Systems (Combat and Radar Systems) Ltd ▶ Sodexo Ltd ▶ Civil Aviation Authority ▶ Turner and Co (Glasgow) Ltd ▶ FBS Ltd ▶ Nortel Networks PLC ▶ General Electric Co PLC ▶ GKN PLC ▶ Marshall of Cambridge (Holdings) Ltd ▶ Serco Denholm Ltd ▶ Primary Management (Aldershot) Ltd ▶ Amec PLC ▶ Rail Settlement Plan Ltd ▶ Machines Bull ▶ VT Aerospace Ltd ▶ HCR Ltd ▶ Banner Business Supplies Ltd ▶ Alfred McAlpine PLC ▶ VT Services Ltd ▶ KPMG ▶ Portsmouth Aviation Ltd ▶ Kier Group Ltd

### £10–£25 MILLION (57 CONTRACTORS)

Aramark Ltd ▶ BAE Systems Royal Ordnance (Weapons and Munitions) ▶ Carrillion Services Ltd ▶ Radio Communications Agency ▶ TRW Ltd ▶ Amey Business Services Ltd ▶ TAVRA ▶ BAE Systems (Land and Sea Systems) Ltd ▶ Modus Services PLC ▶ AEA Technology PLC ▶ British Gas PLC ▶ BTR PLC ▶ Thales Avionics Ltd ▶ Defence Management (Watchfield) Ltd ▶ Totalfinal UK Ltd ▶ UK Universities PLC ▶ William Cook ▶ Raytheon Systems Ltd ▶ Caterpillar (UK) Ltd ▶ AXA Corporate Solutions Services UK Ltd ▶ Smith and Nephew PLC ▶ Brama Brown & Root & Marshall Aerospace Ltd ▶ Services Sound and Vision Corporation ▶ Dell Computer Corporation Ltd ▶ Unisys Corporation ▶ British Energy Generation Ltd ▶ Taylor Woodrow

to being a company with a good position in all principal market sectors, including a strong presence in the US.

### **BAE Systems consists of a number of Business Groups:**

► *Programmes*, including the principal military aircraft activities: Eurofighter Typhoon; Nimrod and Hawk as well as major UK programmes such as the new Astute class submarine and Type 45 destroyer. This Group represents 19 per cent of BAE Systems Sales, amounting to £2,415m, with profits of £3m and an order book of £10.1bn. Programmes employ 13,100.

► *Commercial Aerospace*, BAE Systems has a 20 per cent stake in Airbus and is responsible for the design and manufacture of the wings for all Airbus aircraft. Commercial Aerospace also includes the BAE Systems Air Service Group, which manufactures the Avro RJ series of regional jets. Commercial represents 22 per cent of BAE Systems sales, amounting to £2,868m, with profits of £149m and an order book of £16.1bn. Following the events of 11<sup>th</sup> September 2001, BAE Systems has recently completed a review of its commercial aerospace markets, resulting in the loss of 1,669 jobs from a workforce of 10,900.

► *North America, electronics systems, information systems and service companies*. North America represents 13 per cent of BAE Systems sales, amounting to £1,663m, with profits of £165m and an order book of £2.4bn. North America employs some 23,000.

► *Customer Solutions & Support*, the largest military services and support provider in the UK and one of the leading players worldwide. Much of this group's activity is around the Al Yamamah programme in Saudi Arabia, which involves some

5,000 people. CS & S represents 14 per cent of BAE Systems sales, amounting to £1,820m, with profits of £434m and an order book of £2.8bn. The division employs some 8,700.

► *Avionics, airborne electronic systems for civil and military applications*. Supplies equipment to many of the major military aircraft programmes in Europe and the USA, including a significant share of the Eurofighter Typhoon. Avionics represents 8 per cent of BAE Systems sales, amounting to £1,060m, with profits of £107m and an order book of £2.6bn. Avionics employs some 11,400.

► *International Partnerships* includes the Swedish company Saab AB, in which BAE Systems has a 35 per cent stake. BAE Systems is also partnered with Saab to offer the company's Gripen combat aircraft in the export market. *International Partnerships* also includes Matra BAE Dynamics Astrium and the recently formed MBDA. The division represents 14 per cent of BAE Systems sales, amounting to £1,858m, with profits of £117m and an order book of £6.3bn. International Partnerships employs some 18,300.

► *Operations*, includes the company's principal naval and aerospace manufacturing activities. As well as BAE's shipbuilding activities this group includes substantial aerospace activities for aircraft programmes in the US, the UK and elsewhere in Europe. RO Defence (formerly Royal Ordnance) and the Underwater Weapons business are also part of this group. Operations represent 10 per cent of BAE Systems sales, amounting to £1,308m, with a loss of £33m and an order book of £3.6bn. Operations employ some 15,300.

BAE Systems operates from nearly 40 sites worldwide, including Australia, Canada, Europe, the USA and Saudi Arabia. The company has home markets in nine different countries.

## individual contractors 2000/01

Source: MoD Defence Bills Agency.  
Includes suppliers of food, fuels and services.

PLC ► EBC Group PLC ► Thales Training and Simulation Ltd ► Leyland DAF Holdings Ltd ► Royal & Sun Alliance Insurance Group PLC ► Thales Optronics Ltd ► Aviation Training International Ltd ► Mansell PLC ► Bramall Construction Ltd ► Wood Group Component Repair Ltd ► Unicorn Consultancy Services Ltd ► Software Box Ltd ► Independent Energy UK Ltd ► National Westminster Bank PLC ► Exxonmobil Aviation Int Ltd ► Skanska Construction UK Ltd ► Farrans (Construction) Ltd ► Rockwell International Corp ► Admiral PLC ► Claverham Ltd ► The UK Hydrographic Office ► British Maritime Technology Ltd ► Sogea Holdings (UK) Ltd ► Akhter Group (Holdings) PLC ► Moyola Construction Ltd ► Edmund Nuttall Ltd ► Cap Gemini UK Ltd ► Marconi Mobile Ltd ► Data Sciences UK Ltd ► The Weir Group PLC ► UK Safety PLC

### **£5-£10 MILLION (92 CONTRACTORS)**

Compass Group PLC ► John Laing PLC ► Ocean Group PLC ► Thales Communications Ltd ► Bax Global Ltd ► Computing Devices Company Ltd ► Cilva Holdings ► HBG Construction Western Ltd ► Ballast PLC ► MS International PLC ► Defence Training Services Ltd ► NATO Shape ► Rosyth Royal Dockyard Ltd ► Hogg Robinson PLC ► TI Group PLC ► Royal Hospital ► Canon Inc ► Siemens PLC ► Honeywell Normalair Garrett (Holdings) Ltd ► Man B&W Diesel Ltd ► Vickers PLC ► Argyll and Bute Council ► Carpets International (UK) Ltd ► Robertson Group (Scotland) Ltd ► Sigma Aerospace Ltd ► Birse Group PLC ► Michelin Tyre PLC ► Harland and Wolff RO RO Ltd ► TUV

Product Service Ltd ► Elonex PLC ► Meggitt Holdings PLC ► City of Westminster ► Carmichael International Ltd ► J&S Marine Ltd ► Energy and Technical Services Group PLC ► Penman Engineering Ltd ► Coutts Consulting Group PLC ► Haymills Holdings Ltd ► BICC PLC ► Tactica Solutions Ltd ► White and Co PLC ► Lucas Varsity PLC ► Annington Property PLC ► Wardle Storeys PLC ► EIS Group PLC ► Pettifer Construction Ltd ► The BBW Partnership Ltd ► English Welsh and Scottish Railway Ltd ► Northern Electric PLC ► Chemring Group PLC ► Bryant Group PLC ► Guardian Royal Exchange PLC ► David Brown Group PLC ► Pearldeck Ltd ► Marconi Applied Technologies Ltd ► Thales Instruments Ltd ► ROC Office Furniture PLC ► Silicon Valley Group PLC ► Balfour Beatty Costain Joint Venture ► Cowlin Construction Ltd ► Veritair Ltd ► Logica PLC ► Williams Holdings PLC ► Centerprise International Ltd ► Middlemace Ltd ► Heaton Holdings Ltd ► Compaq Computer Ltd ► Aerosystems International Ltd ► Basys Holdings Ltd ► Whittle Movers Ltd ► West Berkshire District Council ► Agilent Technologies UK Ltd ► Moseley (Holdings) Ltd ► Oracle Systems Corp ► Covesea ► Richmondshire District Council ► Allied Command Easlant ► Hanson PLC ► Barclays Bank PLC ► Remploy Ltd ► Drumgrange Ltd ► Jack Morton Worldwide Ltd ► W Vinten Ltd ► Daimler Chrysler Rail Systems (UK) Ltd ► The Maersk Co Ltd ► Thales Missile Electronics Ltd ► Mitel Semiconductor Ltd ► LDV Ltd ► United House Ltd ► John Saville & Sons Ltd ► The Stationery Office Group Ltd ► Graesby PLC

### BAE Systems' UK dependency on military exports

This study is interested in the probable impact on the company in the military export market. Whilst BAE Systems employs some 65,000 staff in 60 sites throughout the UK, 13,000 of these are in commercial activities. 52,000 BAE Systems staff in the UK are dependent on military work, with 30,000 of these being dependent on military exports (author's survey 2002).

## Export of military equipment

The MoD provides information on the value of exports and imports of identified military equipment. The total value of each is derived from the product of identified deliveries of equipment recorded by HM Custom & Excise and an estimate of additional aerospace exports derived from the Society of British Aerospace Companies (SBAC). The most up-to-date figures are those for 2000.

In 2000, aerospace related equipment accounted for over 96 per cent of military equipment exports (see Table 5). Although the amount and proportion will vary on an annual basis, typically more than 80 per cent of military exports come from the aerospace sector.

### Aerospace

The UK aerospace industry is involved in the design, development, production, repair and maintenance of military and civil aircraft, helicopters, aero-engines and equipment as well as missiles and space systems (Hartley and Hooper, 1993). Employment in the UK aerospace industry was estimated to total some 170,000 in 1989-90. During the 1980s and early 1990s employment declined, however prior to 11<sup>th</sup> September 2001 the industry had stabilised and was entering a period of growth. Although the industry's association, the SBAC, do not publish regional figures on aerospace employment, it is possible to estimate regional statistics by combining SBAC UK figures with the Annual Employment Survey's regional figures, which are thought to underestimate employment. These estimates, presented in

Table 5 Exports of military equipment (2000) CURRENT PRICES; £ MILLION

ESTIMATED TOTAL DELIVERIES	4,406	%
SPLIT BY COMMODITY:		
Armoured fighting vehicles and parts	80	1.8
Military aircraft and parts	1,183	26.9
Warships	0	0.0
Guns, small arms and parts	36	0.8
Guided weapons, missiles and parts	394	8.9
Ammunition	26	0.6
Radio and radar apparatus	–	–
Optical equipment & training simulators	2	0.0
Estimates of additional aerospace equipment	2,685	60.9

Source: UK Defence Statistics 2001

Table 6, indicate that both the North West and the South West have around 30,000 aerospace workers and London and South East around 20,000. Some regions, including the East Midlands, have experienced a recent significant growth in aerospace employment. However it should be emphasised that these figures include both civil and military aerospace employment.

Fighter aircraft is the predominant sector of the military industry and forms the largest component of military exports. Fighter aircraft production is a significant proportion of aircraft companies' total business activities. The collaborative Eurofighter-Typhoon alone employs 90,000 workers in Europe. 40,000 UK jobs have been estimated as being dependent on the project. The Eurofighter consortium's goal is to capture up to 50 per cent of the total export market. Confirmed orders to date include: United Kingdom, 232 (with an option for 65); Germany, 180; Italy, 120 (with an option for 9) and Spain, 87 (with an option for 16) (Sefarti, 2001).

The single most important new military aircraft to be produced over the next 30 years will be the Joint Strike Fighter (JSF). The JSF market consists of 3,002 aircraft for the UK and the USA. Another 2,000 are expected to be exported outside of these two 'domestic' markets. Delivery of

Table 6 Regional aerospace employment by government office region

	ANNUAL EMPLOYMENT SURVEY (AES)			AES ESTIMATES BASED ON SBAC 'TOTAL UK' FIGURES		
	1996	1997	1998	1996	1997	1998
South East	12,530	11,017	12,149	18,600	17,300	17,700
East	4,384	7,810	7,395	6,500	12,300	10,800
London	1,545	1,236	2,012	2,300	1,900	2,900
South West	19,680	19,036	19,784	29,200	29,900	28,900
West Midlands	6,125	7,405	6,264	9,100	11,600	9,100
East Midlands	12,880	13,799	16,664	19,100	21,700	24,300
Yorkshire and the Humber	4,968	4,923	4,940	7,400	7,700	7,200
Merseyside	336	436	635	500	700	900
North West	17,858	19,131	20,680	26,500	30,000	30,200
North East	525	572	563	800	900	800
Wales	5,801	4,663	6,468	8,600	7,300	9,400
Scotland	5,041	5,856	6,082	7,500	9,200	8,900
<b>Total</b>	<b>91,673</b>	<b>95,884</b>	<b>103,636</b>	<b>136,100</b>	<b>150,500</b>	<b>151,100</b>

### TOTAL UK EMPLOYMENT IN THE AEROSPACE INDUSTRY THOUSANDS

	1996	1997	1998
Society of British Aerospace Companies (SBAC)	139.1	153.9	154.4

the systems will commence in 2003 during the engineering and manufacturing development phase. Low rate initial production will commence in 2006 with the first of six lots, consisting of 13 aircraft. Full rate production of the aircraft will begin in 2010 continuing until 2026.

Although the prime contractor is the US Lockheed Martin, there are a number of UK companies involved as direct (or Tier One) suppliers as well as indirect (or Tiers Two and Three) suppliers. The Department of Trade and Industry estimated that around 3,500 UK jobs would be sustained or created in the initial System Design and Demonstration (SDD) contract, rising to 8,500 for the Production and Support phases. More than half of these jobs are located in the South West with a significant number being in the North West, see Table 7.

**Table 7 UK jobs dependent on JSF, by region**

South West	4,300
North West	2,400
South East	1,000
West Midlands	300
Scotland	300
Wales	100
Northern Ireland	100
<b>UK</b>	<b>8,500</b>

BAE Systems is a full partner in the JSF with approximately 15 per cent programme participation supporting 3,500 jobs. The JSF is also important to a range of other companies in the UK, notably Rolls Royce, which will have 4,100 jobs supported by the contract. Smiths Aerospace will have some 300 jobs supported by the JSF at Cheltenham and Wolverhampton, see Table 8.

**Table 8 UK jobs dependent on JSF, by company**

Rolls Royce	4,100
BAE Systems (Aerostructures)	2,400
BAE Systems (Avionics Group)	1,100
Smiths Group	300
TRW-Lucas Aerospace	200
Cytec Fiberite	100
Martin Baker	100
Others	200
<b>Total</b>	<b>8,500</b>

### Shipbuilding

The other easily identifiable military sector is that of shipbuilding. Although the UK has a strong maritime tradition and ranked fifth in the list of countries exporting naval ships in the 1980s, with some 12 per cent of total naval transfers, the future looks to be almost exclusively within the domestic market. The spate of orders announced or confirmed by the Strategic Defence Review and the Department of Trade and Industry's confirmation that all 30 warships will be built in the UK would appear to offer UK military shipbuilders significant work for the next 15-20 years. The agreements with the MoD over the build strategy for the UK's Type 45 destroyers, two Alternative Landing Ship Logistics (ALSL) and the next phase of the competition for the UK's next generation aircraft

carriers support this.

Although BAE Systems argue that there is an export market for their warships, the Minister of State for Defence has argued for diversification saying, "... the shipbuilding companies must also move into commercial shipbuilding initiatives."

# Regional and local military employment

▷ A major problem is the lack of reliable statistics on the UK military industry at the local level. The MoD provides information on regional levels of direct employment dependent on military equipment expenditure, see Table 9.

The method of calculating this dependence is under review and the most up-to-date figures apply to 1998/99. The MoD does not publish figures relating to the regional level of employment based on military exports. One way of estimating this would be to assume that these figures are related to the level of regional direct military employment.

A House of Commons Library Research Paper (Morgan, 1996) provided an estimate of export-related military employment at a regional level. The paper assumed that export employment follows the pattern of MoD expenditure in the aerospace industry. From this analysis the paper suggested that the South East accounts for 38 per cent of export-related employment, whilst the South West and the North West account for 23 per cent and 18 per cent of export employment respectively.

Whilst the paper did not present any figures relating to military employment by county, it did conclude that *"It is likely that the defence industry is still concentrated in a small number of counties and regions, with the most dependent areas including Cumbria, Fife, Essex, Lancashire and Wiltshire"*.

The paper also provided information on the relative importance of the military sector to the regional economy. Whilst the House of Commons paper considered all military jobs, including industrial, MoD civilians and UK-based regular forces, it is possible to break down this information to estimate the relative importance of military export jobs to the local economy, see Table 10.

Using this estimation the regions most dependent on military exports are the South East and the South West.

## Regional analysis of the impact of military export job losses

### The South West

The South West Region comprises the seven counties of Avon, Cornwall, Devon, Dorset, Gloucestershire, Somerset and Wiltshire. The South West has a working population of some 2.4 million. Although predominantly rural the region has a number of urban areas including Bristol and Plymouth. The local economy is diversified and has an International Labour Organisation unemployment rate of 4.0 per cent, below the UK average of 5.3 per cent and a Claimant Count rate of 2.0 per cent, compared to the UK average of 3.0 per cent. In total the South West has 48,800 claimants.

The South West has experienced significant military job losses since 1987-88. However, over the same period, government spending on military equipment in the region has increased from £1,100m to £1,900m per annum, see Table 11.

Almost half of MoD military industrial jobs have been lost, as employment has decreased from 27,000 to 14,000. The vast majority of these job losses have been in Avon and much of this has been at Bristol's BAE Systems and Rolls Royce sites.

The 20,610 jobs in the region estimated to be dependent on military exports, and therefore at risk by any ban on such exports, exceed the total number of military equipment jobs lost over an 11 year period. However we know that military export jobs have recently been lost in the region and that only a minority of those affected remained unemployed for long.

A study of 10,347 redundant military workers in the South West undertaken in 1995, provides an insight into the experience of redundees in the region between 1989 and 1994 (Hooper, Butler, Hartley, Braddon, Dowdall, 1996). This study revealed that at the time of the survey less than half (45.6%) of respondents were employed and a further 4.5 per cent were self-employed. Almost a quarter (24.3%) were unemployed and 18.7 per cent had retired. 0.4 per cent were semi-retired and 5.5 per cent were not seeking work, consisting of 2.2 per cent medically unfit, 1.9 per cent undertaking further education, 0.8 per cent for family reasons and 0.6 per cent for other reasons. If these ratios were applied to those facing redundancy as a result of a ban on arms exports then we would expect to see the outcomes of employment status indicated in Table 12.

Table 9 Estimated UK regional direct employment dependent on MoD equipment expenditure THOUSANDS

	1995/96	1996/97	1997/98	1998/99
UK	84	77	71	81
England	75	70	64	73
North East	6	5	5	3
Yorks & Humberside	4	5	5	5
East Midlands	3	3	2	3
Eastern	1	1	1	2
London & SE	32	26	22	31
South West	16	18	18	14
West Mids	5	5	4	5
North West	7	8	7	11
Scotland	8	7	6	6
Wales	1	-	-	1
Northern Ireland	1	-	-	1

Source: UK Defence Statistics 2001

Table 10 Estimate of regional employment 1994-95

REGION	MILITARY INDUSTRY JOBS	% OF TOTAL MILITARY INDUSTRY JOBS	MILITARY EXPORT JOBS	% OF TOTAL MILITARY EXPORT JOBS	% OF TOTAL MILITARY INDUSTRY JOBS DEPENDENT ON EXPORTS
North	20,000	5.6	270	0.3	1.4
Yorks & Humberside	14,000	3.9	270	0.3	1.9
East Midlands	11,000	3.1	450	0.5	4.1
East	12,000	3.3	2,160	2.4	18.0
South East	137,000	38.1	38,340	42.6	28.0
South West	72,000	20.0	20,610	22.9	28.6
West Midlands	19,000	5.3	6,030	6.7	31.7
North West	35,000	9.7	16,020	17.8	45.8
Scotland	27,000	7.5	3,600	4.0	13.3
Wales	5,000	1.4	450	0.5	9.0
Northern Ireland	9,000	2.5	1,890	2.1	21.0
<b>UK</b>	<b>360,000</b>	<b>100</b>	<b>90,000</b>	<b>100</b>	<b>25.0</b>

It should be stressed that these redundancies took place over a number of years and therefore do not provide the same shock to the local labour market as a sudden major redundancy exercise. However the region's economy has continued to improve over this period.

If all 20,610 people were to lose their jobs and become claimants there would be a total of 69,410 claimants in the region, around the same number as in 1999 (75,300) or, at 2.8 per cent, approximately the UK average. However if the post redundancy experience of the study above were to be repeated then 5,008 would remain unemployed. Therefore the number of claimants would increase to 53,808, or 2.2 per cent.

However we know that even in the immediate past redundancies have taken place at specific localities in the region.

#### AgustaWestland, Yeovil

In late 2001 some 200 workers at AgustaWestland, Yeovil, the Anglo-Italian helicopter venture, took voluntary redundancy. In January 2002, the company decided to shut their plant in Weston-super-Mare, where 350 were employed, and reduce the workforce at the main factory at Yeovil by 600. The UK workforce totalled 5,450 in November 2001, but will be down to 4,300 at the completion of these redundancies.

AgustaWestland is the UK's only helicopter manufacturer. The company designs and manufactures both civil and military helicopters and is the prime contractor for the £600m

Support Helicopter contract for the RAF and the £2bn Attack Helicopter contract for the Army Air Corps. In 1999 the company was reported as having annual sales of £290m split 50/50 between military and civil. In February 2002 the firm won a Ministry of Defence contract worth more than £20m to prove its latest Lynx helicopter is the best choice to replace the British Army's battlefield aircraft. A full order to replace the army's 80 Lynx Mk VII and Mk IX helicopters will also safeguard hundreds of jobs in Yeovil and could result in the firm winning the contract to upgrade a further 40 Royal Navy Lynx. AgustaWestland's Future Lynx is the only aircraft selected by the MoD for assessment and if chosen it will attract more than a £1bn of business to Yeovil.

Table 12 Potential outcome of military job losses in the South West

EMPLOYMENT STATUS	NUMBER	%
Employed	9,398	45.6
Self-employed	927	4.5
Unemployed	5,008	24.3
Retired	3,854	18.7
Semi-retired	82	0.4
Medically unfit	453	2.2
Further Education	392	1.9
Family Reasons	165	0.8
Other	124	0.6
Unknown	2,271	1.1
<b>All</b>	<b>20,610</b>	<b>100.0</b>

However the company also has significant export orders. At the end of 2001 they secured a contract worth £230m to supply 14 EH101 helicopters to the Danish government and a £200m order to supply 12 EH101s to the Portuguese government for search and rescue and fishery protection. As far as military exports are concerned the company announced in January 2002 that they had won a contract to supply Oman with 16 Super Lynx 300 helicopters. Over 400 Lynx helicopters have been sold to fourteen operators around the world.

Whilst it is difficult to speculate on how many of the 4,300 jobs remaining at AgustaWestland, Yeovil are dependent on the export of military helicopters, we do know that the town is heavily dependent on military contracts and in 1992 had more than twice the European average of military dependency.

Table 11 MoD equipment expenditure and associated employment in the South West

YEAR	MOD EQUIPMENT EXPENDITURE £M	ASSOCIATED EMPLOYMENT
1987-88	1,100	27,000
1988-89	1,050	23,000
1989-90	1,100	22,000
1990-91	950	18,000
1991-92	1,400	24,000
1992-93	1,200	19,000
1995-96	1,250	16,000
1996-97	1,550	18,000
1997-98	1,900	18,000
1998-99	1,400	14,000
1999-2000	1,800	n/a

However unemployment in the town is low and job opportunities in manufacturing do exist. Yeovil Travel To Work Area has a claimant count of only 1.5 per cent. The number of claimants in Yeovil, at the time of writing, was 669. A further 800 job losses at Yeovil had already been declared and the possibility of many more could have a major impact on the local labour market for years to come. If all of these 800 were to remain unemployed and the site was to close, with everyone becoming and remaining unemployed then the claimant count rate would increase to 12.9 per cent, the highest claimant count Travel To Work Area in the UK. However whilst the manufacturing sector has been under threat recently, there are still more than 33,000 people working in Somerset's manufacturing industry, twice the number employed in tourism. If closure and the already announced 800 losses were to share the previous experience of other military job losses in the South West then we would expect some 24.3 per cent of those to remain unemployed. This would add 1,239 claimants to the count and increase the rate to 6.0 per cent, a figure that the region has not witnessed since 1995 and almost double today's national average.

However it should be stressed that given the MoD's reliance on AgustaWestland, for present and future helicopters, and the company's success in both the military and civil sectors, the future of the site is not likely to be at risk from a ban on exports of military equipment.

### **Plymouth**

Historically Plymouth has had a high dependency on the military for employment and the success of the economy. Since the reduction of the military industry, new businesses have started up or moved to the city, giving it a much broader based economy. The city has a population of around 250,000 and has traditionally had a high unemployment rate, relative to the South West. However redundant military workers in the city have had some degree of success in finding new employment. A report on the impact of 800 job losses at Devonport Management Ltd over the period from May 1989 to December 1991, revealed that over 51 per cent of those made redundant had found a job, with 33.7 per cent being unemployed (Gripaios and Gripaios, 1992 and 1994).

### **Bristol**

Bristol has also traditionally been a city with a particularly high military dependency. A significant number of the South West's military export jobs are also likely to be in Bristol. The city has both BAE Systems and Rolls Royce establishments and has already been particularly affected by military job losses, with over 7,400 job losses prior to 1996, 5,500 of which were at these two companies.

Cuts continue to impact upon Bristol, with Rolls Royce Defence (Europe) announcing around 2,000 based at Patchway since 1999, including 450 announced in December 2001. Fewer than 4,000 workers are left at the firm. BAE Systems/Airbus have also recently made cuts, with 200 of their 4,500 workers at Bristol being made redundant. Although the majority of Filton's activities are civil dependent, Airbus also has a military transport version. In December 2001, eight countries including the UK ordered 196 Airbus A400M transporters at a cost of 18 billion euros (£11.25bn). The order is expected to secure employment of more than 400 design engineers and 500 manufacturing personnel at Filton.

Filton is also the home of MBDA, recently formed by the merger of Matra BAe Dynamics (37.5 per cent), EADS, the French-German-Spanish group (37.5 per cent) and Finmeccanica of Italy (25 per cent). The company employs some 400 workers at Filton, which has the responsibility for

the UK Meteor advanced air-to-air missile programme. MBDA will have 70 customers across the world.

BAE Systems Customer Solutions and Support is also based at Filton, employing 60 people, all of whom are dependent upon military exports. In addition, the Ministry of Defence Procurement Executive is based in north Bristol and employs over 4,000 people.

However the Bristol local economy is diverse, with military accounting for only 6 per cent of local employment. The Bristol workforce is estimated to be around 650,000 of a total population for the sub-region of 1,015,400. The corresponding figures for the Bristol Unitary Authority area are 274,200 and 406,200. Economic activity is estimated at 82.6 per cent. The Bristol TTWA has 8,370 claimants, a rate of 2.1 per cent. Presuming the maximum job loss scenario, that all military industry workers in Bristol were dependent on military exports, some 9,000 direct workers could be made redundant. As indicated above, based on previous experience we would expect some 24.3 per cent of them to remain unemployed. This would increase the claimant count by 2,200, to a rate of 2.6 per cent, still below the national average.

### **Wiltshire**

A report undertaken by Wiltshire County Council in 1996 estimated total employment dependent on military-related industries to be 27,190, of which 20,900 were direct employees. Swindon is the main military-manufacturing centre in the county and is home to 66 per cent of companies. However 51 per cent of companies (30) responding to the survey undertaken as part of the report, revealed that military sales accounted for less than 10 per cent of their turnover. Furthermore only 17 companies (29%) exported directly to overseas military markets.

Wiltshire had experienced the loss of over 9,000 military jobs between 1990 and 1996, representing 3.3 per cent of the economically active workforce in the county. The report predicted that by 2000, total employment would fall to 19,837 as a result of previously announced MoD spending cuts.

## **The South East**

The region with the largest number of military export related jobs is the South East, with some 38,340. 13.8 per cent of the region's jobs are in manufacturing with military jobs accounting for 0.46 per cent of all employment in the region. Whilst both Essex and Hampshire/Isle of Wight were reported as having more than twice the average EU military dependence in 1992, this included uniformed service personnel, civilian service personnel and military-related industry employment. This study concentrates only on that aspect of military industrial employment which is dependent on arms exports.

Major military contractors in Hampshire include Vosper Thornycroft and BAE Systems, with around 540 smaller local companies being involved in military-related markets. The Hampshire KONVER II bid in 1996 suggested that the county had 38,800 employees in military-dependent companies and, applying a multiplier effect of 1.75, some 70,000 jobs in total either directly or indirectly dependent on the military industry. The KONVER bid estimated that some 11,500 military-related industrial job losses had occurred in the county between 1990 and 1996. The bid also reported BAE Systems (formerly GEC-Marconi Aerospace Ltd) at Titchfield as being 60 per cent civil and 40 per cent military dependent. BAE Systems, Titchfield employs some 1,000 people of which 850 are

involved in aerospace activities.

In June 1999, BAE Systems announced it was shutting down its Dunsfold site in Surrey, with the loss of 900 jobs. During the phased closure, which lasted 18 months, the company spent £500,000 on retraining those made redundant. Blackwater Valley Enterprise (BVE) advised employees on the opportunities and pitfalls of starting their own business, providing free confidential advice to employees. Advice sought ranged from help in preparing a basic business plan to a more in-depth exploration of marketing and finance. In addition, comprehensive information was made available on specific business sectors, the choices of business legal entity, employing staff, VAT, insurance and other important considerations in starting a business. The resettlement rate appeared to be high, reaching 75 to 80 per cent.

BAE Systems are also part of Alenia Marconi Systems (AMS), a 50/50 joint venture with Finmeccanica of Italy; the company has a site at Broad Oak, Portsmouth which employs some 1,000 workers. AMS manufactures a wide range of products for the world wide military market, including the UK MoD. The maximum job loss scenario would be to assume that all 1,000 jobs would be at risk by a ban on arms exports.

Vosper Thornycroft was reported as being 60 per cent military and 40 per cent civil dependent, with the military component predicted to decrease over the next few years. Based at Southampton, Vospers designs and constructs warships and paramilitary craft. The company has two shipyards, at Southampton and Porchester, near Portsmouth, and following a spate of redundancies employs around 1,600. Vosper Thornycroft is thought likely to concentrate its military warship activities in winning MoD work over the next 10-15 years and is therefore unlikely to be impacted in the short to medium term by any ban on military exports.

A survey of Vosper Thornycroft suppliers undertaken in 1999 revealed that only 1 of the 71 respondents identified Vospers as one of their four main customers. However 44 (66%) of respondents identified one or more of the following organisations as their key customers: BAe; GEC; DERA and the MoD.

Since the survey was undertaken BAe and GEC's military arm have merged to form BAE Systems, which makes BAE Systems the main customer of military-dependent companies in Hampshire with 25 or 35 per cent of all companies identifying them as their main customer. DERA has been part privatised since the time of the Hampshire Study but this is assumed to have no direct impact on this research.

The South East is a large diversified economy, which has been able to absorb significant military job losses over the last decade. However there can be little doubt that the loss of over 38,000 jobs would have an impact on the region's labour market and economy. The region has 63,200 existing claimants, a rate of 1.5 per cent. Presuming that all 38,340 export dependent jobs were lost, and all workers were to 'sign on', then the number of claimants would rise to 101,540 or 2.4 per cent. Although this would take the region to levels of unemployment not experienced since 1997, the claimant rate would still be below the UK average of 3.0 per cent. However, as indicated above, not all of those made redundant would become claimants. Since 1999, when a resettlement rate of 75 to 80 per cent was achieved, the region's employment market has become even tighter: 44,800 vacancies remained unfilled at Jobcentres in the region. If the same resettlement rate were achieved then some 30,672 would gain new employment or training, with a maximum of 7,668 becoming unemployed. However previous experience has indicated that a number of these would retire, look after families or register as sick.

The South East has a very tight employment market and a shortage of labour. If all military export employees were made redundant, most of the local economies in the region would absorb the workforce with little or no government intervention (Ingram and Davis,2001).

## The North West

The military aircraft industry has consolidated in the North West region, with some 11,000 jobs being dependent on MoD equipment expenditure and some 16,000 dependent on military exports. The region and in particular Preston/Lancashire has experienced significant military job losses over the years. BAe announced the closure of their Strand Road site in Preston in 1990 with the loss of 2,524 jobs. These cuts have continued into recent years and the company now employs around 10,000 in the county. Around 6,000 are at its Warton site, near Preston, which shed some 900 jobs in 1999 and 4,000 at its plant in Samlesbury, near Blackburn, where 200 management positions went in 2000. A further 1,010 jobs were shed between Warton and Samlesbury in 2000/2001. However in October 2001 the company announced that 500 jobs would be created in the next year as a direct result of the £280bn JSF deal won by US aerospace company Lockheed Martin. In November 2001, Rolls Royce announced 295 job losses at its plant at Barnoldswick, Lancashire.

Although Lancashire has gained experience in managing military and in particular aerospace job losses over the last 10 years there is little doubt that a mass redundancy of the estimated 16,020 military export workers in the county would have a substantial impact on the local economy.

Unemployment could more than double from the present 12,880 (2.9%) to 28,900 or 6.5 per cent. However if those made redundant were to share the experience of their Preston colleagues then 4,325 (27%) would find work, 961 (6%) self-employment, 481 (3%) training, 2,243 (14%) would remain unemployed and 13,010 (50%) would become economically inactive. Under this scenario then the claimant count would increase to 3.4 per cent.

The other main military-dependent area in the region is Barrow in Furness in Cumbria, which is heavily dependent on BAE Systems which employs around 20 per cent of the local workforce. The yard, formerly VSEL, is the sole surviving builder of submarines in the UK and has witnessed dramatic job losses, cutting employment from a high of 16,000 to a low of 4,000 in a decade. Current estimates of employment are around 6,000. Barrow-in-Furness has 1,501 claimants, a rate of 5.2 per cent. However as indicated above, BAE Systems now seems to be concentrating on the home market for the next 10-15 years. Localities dependent on military shipbuilding such as Barrow are therefore not considered to be at any immediate threat from a ban on exports.

At the regional level, the North West has a total of 115,600 claimants, a rate of 3.5 per cent. A mass redundancy of 16,020 military export jobs could result in a maximum unemployment rate of 4.0 per cent. However there are 46,700 unfilled vacancies in the North West and a major programme of re-employment and re-training would result in a number of these vacancies being filled.

## The West Midlands

The Midlands remain the industrial heartland of the country. Around a quarter of all employees in the West Midlands are involved in manufacturing, accounting for almost 30 per cent

of regional output. Some 1,900 companies in the West Midlands are reported as either supplying components or sub-contracting to military industry, and in Coventry almost one in four of the city's manufacturing employees work with military contracts (Goudie, 1996). However the region has witnessed significant job losses from the military sector, with Coventry alone losing more than 5,000 jobs. Statistics indicate that there are 5,000 jobs directly dependent on MoD equipment expenditure and 6,030 dependent on military exports.

However job losses have continued since these statistics were compiled. In October 1998 Coventry armoured car makers Alvis agreed to merge with GKN, resulting in 200 permanent employees and 90 contract staff losing their jobs at Walsgrave Triangle. Only a few of the workforce relocated to GKN's Telford plant in Shropshire. Whilst there was a storm of protest, with workers downing tools when the plans were announced, unions negotiated improved terms of severance. Longer-serving workers received three months in lieu of notice, three months statutory redundancy pay plus an enhancement payment which amounted to around £16,000.

Around half the 2,600 jobs at Rolls Royce's Ansty plant were axed after the company announced a major shake-up of its operation in November 2000. Up to 650 of these were in the companies division that makes components for the aerospace industry. In November 2001, Rolls Royce announced a further 165 redundancies at Ansty.

However Coventry has much lower unemployment than in the past and in recent years there have been new jobs in the engineering and toolmakers sector. Coventry has 4,018 claimants or 3.5 per cent, compared to the West Midlands as a whole which has a claimant count of 92,900 or 3.5 per cent. An additional 6,030 unemployed would increase the region's claimant count to a maximum of 98,930 or 3.7 per cent, a 0.2 per cent increase in existing figures.

## The North East

Concentrated in Tyne and Wear, the manufacturing of military equipment has traditionally been one of the region's major industrial sectors. The industry has suffered substantial job losses in the last decade, as direct MoD employment decreased from 14,000 in 1993 to 3,000 in 1998/99. The two major military companies in the North East, Vickers at Scotswood and RO Birtley, have been subject to industrial restructuring, seeing their employee numbers decrease significantly. Vickers is now part of the Rolls Royce Group, whilst RO Birtley is part of BAE Systems.

In December 2001, BAE Systems announced the closure of their Royal Ordnance factory at Birtley and there is continued speculation over the future of Vickers. The company completed the last Challenger 2 tanks for the British Army at the end of February 2002 and recently failed to win a £1.2bn Greek order. Rolls Royce has been in talks to sell the plant to armoured vehicle manufacturer Alvis.

Demand for armoured vehicles has shrunk so much since the Cold War that one or two orders can make a big difference

to the few remaining manufacturers. The Alvis takeover of Vickers would consolidate the UK industry into one company. There may be little demand for more Challenger 2 tanks, but Vickers does have orders for specialist tanks and for support to the Challenger fleet. From 2005 onwards Alvis can expect deliveries to the British Army to revive, including the multi-role armoured vehicle or "battlefield taxi" it is developing with Dutch and German companies. The question is whether Alvis will close the Newcastle plant, with the loss of 500 jobs, prior to this.

The closure of RO at Birtley would result in the loss of some 300 jobs.

Tomaney, Pike and Cornford (1995) have considered the experiences of 2,200 workers made redundant in the North East at the Tyneside Swan Hunter shipyard. Their study revealed that in 1995, two years after the company had gone into receivership, just under half of the 1,645 respondents were in work (44%), with an average period of unemployment of just 19 weeks. Whilst a significant number 634 (38.5%) were unemployed at the time of the survey, 212 of these had had some work in the period since leaving Swan's. The majority of those in work had jobs in the North East but had accepted an 8.5 per cent decrease in wages. However the 15 per cent who left the region for employment had increased their wages by 37 per cent, it should be stressed that this was often 'contract' employment and did not include company pension, sick leave, holiday entitlement, etc.

If the 800 workers at RO and Vickers were to have the same experience as their Swan Hunter colleagues then some 349 would find employment and 308 would be unemployed after two years, see Table 13.

Unemployment remains high in the North East with a claimant rate of 5.1 per cent. Workers made redundant in the region would therefore find it more difficult than those in areas of lower unemployment to find new jobs. With 59,000 claimants in the region an extra 800 would raise the rate to 5.17 per cent. If the workers were to share the experience of those from Swan Hunter's, unemployment would increase by 308 to 5.13 per cent.

However redundancies at Birtley and Vickers may well take place in any event and not as a direct result of an arms export ban.

## Yorkshire and Humberside

Employment in the region dependent on MoD spending on military equipment has increased from 4,000 in the early 1990s to 5,000 in the latter half of the decade. However military job losses have occurred during this period. For example Vickers employed 880 at its site in Leeds in 1994 but since then announced a series of redundancies resulting in the eventual closure of its tank manufacturing facilities in 1999.

East Yorkshire's biggest employer, BAE Systems at Brough, home to the pilot-training Hawk fighter, has also experienced a number of redundancies during the last decade including some 700 in 1995 and 850 announced in June

Table 13 Actual and possible outcomes of North East military redundancies

COMPANIES	EMPLOYED /SELF-EMPLOYED	UNEMPLOYED	RETIRED	SICK	EDU/TRG	NOT STATED	TOTAL
%	43.65	38.54	0.91	11.98	2.86	2.07	100
Swan's	718	634	15	197	47	34	1,645
Vickers/RO	349	308	7	96	23	17	800

2000. More job losses were announced in January 2001 and the future seems to depend on the company winning a major contract for the Hawk Aircraft from India. However BAE Systems are predicting sales of 100-200 Hawk aircraft over the next ten years and are suggesting that the Hawk will form the fast jet trainer solution to the MoD's Military Flying Training System requirements.

Estimates that Yorkshire and Humberside's military export industrial employment is only 270 have been criticised for being far too low (Chalmers, Davies, Hartley and Wilkinson). The Brough factory alone employs some 3,000 and although the plant makes components for Airbus, 70 per cent of its work is related to the Hawk, which has significant export potential.

The importance of aerospace to Yorkshire has been reflected in the government's decision to establish a new innovation centre in the county aimed at making aerospace manufacturing in Yorkshire a centre of excellence.

Unemployment in Yorkshire and the Humber is 3.7 per cent, representing 89,400 claimants. 3,000 job losses could increase this to 92,400 or 3.8 per cent. However the impact on Brough is likely to be much sharper. Brough is located within the Hull Travel To Work Area, which has 8,259 claimants, a rate of 7.1 per cent. A mass 3,000 redundancies would have a major impact on the local labour market. The worse case scenario would be an increase to 11,259 claimants, a rate of 9.8 per cent, which would be the second highest TTWA claimant count in England.

## Scotland

The reliance of Central Scotland on military industry became increasingly apparent during the 1990s as mass redundancies hit Strathclyde, Edinburgh and Fife. Scotland has both shipbuilding and aerospace activities. Shipbuilding is covered elsewhere in this study and a recent report (Goudie and McNulty) indicated that the Scottish aerospace industry was more military dependent than the aerospace industry in the UK as a whole. Most of Scotland's arms exports are produced at the BAE Systems plants in Edinburgh, with some at Raytheon and AMS in Fife, Thales in Glasgow and Rolls Royce in East Kilbride. In total Scotland has 3,600 jobs dependent on military exports.

BAE Systems has announced the closure of their Royal Ordnance plant at Bishopton. Rolls Royce has announced some 410 job losses at the company's Hillington plant in Renfrewshire, which employs 1,000 workers building compressor blades for the Trent aero-engines for the Airbus A340 aircraft. Forty jobs will also go at its East Kilbride plant, which depends on military contracts for 60 per cent of its business. At the time of writing, around 200 of those facing redundancy at Hillington had secured alternative employment or taken early retirement. The company has also announced the closure of the Hillington site and, after rejecting a bid from the Czech Republic, will be opening a new £85m factory in Scotland, with the assistance of £15m Scottish Executive funds.

The vast majority of jobs in Scotland dependent on arms exports are at BAE Systems plants in Edinburgh, which has seen the workforce reduce from around 6,500 in 1990 to around 2,000 today. The former Barr and Stroud factory in Glasgow, now part of Thales, has witnessed reductions from 2,500 in 1989 to around 540 today. Raytheon peaked at around 1,000 workers in the late 80s before losing around 300 jobs in the early 1990s.

However, like elsewhere in the UK, the economy in

Scotland has improved. Scotland now has 99,200 claimants, a rate of 4.0 per cent. Indeed, Scottish businesses are now facing a growing threat from unfilled job vacancies despite widespread redundancies in manufacturing. There were 45,700 unfilled posts at job centres in March 2001, an increase of 8,200 posts from the year before and up from 30,400 in 1999. Advertised vacancies have also increased, from 25,500 in March 1999 to 27,000 in March 2001. The figures, the latest available from the Employment Service, are thought to represent only a third of the total jobs available.

The City of Edinburgh has extremely low unemployment with a total of 5,028 claimants, a rate of 2.3 per cent. East Kilbride has a claimant rate of 3.2 per cent, Renfrewshire 3.9 per cent, Glasgow 4.7 per cent and Fife 6.2 per cent. Although the majority of jobs lost would be in Edinburgh, any workers made redundant would be expected to secure new employment in a short period. There is a large demand for labour in Edinburgh, with at least 3,000-4,000 unfilled vacancies which cannot be filled locally.

The biggest impact of arms export job losses in Scotland would likely be in Fife, which has already experienced significant military job losses over the last 20 years. Around 1,000 jobs could be at risk at Raytheon, Glenrothes and AMS, Hillend, from a ban on arms exports. However Fife, traditionally the most military-dependent part of Scotland, has a long history of managing military job losses and has successfully diversified the local economy in recent years. A 1996 evaluation on programmes aimed at assisting redundant military workers in Fife reported that some 62.6 per cent of respondents were in employment between five and eight months after their redundancy. Just over a quarter (27.1%) were unemployed and 4.9 per cent of respondents were in training or education. Furthermore a large proportion (61.8%) of those in work found employment within one month and another 24.5 per cent found work within 2-3 months. However 56 per cent indicated that their salary was lower than before while 22.7 per cent said that it was higher.

The Scottish Parliament is also building a strong reputation for positively responding to redundancies; see page 20 for details on the Clyde Task Force. In her speech to the Scottish Labour Conference on 24th February 2002, Wendy Alexander, the then Minister for Enterprise, Transport and Lifelong Learning, pledged that 95 per cent of those made redundant at Motorola in West Lothian, which has a claimant rate of 4.7 per cent, would be redeployed within a year. It is assumed that a similar initiative would be announced to manage the impact of job losses resulting from a ban on arms exports.

## Wales

According to MoD statistics, Wales has approximately 1,000 jobs dependent on military equipment expenditure. This includes Thales at St Asaph and the BAE Systems RO site at Monmouthshire. It is estimated that some 450 jobs in Wales are dependent on the export of military equipment. However a survey of companies taken as part of this study revealed that RO employs some 400 staff, all reported as being dependent on the export of military equipment. Unemployment in the Monmouthshire local authority area is only 857 or 2.6 per cent. The sudden closure of the RO site could have a significant impact on the local labour market resulting in 3.8 per cent unemployment.

A proportion of the Thales workforce is also thought to be dependent on the export of arms. The company, along with Avimo Optical Imaging in Prestatyn and Avimo Thin Film

Technologies in Plympton, forms part of HTO-UK. The company announced 30 redundancies following a reorganisation in November 2001. St Asaph employs some 1,000 and is located in the county of Denbighshire which has an unemployment rate of 3.7 per cent.

Wales has an unemployment rate of 3.6% representing 46,800 claimants. The loss of 450 jobs would have little impact on these statistics, increasing the claimant count to 47,250 or 3.64%.

## Northern Ireland

Bombardier Aerospace is the largest private sector employer in Northern Ireland, employing more than 7,200 people. It is part of the third largest civil aircraft manufacturer in the world. However the company also supplies components for military aircraft, including the Boeing Apache helicopter and the Lockheed Martin C-130. The company has manufacturing operations at five sites in Northern Ireland.

Shorts Missile Systems (SMS), now part of the Thales Group, employs some 550 at its factory in the Castlereagh area of Greater Belfast and supports around 170 in its network of subcontractors. Over the last number of years SMS has significantly increased its missile manufacturing and improved assembly techniques and is involved in major missile collaborative programmes in the UK, Europe and the United States. The company's products are in service with 56 armed forces around the world.

Other companies known to be involved in the military sector in Northern Ireland include Creative Composites, John Huddleston Engineering, Langford Lodge Engineering, Sprinco and Survitec.

Raytheon Systems Limited (RSL) has recently set up its new multi-million-pound software development centre in Derry. RSL expects to employ 120 people by the end of 2002. Although Raytheon has numerous military activities, the Derry centre will focus on a variety of the company's commercial programmes.

In total, 1,890 jobs in Northern Ireland are estimated to be dependent on the export of military equipment. At 4.8 per cent, Northern Ireland has the second highest unemployment rate of any region in the UK. The province has 37,900 claimants and if all 1,890 jobs were to be lost unemployment would rise to 39,790 or 5.0%.

## Summary of impact of military export job losses on UK regions

Table 14 provides a summary of the maximum impact on regional employment as a result of a ban on the export of arms. The figures have been rounded up to take into account specific knowledge of local employment dependent on military exports. The table also provides an indication of the 'likely' impact on regional unemployment after 3 months, based on a 50 per cent transition rate into unemployment.

However this is also likely to be an overestimate of unemployment as the average transition rate is inflated by certain groups which experience higher rates of unemployment: young people; part-time workers; partly skilled and unskilled workers; and people from ethnic minorities or with disabilities.

The experience of those made redundant can be summarised into certain categories (Tomaney et al, 1997):

- ▶ many cease to be unemployed within a relatively short period, accepting a new job, entering training or education, retiring or voluntarily leaving the workforce, typically within one year.
- ▶ those who remain unemployed are likely to do so for a long time: unskilled and older workers have more difficulty finding work; most redundant workers do not move in search of work; the majority of workers accept lower skilled work and lower pay when starting a new job.

The state of the local economy affects the outcome of redundancy and the way in which the company conducts its redundancy programme makes a significant difference to the well-being of those made redundant (see also Goudie, 1996).

A recent Labour Force Survey (November 2001) reports that for the first time the majority of those leaving employment are likely to become economically inactive rather than unemployed.

Moore and O'Neil provide an illustration of the various factors influencing the post-redundancy experience. The factors included here are:

- ▶ Personal factors; age, gender
- ▶ Household factors; marital status, number of dependants, etc.
- ▶ Human capital factors; qualifications, skill level, etc.
- ▶ Wealth factors; savings, mortgage, etc.

Table 14 Potential impact on jobs and unemployment of a ban on arms exports

	CLAIMANT COUNT	RATE %	MAX JOBS AT RISK	MAX NEW CLAIMANT COUNT	MAX NEW RATE %	LIKELY NEW RATE %
United Kingdom	918,400	3.0	91,260	1,040,332	3.3	3.1
North East	59,000	5.1	800	59,800	5.2	5.1
North West	115,600	3.5	16,020	131,620	4.0	3.7
Yorkshire & Humberside	89,400	3.7	3,000	92,400	3.8	3.7
East Midlands	58,300	2.9	450	58,750	2.9	2.9
West Midlands	92,900	3.5	6,030	98,930	3.7	3.6
East	51,700	2.0	2,160	53,860	2.1	2.0
London	155,700	3.3	Included in South East			
South East	63,200	1.5	38,340	257,240	2.9	2.2
South West	48,800	2.0	20,610	69,410	2.8	2.4
Wales	46,800	3.6	450	47,250	3.6	3.6
Scotland	99,200	4.0	3,600	102,800	4.1	4.0
Northern Ireland	37,900	4.8	1,890	39,790	5.0	4.9

- ▶ Policy factors; assistance post-redundancy, etc.
- ▶ The external local labour market; unemployment levels.

Here they emphasise that not only do these factors affect the post redundancy experience but they also interact with each other. Personal factors, such as age, are likely to be closely correlated with wealth factors, including the size of redundancy payments.

**Table 15** Reasons for difficulty in finding a job in a different industry

REASONS	FEMALE	MALE
Lack of appropriate alternative jobs	77%	83%
Lack of appropriate training	54%	32%
Lack of funding for training	31%	18%
Lack of information re training	46%	26%
Other reasons	54%	32%

**Table 16** Advisory services offered in-house

TYPE OF ADVICE	%
Career guidance	37
Information on vacancies	65
Job search training	51
Internal certification, pre-redundancy	12
Guidance on external training options	16
Financial advice on benefits, mortgages etc	43
Financial advice on redundancy money	67

# Redundant military workers surveys

▶ Surveys of redundant military workers in the UK have been relatively few.

Fife Regional Council's Career Change Guidance Service – Evaluation Report, October 1993 reported that out of 344 clients who had been made redundant from six different military companies in the region between February 1992 and June 1993, 37.8 per cent were in employment, 43.9 per cent unemployed and 16.3 per cent in training. Only 1 per cent were self employed. The amount of time spent unemployed and the location of redundees is also important to the Fife study and not surprisingly it revealed that the percentage unemployed was less for those groups made redundant earlier rather than later.

Donnelly and Scolarios (1998) found that by far the main reason why redundant military workers in the West of Scotland had difficulty finding re-employment in a different industry was the lack of appropriate alternative jobs, see Table 15.

Donnelly and Scolarios also found that older people had more difficulty in finding a new job. However, at the time of the survey, almost half (48.3%) of respondents had managed to find a new job, with around a third (29.4%) still unemployed and one fifth (20.6%) taking retirement or retiring through incapacity. Only a small proportion, 3.3 per cent, were self-employed and 2.8 per cent were in training or education (Note: figures do not add up to 100 since some respondents classified themselves in more than one category). However it must be stressed that the vast majority of those finding employment (67%) found new work in the military company, which had originally employed them.

Tomaney et al (1995) reflected on the two arguments put forward regarding the potential closure of the Swan Hunter shipyard at Wallsend, Tyneside in 1995. Namely that the closure of the yard, whilst unpleasant in the short-term, would not be disastrous as the region had diversified. New opportunities in new sectors were available and a system of training support and job placement was in place as well as support for those seeking self employment. The other view was that redundant shipyard workers would in fact find it extremely difficult to find new jobs. The survey found that nearly half (48%) of those who had been made redundant up to eighteen months previously were unemployed at the time of the survey. Only 32 per cent were in employment, whilst 15 per cent were registered sick or disabled and 4 per cent were in training. No mention was made of self-employed but these could have been included in the 2 per cent classed as 'others'.

In East Kilbride, a Fraser of Allander Report warned of a 'significant loss of high quality employment and local income in the East Kilbride area and beyond' following the decision to close Rolls Royce's aero-engine design operation in the new town. This report used a Local Area Model (LAM) designed to compute the total loss of income and employment resulting from the Rolls Royce closure. The study estimated that the 636 jobs lost by closure would result in a total loss of 724 in the short term and 781 in the long run in the East Kilbride area. The LAM also indicated that within the Strathclyde region, which East Kilbride is located within, some 829 short

# Company redundancy programmes

term and 902 long run jobs would be lost. The total loss of jobs to the area represented 1.7 per cent of all employment in the short run and 1.9 per cent in the long run. However a number of jobs were created in East Kilbride as a result of the closure. A government quango, Scottish Design, set up a programme to place designers from Rolls Royce within local small and medium enterprises (SMEs). Other workers established themselves in a new company, East Kilbride Engineering Services, which has since developed into an Engineering Design and Management Consultancy. The Company now employs over 30 staff.

Finch's (1998) study of redundant aerospace workers at BAe in the North West raised a number of important issues which impact upon the success, or otherwise, of those made redundant in finding new employment. These include age, tenure, location and skills level but most importantly he argues that 'the likelihood of securing re-employment is expected to be affected by the ability of former aerospace employees to transfer their sets of skills and knowledge into other business sectors'. This 'flexibility' in transferring skills is also backed up with flexibility in accepting lower conditions of employment and in particular lower wages. Of the 50 in the sample who had found new employment, 41 had done so at lower wages than in BAe.

A report into military industry redundancies in the South West, undertaken by the University of York, reported that '*for many of those made redundant from defence industries in the South West, the labour market seems to have worked*' (Hooper et al, 2001).

## Most useful advice or assistance

There have been a very limited number of studies into military redundancies in the UK and appropriate advice and assistance offered or sought.

Goudie (1996) reported that around 74 per cent of redundant military workers in Strathclyde recalled that their employer provided in-house guidance and counselling. Of those providing in-house advice the offerings included those shown in Table 16.

Hooper *et al* asked respondents in the South West what advice or assistance they found most useful. The most useful form of assistance was in the preparation of CVs, job applications and interview techniques, see Table 17.

Table 17 Most useful advice and assistance

TYPE OF ADVICE OR ASSISTANCE	%
CV preparation, job application, interview techniques	15.3
Training/back to work courses	9.7
Encouragement/motivation	8.4
Financial advice	7.9
Used own initiative/self-motivation	7.3
Job search	7.0
Job counselling/career advice	6.4
Pre-retirement/redundancy courses/counselling	4.8
Advice from others in similar situation	4.0
Sources of information	3.3
Benefit entitlement	3.0
Starting business/self-employment	1.5
To stop looking because of age	1.3
Other	7.2
Little or none received	12.7

► Redundancies have taken place in military industry over the last twenty years as a result of military cuts, cost reductions, productivity improvement and corporate restructuring. During this period companies have employed a variety of redundancy strategies ranging from limited consultation and support to full consultation and assistance, often including the use of external consultants and outplacement agencies. BAe Systems, Thales and Rolls Royce have all provided corporate assistance for those made redundant. This has had a significant beneficial impact on the attitude to re-employment and retraining of those losing their jobs.

## Thales

In October 2001 Thales announced that it was cutting 570 jobs as it reorganised its electronics and telecoms division. Of the 570 staff, 370 were offered retraining for jobs within Thales near their place of work, 70 moved to other jobs away from their area or outside the group, while 80 were offered an early retirement package. Around 50 temporary contracts were not renewed.

## Rolls Royce

Following the 11th September 2001 Rolls Royce announced some 5,000 job cuts world-wide, including 3,800 in the UK. Both the company and the Government vowed to do all they could to help workers who lose their jobs. Trade and Industry Secretary Patricia Hewitt promised that staff made redundant would be given help to re-train for new jobs and the Rolls Royce network of five job search and resource centres aims to help workers find new posts, either within the company or with other firms. Rolls Royce has also employed external consultancy firms to help match workers' skills to jobs elsewhere, or to re-train them for other jobs.

Some 450 of these jobs losses were in Bristol, where the company's military (Europe) business is based. In total, 450 employees out of a 4,350-strong workforce will lose their jobs. The company said that it would look to achieve the reductions through voluntary redundancy, early retirement and re-training.

## Vickers

At the time of the final 400 job losses at Vickers Defence Systems' tank factory in Leeds, the company, in partnership with Leeds City Council, the Employment Service and other local and regional development and training agencies, established a strategic partnership to manage the redundancy exercise. The partnership utilised an existing skills and training initiative called the 'Jobroute Project' to assist Vickers' employees. Of the 378 redundant workers who registered with Jobroute, some 302 (80 per cent) had secured a 'positive outcome':

- 225 had gained employment;
- 18 had started full-time education/training;
- 18 had become self-employed; and

► 41 were not actively seeking work.

### **BAE Systems – British Aerospace; Hertford**

The BAe Hatfield site, which developed guided weapons and manufactured Airbuses, employed over 3,000 people in 1992 (Moore and O’Neil, 1996). Redundancies took place from April 1992 and the site closed in December 1993. By August 1994, over half the sample (58 per cent) had gained employment with a further 6 per cent becoming self-employed, 19 per cent were unemployed, 2 per cent were in training and 14 per cent had become economically inactive. The average unemployment rate in Hertford for the twelve months preceding the commencement of redundancies was 6.9 per cent. Those made redundant represented 1.5 per cent of the Travel To Work Area employees in employment. The impact of these redundancies on local unemployment was negligible as the unemployment trend in Hertford broadly reflected that of the South East region (Moore and O’Neill).

### **BAE Systems – British Aerospace; Preston**

British Aerospace announced in 1990 that their Strand Road site in Preston would close by the end of 1993 with the loss of 2,524 jobs. Under the ‘Special Early Release Programme’ (SERP) the following entitlements were available:

- A one-off redundancy payment,
- Those over 50 were entitled to a pension,
- All those made redundant were eligible for the ‘New Start’ outplacement service (which included ‘Job Search’ and ‘Business start-up’ courses) supported by BAe and Lancashire Enterprises and funded, in part, by the European Social Fund.

By August 1994, 27 per cent of those made redundant were in work, 6 per cent were self-employed, 3 per cent were in training, 14 per cent were unemployed and 50 per cent had become economically inactive, probably by taking early retirement (78% of the sample were over 50). The average unemployment rate in Preston for the twelve months preceding the commencement of redundancies was 5.4 per cent. Those made redundant represented 1.5 per cent of the Travel To Work Area employees in employment. However, unlike in Hertford, the impact of these redundancies on local unemployment in Preston was high, with unemployment becoming 23 per cent higher than the North West average (Moore and O’Neill).

# The role of policy initiatives

► A great deal of help and assistance is available for redundant military workers. Although a number of studies (Donnelly and Scolarios, Goudie, and Hooper et al) have indicated that those made redundant did not find the advice and assistance received useful, policy factors such as assistance received during and post redundancy can have a positive impact on the propensity to take up training, secure employment or become self-employed. Here we consider a number of government interventions aimed at assisting redundees to find new employment opportunities.

## The Prestwick Task Force

British Aerospace announced on 29th May 1997 that production on the Jetstream 41 regional turbo-prop aircraft at Prestwick would cease at the end of 1997 with the loss of up to 380 jobs. A further 270 jobs at the Aerostructures Division at Prestwick were also seen to be at risk as a result of the decision. The Government responded on 5th June 1997 by establishing ‘The Prestwick Taskforce’. The remit of The Task Force was to consider how the loss of the British Aerospace jobs could be mitigated in the short-term and to consider options for the future development of Prestwick. The Task Force consisted of politicians, business leaders and trade unionists. Under the chairmanship of the Scottish Industry Minister, Brian Wilson MP and latterly Lord Macdonald, the Task Force met seven times between 24 June 1997 and 25 September 1998.

The Task Force produced a preliminary report on 19th September 1997, “Realising the full potential of Prestwick”, that set out the issues that were being addressed. Among the early achievements of the Task Force was the securing of 270 jobs in the Aerostructures Division.

The Task Force agreed targets in relation to the two key objectives of mitigating short-term BAe job losses and considering options for the future development of Prestwick.

- Jobs found for at least 75 per cent (285) of Jetstream workers affected by closure;
- Secure the 270 Aerostructure jobs at risk;
- Assist in the creation of 380 new jobs (equivalent to those lost from Jetstream) in the Prestwick area;
- Develop plans for an Engineering Centre of Excellence;
- Market aerospace opportunities at Prestwick;
- Investigate the concept of an integrated aircraft maintenance facility at Prestwick;
- Press for an upgrade of the trunk road between Prestwick and Glasgow;
- Support further development of Glasgow Prestwick International Airport.

All three of the employment targets were met. Alternative employment had been found for 91 per cent of the 380 workers affected by the Jetstream 41 closure, a result

described as “an outstanding success” by Lord Macdonald. This redeployment was achieved with the assistance of two major redeployment initiatives.

The Jetstream redeployment programme, consisting of:

- ▶ one-to-one counselling;
- ▶ personal action planning;
- ▶ confidence building and assertiveness;
- ▶ financial planning;
- ▶ job search;
- ▶ personal marketing, including CV compilation, interview techniques and using the internet;
- ▶ manager support training;
- ▶ identifying business opportunities and setting up in business;
- ▶ access to resources e.g. journals, software packages and the internet;
- ▶ completion of vocational qualifications, work-based degrees and HE/FE courses; and
- ▶ skill enhancement for opportunities in the wider labour market.

This Redeployment Programme cost some £209,525 and was funded by BAe, who contributed 45 per cent of the costs; the local authority and economic development agency, who contributed 10 per cent between them; and the European Union, whose European Social Fund (ESF) Objective 3 provided 45 per cent ‘match-funding’ to the programme.

A specific Management Placement Programme was developed at an estimated cost of £200,000. This programme attempted to help appropriate BAe managers to make an effective transition to local SMEs.

The 270 aerospace jobs which had been at risk were secured by new work being brought into Prestwick by British Aerospace. Indeed a further 60 new skilled workers and 31 technical and professional employees were recruited to meet the new demand and the redundant Jetstream buildings (Hangers 12 and 90) were taken off the market in June 1998.

The target of 380 was set to counteract the loss of the jobs from Jetstream. As reported above, 91 per cent of these actually found new employment within the BAe site or locally within Ayrshire. In addition 91 new staff had been recruited and, at the time of the final report being published, a further 21 technical and professional vacancies existed. In addition two existing aerospace companies at Prestwick, GE Caledonian and Rohr, announced plans to create at least 200 additional jobs. During the same period another aerospace company, Woodward Governor, established itself at Prestwick, initially employing 30 people. Prestwick Airport had created a further 68 new jobs and there had been a considerable shift from temporary to permanent staff at the airport. Fullerton Computer Industries also set up a new production facility at Prestwick during this time, employing around 400 staff. In total therefore, over 800 new jobs had been created or planned in the Prestwick area during the 18-month period that the Task Force was in existence.

A range of training and skill initiatives were developed, allowing the combined capability to be marketed as a “virtual centre of excellence”.

The advantages of Prestwick and Scotland as a location for aerospace projects had been researched and marketed, particularly to North America. Fifteen active leads were reported as being pursued at the time the Task Force’s Final Report was published.

Locate in Scotland undertook research into the potential for the development of Prestwick as an integrated aircraft maintenance facility. This was being discussed with various

companies at the time of the Final Report.

Continuing development of the road infrastructure would be pursued by the proposed grouping to succeed the Task Force and/or by other bodies.

Passenger and freight had continued to grow at Glasgow Prestwick International airport during the life of The Task Force and the airport’s operators had undertaken a number of major developments, notably the completion of a new purpose-built airfreight facility.

Although it is difficult to argue that none of these initiatives or developments would have occurred without the existence of the Task Force, there can be little doubt that the Prestwick Task Force was successful in achieving an extremely high level of re-employment of Jetstream workers. Although there is no information on the new wage rates of those made redundant, the relative short period of redundancy which they experienced may have avoided some of the more negative effects of such an experience. Furthermore the Task Force claim, perhaps with some justification, that they brought added momentum to plans for the Prestwick area, primarily through the benefits of long-term partnering working.

## The Clyde Shipyards Task Force

Following the announcement by BAE Systems of 1,000 redundancies at their Govan and Scotstoun yards on the river Clyde, the Scottish Minister for Enterprise and Lifelong Learning, Wendy Alexander MSP established the Clyde Shipyards Task Force in July 2001. The Task Force, chaired by the Minister, included representatives from the Scottish Executive, the Scotland Office, the Scottish Parliamentary Shipbuilding Group, Scottish Enterprise Glasgow, Glasgow City Council, Employment Service, Scottish Engineering, Clydeport, BAE Systems, and the unions (both lay representatives and full time officials).

The remit of the Task Force was to consider the immediate and longer term strategic issues facing the Clyde shipbuilding industry, particularly naval, and to identify the changes necessary to ensure a competitive industry to exploit future opportunities. This included the following objectives:

- ▶ To quantify the range of trades and skills available in the Clyde shipyards;
- ▶ To identify any mismatch between trades/skills and market opportunities;
- ▶ To predict the nature, level and phasing of further opportunities for naval shipbuilding (and related industries requiring similar skills) over the next 10 or more years;
- ▶ To consider the implications of the above in the form of appropriate responses and actions, especially the need for training, with reference to responsible agencies and timescales;
- ▶ To provide strategic direction for the work of the existing PACE team in its response to the expected redundancies from the Clyde shipyards and to assist the team in identifying appropriate responses. This will include identification of training needs for those leaving employment and appropriate implementation mechanisms;
- ▶ To consider the implications of the strategy for the shipbuilding communities of Govan and Scotstoun including the wider land use and community regeneration issues; and to prepare a report for Ministers by December 2001 setting out a recommended plan of action.

The main Task Force met on a monthly basis to provide

direction but much of the work programme was developed through four small sub-groups: Strategy; Skills; Redundancy Management; and Community Regeneration and Land Use.

During the lifetime of the Task Force, BAE Systems attempted to mitigate the level of compulsory redundancies by introducing a series of remedial measures including: seeking volunteers; assisting relocation to other BAE shipbuilding sites; redeploying workforce within the Glasgow yards, with training where appropriate; and promoting employment opportunities elsewhere within the wider BAE Systems group.

The overall impact of these measures was to reduce the number of compulsory redundancies from 1,000 to approximately 450. The Redundancy Management sub-group looked to bring forward and implement, if necessary, a comprehensive series of measures designed to assist workers threatened with redundancy to move into alternative employment or training either prior to, or as close as possible to, the point of redundancy. The sub-group operated within the framework of the PACE initiative and utilised the expertise of the Glasgow REACT Team and Employment Services.

The PACE (Partnership Action for Continuing Employment) initiative was established in March 2000, specifically to allow the Scottish Executive to respond positively to potential job losses resulting from market conditions. PACE attempts to plan for such job losses by working with companies prior to, during and after redundancies take place. PACE develops and implements local plans to mitigate and avoid job losses and to get any redundees back into work as soon as possible. At the time of writing there were 22 PACE teams across Scotland.

The Glasgow REACT team is a redundancy management organisation funded by the Local Authority (City of Glasgow), the Economic Development Agency (Scottish Enterprise Glasgow), the Local Economic Development Company (Govan Initiative) and the European Social Fund.

Targets set by the REACT team include:

- ▶ Each registered employee to have an individual career transition plan;
- ▶ Each registered employee to have a professionally prepared CV;
- ▶ Each registered employee to be invited to all Job Fairs;
- ▶ 50 per cent of registered compulsory redundees resettled (e.g. in employment, self-employed, training) within 90 days of termination; and
- ▶ 75 per cent of registered compulsory redundees resettled within 180 days of termination.

Furthermore, mindful that these targets could still mean that 25 per cent of registered redundant workers would remain unemployed after six months, the Clyde Shipyard Task Force recommended further consideration be given to:

- ▶ The development of appropriate short-term 'conversion' training programmes for mature workers seeking to skill-up in order to take advantage of opportunities in growth industries; and
- ▶ Scottish Enterprise funding a short-term training and employment subsidy programme to encourage employers to recruit and retrain redundant shipyard workers six months after redundancy. The subsidy would equate to 50 per cent of wage for six months, to a maximum £100 per week including NI. In addition there would be a £750 training allowance to allow personnel to develop higher level skills training that would enhance their competitiveness in the labour market and meet the aim of raising the skill level of the labour force.

## Rolls Royce, Derby

Rolls Royce employs around 12,000 in their Derby group. The company has announced it will cut about 2,300 jobs at its plants in Derby during 2002. 225 at Hucknall and 1,455 at Derby, with a possible further 600 predicted. However Derby has been successful in winning £7.27m of European cash to help the city cope with effects of job losses at Rolls Royce. Trade minister Brian Wilson claimed the regeneration package would create almost 850 jobs, safeguard a further 215 and help more than 270 small businesses.

Derby City Partnership, which bid for the money in November 2001, has said it will use the cash to boost city centre investment and encourage enterprise, technology, tourism and culture. The cash will be used to boost business and jobs in Abbey, Babington, Litchurch, Osmaston and Derwent. Although trade unions have criticised Rolls Royce management for claiming that the redundancy programme was a 'model' for the industry, it has been relatively successful. Voluntary redundancies have accounted for about 75 per cent of the 1,415 losses and the company's employment resource centres have enabled those under threat of redundancy to improve their job-finding skills.

## The Rapid Response Service

Whilst the impact of redundancies on any region will depend not only on the numbers being made redundant but also on the nature of the local labour market, the government have established the Rapid Response Service (RRS) to provide a coherent response to significant redundancies. The Service, run by the Employment Service, part of the Department for Work and Pensions, aims to help people affected by a significant redundancy by moving them quickly into new jobs. The RRS is run by a network of Employment Service senior regional managers and is delivered through local partnerships of various organisations including: Regional Development Agencies; Local Learning Skills Councils; Government Offices; the Welsh Assembly and Scottish Executive. The partnership will work with the company undergoing a redundancy programme to ensure an appropriate response to the situation. This includes:

- ▶ Offering consultancy to the company;
- ▶ Analysing the effect on the local economy and co-ordinating activities to overcome barriers to re-employment; and
- ▶ Offering information and advice to those affected and developing customised training programmes, where appropriate.

The exact nature of assistance will depend on local circumstances but will include:

- ▶ Advice on the jobs available in the local labour market & guidance on other sources of help;
- ▶ access to vacancies;
- ▶ CV preparation;
- ▶ job search assistance;
- ▶ counselling, including debt counselling;
- ▶ careers advice (information, advice and guidance);
- ▶ early access to Jobcentre Plus programmes including Work Based Adults/Training for Work;
- ▶ referrals to a range of programme provision (including small business initiatives);
- ▶ benefits advice;
- ▶ higher cost training when it is linked to a job.

## Partnership at Work Fund

The government has established the Partnership at Work Fund with a budget of £5m. The Fund is set to form a key part of the government's £20m Best Practice Strategy announced at the Manufacturing Summit in December 2001.

Partnership at Work means employers, employees and their representatives work together to solve particular business problems or avoid such problems arising in the first place. Where partnership is successful, employers and employees have a mutual understanding of one another's needs and a shared goal in winning business.

In the absence of any new specific 'diversification fund' to enable military companies and their workforces to plan for the changes which would be required if a company dependent on military exports was to lose this part of their business, then the Partnership at Work Fund could support a range of activities. For example funding could be forthcoming for employees and employers to commission research into possible new products and markets.

## Role of Regional Development Agencies

Patricia Hewitt, Secretary for Trade and Industry, has stressed the importance of manufacturing, recognised the plight of the thousands of workers who are losing their jobs, and promised a summit to consider positive action. Ministers believe the DTI should be more pro-active, both in its thinking and its budget. Brian Wilson has pointed to the increase in budgets for Regional Development Agencies (RDAs) from £1.2bn to £1.7bn by 2003.

Trade unions have also called for a greater role for RDAs. The South East Regional TUC has argued for concerted support from the government and from the East of England and South East Regional Development Agencies to establish a Manufacturing Task Force. The Task Force would advise on positive strategies of support for manufacturing; help identify growth opportunities; and provide an early warning of potential threats, with trade unions as key partners in this task. The TGWU have called for the nine English Regional Development Agencies to have greater powers to aid manufacturing. However the union believes that the role of RDAs should be extended to include a requirement for companies which are considering major redundancies to inform the RDA in advance. This would enable steps to be taken to mitigate any negative impact, with powers to allow the RDA to recover any public finances granted to companies which fail to do so.

## KONVER (1993-1999)

In 1993 the European Union announced a programme, entitled KONVER, aimed at promoting the diversification of economic activities in the regions most heavily dependent on the military sector. The initiative included business development, the promotion of innovation, know-how and technology transfer. It was intended to help boost the capacity of local economies to adapt to the changing circumstances, and to help diversification in areas where the decline in the military industry had brought problems.

Specific projects developed under KONVER aimed at training and re-employment measures in the various eligible areas throughout the UK included: Extending the Skill Base; Training for Change; Open Learning; Training in Engineering;

Vocational Training; Guidance and Vocational Training for Redundant Defence Workers; Training Employed Personnel; Redundant Worker Re-Training and Re-Skilling Programme; Consultancy Skills for Redundant Managers in Defence Related Industries; New Employment Training; Employment Subsidy Scheme; Training/Retraining Defence Related Employees/Ex Employees; Vocational Training/Upskilling for Defence Support Employees; Defence Sector Skills Identification and Upgrading; Business Start-Up Training for Ex Defence Industry Workers; Redirecting Redundant Defence Related Workers; Redundancy Counselling and Upskilling Development Programme; Redundancy Training; Support Measures for the Unemployed; Routeways into Work; Winning out of Unemployment and Action Programme for Unemployed Defence Workers (*Diversification '95*).

These projects were developed in response to the perceived needs of redundant military workers, or those under the threat of redundancy, in their specific localities. European Union 'match funding' of such projects was extremely limited often ranging from around £10,000 to £70,000.

The projects developed under KONVER provide an illustration of the type of responses that can be developed at a local level with limited financial assistance.

## Defence Diversification Agency

The Defence Diversification Agency (DDA) was established in January 1999 in response to local authorities and trade unions calling for government action to offset the negative consequences of reductions in military expenditure. The DDA was established under the control of the MoD and has focused almost exclusively on technology transfer from government military research to the civil sector. However both the Green and White Papers on diversification called for the establishment of a Defence Diversification Council (DDC). This was to ensure close co-ordination of the activities of the DDA in technology transfer with those of other departments and agencies with responsibilities for industrial sponsorship and regional regeneration. Such a DDC would include representation from the Department of Trade and Industry, the Department of the Environment Transport and the Regions, the devolved administrations, Local Authorities, industry associations, trade unions, academia and other stakeholders.

Although the establishment of the Defence Diversification Council has been delayed by the government's part privatisation of DERA, a government decision to ban the export of arms could be accompanied by the establishment of the DDC in order to assist companies and local communities to manage the potential impact on jobs and businesses resulting from such a ban.

# Summary

This report has set out to:

- ▶ Provide an analysis of jobs, directly and indirectly dependent on arms exports;
- ▶ Assess the industrial nature and geographic location of such jobs;
- ▶ Assess the general employment levels of such geographic locations;
- ▶ Assess any economic development measures which may

already be in place in such areas;

- ▶ Consider whether or not ‘the market’ or existing economic development measures would be sufficient to absorb any job displacement;
- ▶ Report on a number of initiatives, including KONVER projects and Government ‘Task Forces’, which have been tried in areas that have previously experienced military-related job losses;
- ▶ Report on appropriate forms of economic development packages which may be available to assist individual workers and local economies to manage the industrial and economic impact of the loss of military exports;
- ▶ Compare and contrast the cost of such economic packages with the cost of supporting arms exports and indicate where additional funding mechanisms could be levered from;
- ▶ Propose the form of strategic activities which local authorities, economic development agencies and trade unions could instigate to plan for such measures and to manage the process of change.

## Conclusions

▷ Company closures and job losses have become an unfortunate fact of life within many key industry sectors as global markets become even more competitive. As a result of substantial job losses in military industry since 1990, it is no longer a major employer in many of its traditional localities. Only 45,000 jobs are directly dependent on arms exports, with a further 45,000 indirectly dependent. Employment dependent on military exports represents only 0.3 per cent of all employment. Unemployment is at its lowest level in 25 years and many localities with plants exporting military equipment are now experiencing tight labour markets.

More than twenty years of military job losses have resulted in companies, local communities and trade unions finding themselves becoming experts in managing major redundancy exercises. Whilst redundancy can seldom be regarded as a positive experience, there have been a number of initiatives introduced in an attempt to minimise the effects of redundancy on workers and their families.

Much of the success of initiatives aimed at managing military redundancies is attributed to military companies working in partnership with trade unions, local authorities and agencies. This multi-agency approach seems to have been successful throughout the country. It is assumed that a government policy to ban the export of arms would be accompanied by government initiatives to help companies diversify into new markets as well as a range of targeted measures to assist workers threatened with redundancy find new employment. Demands for such measures would undoubtedly be made by trade unions and those local communities most likely to be affected by a ban on arms exports.

Although workers are likely to experience short-term unemployment and hardship on losing their jobs, many are likely to find a new job albeit at a lower wage, whilst others will leave the workforce to study, retire or look after family. Only a few are likely to remain unemployed for any length of time. The task would be to ensure that military companies work in partnership with other organisations to provide the most effective, sensitive and co-ordinated approach to helping people who may lose their jobs. To date all the various stakeholders, including the major military companies, have responded positively to this challenge.

The most co-ordinated scenario would be for the government to establish a UK Task Force to address the impact on jobs and communities as a result of a ban on the export of arms. A number of such task forces have been established to manage previous military and aerospace redundancies. The aim of these was not to convince military and aerospace companies to change their position but to assist workers and their communities to diversify. With a government policy of banning the export of arms, the political ‘will’ would be there to assist workers and communities affected. Indeed the Defence Diversification Council (DDC), shelved to date, could be established in order to fulfil the government’s commitment to Defence Diversification. It could have the specific immediate role of overseeing a national strategy to assist the 45,000 workers directly affected by a ban and ensure that facilities and resources are also made available to assist those 45,000 workers and their employers dependent on military export Prime Contractors. The DDC/Task Force would seek to work with Regional Development Agencies and their Scottish, Welsh and Northern Ireland counterparts to maximise local SME creation and product and market innovation as well as ensuring the provision of appropriate training and re-training opportunities. Although such initiatives have been successful in achieving 90 per cent plus resettlement this still leaves around 10 per cent of redundant workers facing severe hardship. This may well be higher in those communities, such as Yeovil and Brough, which are likely to be the most severely affected by an arms export ban.

Specific programmes may need to be considered, such as the short-term training and employment subsidy programme to encourage employers to recruit and re-train redundant military workers six months after redundancy, as proposed by the Clyde Shipyard Task Force. Whilst such programmes would require additional funding, the one-off £3,350 maximum cost of a £2,600 wage subsidy and a £750 training allowance is much less than the £8,500 estimated annual cost of subsidising each military export job and could be considered as an investment worth making.

As the government has said, *“We should not seek to hold back the forces of change, but to enable industry, and all those working or aspiring to work in it, to adapt to change and exploit new opportunities.”*

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# References

- Arms Conversion Project, *Diversification '95*, Glasgow, 1995.
- Beatty, Fothergill, Gore and Herrington, *The Real Level of Unemployment*, Centre for Economic and Social Research, Sheffield Hallam University, 1997.
- Braddon and Dowdall, *The Closure of Matra Marconi Space Bristol*, University of the West of England, Bristol, May 1998.
- Braddon, Cullen, Dowdall and Kendry, *The Impact of Reduced Military Expenditure on the Economy of South West England*, The Research Unit in Defence Economics, Bristol Polytechnic, Bristol, 1991.
- CAAT, *Shelling Out: How Taxpayers Subsidise the Arms Trade*, London, 2002.
- Derbyshire County Council, *Impact of Rolls Royce Job Losses in Derbyshire 1993*, Derbyshire, 1993.
- Department of Trade and Industry, *Opportunity For All in a World of Change: Manufacturing*, <http://www.dti.gov.uk/manufacturing/currentmanufacturing.htm>
- Donnelly and Scolarios, *Workers' Experiences of Redundancy: Evidence from Scottish Defence-dependent Companies*. Personnel Review. Vol 27 No 4, 1998, pp 325-342.
- EDAW, *Defence and the Wiltshire Economy*, Wiltshire County Council, 1996.
- Fife Adult Guidance Service, *Konver Redundant Defence Workers Evaluation*, Fife, 1996.
- Fife Regional Council, *Career Change Guidance Service – Evaluation Report*, Fife, 1993.
- Finch, J. H., *The Re-employment Experiences of Former Aerospace Employees Within a Local Economy*, Regional Studies, Vol 32.5, 1998, pp 421-433.
- Fraser of Allander Institute, *The Local Impact of the Rolls-Royce Closure*, Report prepared for East Kilbride District Council, Glasgow, 1995.
- Goudie, A., *Building for the Long Term: Understanding the Impact of the Terrorist Attacks on the Scottish Economy*, Scottish Executive, Edinburgh, 2001.
- Goudie, I., *Redundant Defence Workers' Survey*, report commissioned by Strathclyde Defence Industries Working Group, Glasgow, 1996.
- Goudie, I., *Defence and Regional Conversion: the UK Case and the Particular Scottish Situation*, In Jauhainen et al, *Post-Cold War Conversion in Europe: Defence Restructuring in the 1990s and the Regional Dimension*, Les Rapports du GRIP, 99/3, Brussels, 1999.
- Goudie, I., *Defence Suppliers in a Hampshire*, Hampshire Defence Diversification Project, Hants, 1999.
- Gripaios P. and Gripaios R., *An Analysis of Post Redundancy Experience of Ex-Devonport Workers*, South West Economic Research Centre, Plymouth Business School, 1992.
- Gripaios P. and Gripaios R., *The Impact of Defence Cuts: The Case of Redundancy in Plymouth*, Geography, No 342, Vol 79 (1), 1994, pp 32-41.
- Hampshire Economic Partnership, *Regeneration Strategy for the Defence Industry in Hampshire – Bid for Konver II Funding*, Hants, 1996.
- Hartley and Hooper, *The Economic Consequences of the UK Government's Decision on the Hercules Replacement*, Centre of Defence Economics, University of York, York, 1993.
- Hartley and Newman (Eds), *Defence, Research & Development and Diversification*, South East Economic Development Strategy, Essex, 1996.
- Hooper, Butler, Hartley, Braddon and Dowdall, *Defence Industry Redundancies in the South West Region*, University of York, 1996.
- House of Commons Scottish Affairs Committee, *Employment and Shipbuilding on the Clyde*, Fifth Report of Session 2001-02, HC 865, London, July 2002.
- Ingram and Davis, *The Subsidy Trap – British Government Financial Support for Arms Exports and the Defence Industry*, Oxford Research Group and Saferworld, Oxford, 2001.
- Kendry, Duffield and Butler, *The Economic and Industrial Importance of the Airbus Partnership*, Centre for Social and Economic Research, University of the West of England, Bristol, 1995.
- Ministry of Defence, *Defence Diversification: Getting The Most Out Of Defence Technology*. Cm 3861, The Stationery Office, London, 1998.
- Moore and O'Neill, *The Impact of Redundancies on Local Labour Markets and the Post Redundancy Experience*, DfEE, HMSO, London, 1996.
- Morgan, *Defence Employment 1994-95*, Research Paper 96/92, House of Commons Library, 1996.
- Saunders N. C., *Employment Effects of the Rise and Fall in Defense Spending*, Monthly Labor Review, Vol 116, No 4, April 1993, pp 3-10.
- Sefarti, *The Aerospace Industry: a Case for European Integration?* In Sefarti, Brzoska, Hagelin, Goudie, Skoens, Smit and Weidacher, *The Restructuring of the European Defence Industry: Dynamics of Change*, European Commission COST action 10, Luxembourg, 2001.
- Scottish Executive, *Realising the Full Potential of Prestwick*, The Preliminary Report of the Prestwick Task Force, Edinburgh, 1997.
- Smit, De Peranos, Kulve, Hagelin and Goudie, *Naval Shipbuilding in Europe*. In Elsner (Ed), *International Restructuring and Conversion of the Arms Industries and the Military Sector*, Munster: Lit, 2001.
- Stevenson, *Defence Diversification Project Report*, Hampshire TEC and Business Link Hampshire, Hants, 1999.
- Stone and Peck, *Diversification of Defence Industries at the Regional Level: a Case Study of Tyne & Wear North East England*, Newcastle Economic Research Unit, 1992.
- Taylor, T., *The Operation and Future of the Royal Ordnance factory at Blackburn*, Borough of Blackburn, 1990.
- Thomson, A., *Defense-Related Employment and Spending, 1996-2006*, Monthly Labor Review, Vol 121, No 7, July 1998, pp 14-33.
- Tomaney, Pike, Hayward, Thomas and Cornford, *A Survey of Former Swan Hunter Shipyard Workers*, University of Newcastle, 1995.
- Tomaney, Pike and Cornford, *Plant Closure and the Local Economy: the Case of Swan Hunter on Tyneside*, University of Newcastle, 1997.
- Transport and General Workers' Union, *Manufacturing Matters*, London, 2001.

## Other sources

- Input-Output Tables for the United Kingdom, Office for National Statistics, 1995
- Reply to Parliamentary Question Ref No 1279M, MoD, 22 November 2001
- Scottish Executive News Release: SE1716/2001, 18 July 2001
- TUC Press Release, *'The Proposed End of Car Production At Vauxhall Luton Threatens Personal Tragedy For Workers and Economic Disaster For the Region'*
- TUC, 12 December 2000, <http://www.tuc.org.uk/newsroom/tuc-2582-f0.cfm>
- BBC News Online: UK: Northern Ireland, 9 December 1999, [http://news.bbc.co.uk/low/english/uk/northern\\_ireland/newsid\\_557000/557108](http://news.bbc.co.uk/low/english/uk/northern_ireland/newsid_557000/557108)
- Scottish Executive, News Release: SE1716/2001, Edinburgh, 18 July 2001
- Labour Market Trends, Vol 109/No 11, ISSN 1361-4819, The Stationery Office, November 2001
- Labour Market Trends, Vol 109/No 12, ISSN 1361-4819, The Stationery Office, December 2001
- Western Daily Press, Bristol, 24 December 2001
- Evening Post, Bristol, 21 December 2001
- Evening Post, Bristol, 6 December 2001
- Evening Post, Bristol, 17 December 2001
- Financial Times, 5 July 2001
- <http://www.theherald.co.uk/news/archive/23-12-1998-0-2-58.html>
- <http://www.observer.co.uk/business/story/0%2C6903%2C564445%2C00.html>
- <http://www.employmentservice.gov.uk/English/jobseekers/jts.aso>
- <http://www.employmentservice.gov.uk/English/Local?Northern?nornews1.asp>
- <http://www.businessam.co.uk>
- [http://www.employmentservice.gov.uk/English/local/south\\_west/plymouth.asp](http://www.employmentservice.gov.uk/English/local/south_west/plymouth.asp)
- <http://www.scottishlabour.org.uk/pressrel/pr2002224122141.html>
- <http://www.thisisderbyshire.co.uk/displayNode.jsp?nodeId=64361&command=displayContent&sourceNode=63913&contentPK=1119756>

Campaign Against Arms Trade (CAAT)  
11 Goodwin Street, London N4 3HQ

tel: 020 7281 0297  
fax: 020 7281 4369

email: [enquiries@caat.demon.co.uk](mailto:enquiries@caat.demon.co.uk)  
web: [www.caat.org.uk](http://www.caat.org.uk)

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