The Arms Industry

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Executive Summary

To understand the trade in the instruments of death and destruction it is necessary to be familiar with the arrangements for their production, both in the United Kingdom and in the world at large. These have been undergoing profound changes, the implications of which this paper tries to explore.

In the first place the main organisations involved have become fewer and larger, partly because the global market shrank somewhat after the end of the Cold War, but even more because the escalating costs of research and development exclude all but companies with access to vast amounts of capital. This does not mean that small and medium arms producers have ceased to exist. On the contrary the big companies are tending to withdraw from manufacture in order to concentrate on the design and integration of electronic systems, so that there is increasing scope for suppliers of components and subsystems. But control of the industry, especially in the key domains of aircraft and military electronics, has passed into the hands of a very few organisations.

These are now overwhelmingly private. As in other spheres, governments have been withdrawing everywhere from the ownership and financing of industry. As a result, arms companies are no longer workshops for national armed forces but corporations driven by market imperatives. The market, moreover, is a global one, and the big companies seek to transcend their national origins and to manoeuvre for survival and supremacy in a global arena, seeking to make themselves still larger and reap the economies of scale by purchase or merger or, failing these, by joint ventures, alliances and partnerships. Few major weapons 'systems' are now produced on a purely national basis. Even the giant US companies, Boeing, Lockheed Martin and Raytheon involve other countries in production, partly for reasons of economy and partly to secure access to their markets.

And yet the industry remains inescapably a political one. Its only customers are governments, and no company can pull off a major international arms deal without the diplomatic support of its 'own' government. This is always forthcoming, because governments still regard flourishing arms industries as essential to national security and status. So the ambitions of profit-seeking companies are enmeshed with questions of high political strategy. Should

allies be sought across the Channel or across the Atlantic? What is the object of European integration – to set up a rival to the United States or a partner in its global hegemony?

UK governments and arms companies have sought to avoid these choices and have steered a wavering course between them. In 1998, as part of its drive to be 'at the heart of Europe', the present government was pushing for the integration of European arms production. The two dominant UK companies, GEC and British Aerospace (BAe), were urged to seek European partners, GEC with the French company Thomson-CSF (now re-branded as 'Thales') and BAe (now BAE Systems) with the French Aérospatiale Matra and the German DASA. In the event, however, BAe chose to integrate the UK industry by buying the military branch of GEC, which virtually dropped out of arms production. The French and Germans retorted by forming a 'European Aerospace and Defence Systems, Inc (EADS)' which included the Spanish and eventually the Italian aircraft industry, but not the British. BAe, however, had acquired a 35 per cent stake in the important Swedish company SAAB and has many links with the component parts of EADS, such as the missile producer Matra BAe Dynamics, a joint venture with the French company Lagardère.

To BAE Systems, however, integration with Europe is desirable but integration with the US is the supreme objective. The US government is overwhelmingly the largest customer for arms, and its purchases are set to increase as it seeks to protect its military and economic supremacy. BAE Systems (as well as the engine-maker Rolls-Royce) therefore seeks access to this market, and beyond that it aspires to become a major US company. This is economically feasible because it has the cash resulting from the hugely lucrative deals with Saudi Arabia, while the US companies, especially Lockheed, are financially weak. It is politically feasible because the 'special relationship' gives it a privileged position denied to other foreigners. The Pentagon rules which protect technological secrecy have been relaxed in its favour, and it currently supplies more to US than UK armed forces. It has established close links with Boeing and has been allowed to buy a chunk of Lockheed, thus becoming the world's largest producer of weaponry. And it has secured for the UK a 15 per cent share of the huge US Joint Strike Fighter project, although if this goes ahead – which is not certain – it will on the face of it be a blow to the prospects of the Eurofighter.

However, BAE Systems' larger ambition, merger with Boeing or Lockheed,

has been ruled out by the US government. And early in 2000 the UK government took several steps to encourage it to seek a European future. It lent it £500m to help it build wings for the projected European super-jumbo. It turned to the Airbus Company, not Boeing, for its new military air transports and to Matra BAe, not Raytheon, for the armament of its Eurofighters. The plan for a Rapid Reaction Force is a step towards European military integration, and a Framework Agreement signed in July 2000 was likewise a step towards the integration of the European arms industry at the political level. It was designed to reduce barriers to the movement of weapons, bits of weapons and technology between the leading European arms producers, and also to limit competition in external markets.

In spite of a great increase in transfers between NATO allies, export markets to other countries remain crucial to the prosperity of the arms industry. As things are, every major weapons project, whether national or collaborative, needs external sales to make it viable. Western arms companies will therefore continue to exploit tensions in the Middle East, in the Asia-Pacific region and wherever they can find them. (Although the companies compete fiercely against one another, they have an underlying common interest in the maintenance of conflict.) In addition, they increasingly target countries with struggling arms industries of their own, such as South Africa and the east European countries which have joined NATO or seek to join it. Purchases of Western arms are rewarded by apparently generous 'offset' payments that have the effect of bringing the local industries into the Western orbit, both through 'counter-purchases' of components and through 'industrial participation', which makes the vendor company their effective owner. The arms trade has thus become a way of enabling companies such as BAE Systems to control sources of cheaper labour. It can in fact be seen as a new form of colonial expansion.

In theory, the arms industry could be divorced from the arms trade. Production could be directed solely towards meeting the military requirements of the UK, or of Europe, or of the NATO alliance. It has always been argued that the unit cost of weapons, and so the cost to the taxpayer, would inevitably rise. However, this ignores export subsidies which are likely to more than balance the extra costs to the exchequer. In any case, people might think it worth paying some premium in order to opt out of a disreputable traffic.

The reasons why this particular activity receives state patronage are both economic and strategic. The industry is thought to be a valuable source of

employment, and to be essential to national military security and prestige.

The costs and benefits to the British people of arms production and export need separate study. But it can be pointed out that jobs are worth while only if they provide socially useful goods; that if near-full employment is sustained, jobs lost in one sector can be recouped in others; and that in any case many arms-industry jobs are likely to be exported to less expensive countries. The strategic and political case for the industry is equally weak. The UK faces no military threat, and there are better reasons for national pride than the possession of a 'globally competitive arms industry'.

Other questions need to be posed about the UK arms industry. Can BAE Systems become a global corporation and still claim to be British? If it is responsible only to its cosmopolitan shareholders, why should it expect, as it does, to receive privileged treatment from the UK government in the award of domestic contracts and political backing in its overseas dealings?

THE ARMS INDUSTRY

The arms trade is a product of the arms industry and cannot be understood apart from it. The arms industry is both a collection of business enterprises and an instrument of national military security and power. In recent years, however, its role and self-image have been undergoing drastic change. Arms producers seek to be 'normal' businesses, serving their mainly corporate shareholders rather than governments, and the larger ones chafe at national borders. At the same time, given the nature of the product, shareholder value cannot be wholly detached from questions of high political and industrial strategy. Politicians as well as businessmen increasingly find it impossible to confine their aspirations within the arena of the nation-state, and the arms companies, which by the nature of their business have close relations with governments, have to take account not only of existing states but also of emergent entities such as the European super-power or US global hegemony, otherwise known as the New World Order. It remains to be seen whether they will commit themselves to a European or a transatlantic future, or whether, like the UK government, they will try to straddle the two power-systems. The choices they make will both influence and be influenced by those of our political leaders.

The task of anti-arms-trade campaigners has thus become very much more complicated. The simple concept of an arms company disappears into a labyrinth of licensed production, joint ventures, conglomerates, strategic partnerships, and Co-operative Armament Programmes. The concept of arms trade becomes equally elusive. When weapons 'systems' may be designed in one country, manufactured piecemeal in several others and sold both to the collaborating states and to others, what is an export and who is the exporter? Indeed, what are arms, when a harmless Landrover may be sold or licensed to a semi-respectable government and turn up later, equipped with armour, radio and machine-guns, in the service of a distinctly disreputable one? This paper tries to sort out some of the complexities of this new regime for the production and distribution of the instruments of death.

This is a dismal subject, which has not been enjoyable to study and is not likely to be enjoyable to read about. But it is one that cannot be avoided.

National Champions

Not long ago, arms manufacturers, whether publicly or privately owned, were little more than workshops for national armed forces. Governments decided their needs for military equipment and awarded contracts to domestic suppliers, often on the basis of costs incurred plus an agreed profit. Most of the research on new weapons and some of the development was carried out in government establishments. Companies were encouraged to sell part of the product abroad, so as to lengthen the production line and thus cut the cost to the main customer, while contributing to the balance of payments and in some cases serving political and strategic purposes; but it was assumed that such sales would be to countries with little industrial capacity of their own, and there was not much prospect of breaking into the domestic markets of other national producers, even if they were allies. At most there would be joint ventures such as the Anglo-French Jaguar strike plane of the 1970s or the Anglo-German-Italian Tornado of the 1980s. But these were difficult to negotiate and carry out, and a number of similar projects fell through or were stalled for decades.

Two forces have combined to alter this simplicity. First, there is the competitive progress of technology and the consequent escalating cost of research and manufacture. (A Eurofighter bears about as much relation to a Spitfire as a computer does to an abacus.) Second, of course, is the end of the Cold War. Global military expenditure fell by a third in real terms between 1987 and 1997. The fall, however, was steepest in the former Soviet Union, and NATO countries' spending declined by only 22 per cent in the same period - much less than might have been expected to follow such a profound change in international relations, but still a substantial setback for the arms industries concerned. Governments now became more cost-conscious, as weapons became more and more expensive and security needs appeared less urgent. Contracts were tightened up, and research costs were increasingly diverted to the companies. It was thus necessary for them to be more commercially-minded, to search more desperately for external markets, not only in the 'Third World' but also in other Western countries, which became rivals as well as allies. They were also forced to become fewer and bigger, because there was not enough work for all and because only organisations with access to vast amounts of capital could now carry the burden of developing and marketing a new

weapons 'system'. And once the process of enlargement started it was difficult to stop. For it is a well-known fact of economic life that when there are only a few big fish in the pool they tend to devour one another, though the process is usually stopped short of actual monopoly.

The tendency to greater size is, of course, not confined to arms companies. In fact, none of the present weapons-producing organisations, even in the US, is in the same league, in terms of market value, as General Electric or Microsoft or BP Amoco or Vodaphone. Lockheed Martin, the biggest predominantly arms-making company in the US, ranks only 41st in the Fortune 500 list, and BAE Systems, which overshadows the rest of the UK arms industry, is only 27th in the FTSE rankings at the time of writing, while the whole of the German aircraft industry forms about ten per cent of the Daimler Chrysler car-making empire. But arms companies are peculiar in one obvious respect. Their only customers are governments, which take a special interest in their well-being. The idea that national security requires a national armaments industry has been modified but it is by no means extinct. We therefore find the Western states actively promoting the consolidation of the arms industry, both within and across national borders, as the means of its preservation. But we also find them, for the same reason, hesitating to let market forces rule if the result would be the weakening of what they call the 'defence industrial base'.

Arms industry consolidation within the United Kingdom had already gone a long way by 1990. The Labour governments of the 1960s and 1970s favoured a corporatist approach to industry, in which government and the unions would work together with a few large companies. As a result the historic aircraft manufacturers were induced to merge in the British Aircraft Corporation (BAC), which was nationalised in 1977. The electrical engineering industry, civil and military, remained in private ownership, but the government maintained a close relationship with the General Electric Company (GEC), which had absorbed most of its competitors. BAC, now more grandly titled 'British Aerospace' (BAe) thanks to a small investment in satellites, was restored to the private sector in stages between 1981 and 1985. Shortly afterwards the Thatcher government sold it Royal Ordnance, which had supplied the British Army with guns and ammunition for some four centuries, as well as the Rover car company which had had a shorter spell in state ownership. At the time BAe was thought to have acquired national assets very cheaply, but in fact it would be truer to say that it was leaned on to take over national liabilities. The Royal Ordnance deal, however, is of interest as one of the first

examples of horizontal integration, the gathering of different kinds of arms production into a single organisation. GEC followed in the early '90s by diversifying into ordnance and shipbuilding, acquiring the Yarrow warship-building yard on the Clyde and Vickers Shipbuilding and Engineering, which made both submarines and artillery at Barrow-in-Furness. The latter purchase went through in the face of fierce competition from BAe.

In the mid-1990s there were also several specialist arms producers. The engineering excellence of Rolls-Royce enabled it to survive a financial crisis in 1971 and a subsequent spell in government ownership, and to compete with the US giants in the aero-engine business. Vickers continued to make tanks, and lighter armoured vehicles were produced by Alvis of Coventry and by the engineering combine GKN, which also supplied aircraft components and in 1994 acquired the struggling Westland helicopter business. The electronics company Racal was a leader in radio and radar; Shorts of Belfast, by then in partly Canadian ownership, supplied missiles; and the warship-builder Vosper Thorneycroft still flourished on the Solent. In addition, no fewer than 3,000 small and medium companies contributed bits and pieces. But the UK arms business, especially in the crucial domains of aircraft manufacture and military electronics, was dominated by the two great companies: BAe and GEC, the 'national champions' in their respective domains.

In Germany the same trends were apparent. The aircraft companies were first merged in the combine Messerschmidt-Blohm-Bolkow and then, as DASA, taken over by the Daimler car-maker. Another combine, Krauss-Mattei Wegmann, became dominant in the manufacture of armoured vehicles, and Rheinmetall in ordnance. In France, where Gaullist concepts of national prestige took precedence over economics, the government retained control and partial ownership of most of the arms industry, as it did in Italy and Spain. Most sectors of the French industry, however, were dominated by a single company: DCN in warships, GIAT in tanks and ordnance, Thomson-CSF in electronics. In aircraft manufacture the mainly state company Aérospatiale, prime movers of the European Airbus project, coexisted with the family firm Dassault, makers of the Mirage fighters. The private conglomerate Lagardère, whose primary interest was in the media, had a subsidiary called Matra which specialised in the rapidly growing area of guided missiles.

In the United States, there was no question of state ownership but consolidation was actively promoted by the government in the early '90s,

using the stick of withheld contracts and the carrot of subsidies - 'payoffs for layoffs'. As a result there was a spate of mergers and take-overs, which led to the disappearance of historic names such as Hughes and McDonnell Douglas and left four dominant companies: Boeing, primarily a maker of civil airliners though also important in the warplane business; the specialist warplane producer Lockheed Martin; the electronics specialist Raytheon; and Northrop Grumman, heir of two famous plane-makers. At this point, however, the government cried halt, vetoing Lockheed's plans to absorb Northrop Grumman, smallest of the big four but maker of America's most fearsome weapon, the B2 'stealth' bomber. There is a strong anti-monopoly tradition in the US which hardly exists in the UK, but there is also a dilemma for all governments with modern armed forces: on the one hand they want 'their' companies to be large, so that they may be efficient and profitable, not requiring subsidy; on the other, they fear being held over a barrel by sole suppliers able to dictate the price of their product. It was partly in order to modify such dependence that they began to move towards the idea of a trans-national arms market. And meanwhile the big companies were eyeing their counterparts in other countries and wondering whether they could not become still bigger by co-operating with them or absorbing them. Mergers are in one sense a sign of weakness, of inability to survive in isolation; but they are also powered by vigour and ambition. For corporate executives, size and market share are ends in themselves, since their own status, power and income depend on them as much as on profit. Thus they often talk of 'growing' their company.

At the Heart of Europe?

Trans-national consolidation has been driven by both commercial and political motives; and UK companies as well as UK governments have been confronted with a difficult choice. Should partners be sought in Europe or across the Atlantic? Was it the European or the global arms industry that should be consolidated? If European unity was to be pursued, was that an end in itself or a step towards wider integration? In these matters, industrial logic and political ambitions were intertwined. The Anglo-French alliance that led to the Suez adventure in 1956 also produced the Jaguar strike plane, as well as Concorde. But General de Gaulle killed that alliance in the early '60s by demanding that Britain should give up its special relationship with the US as a condition of admission to the new Europe; and the effects were felt at once in the military-industrial sphere. Both Britain and France were trying to develop their own ballistic missiles. France persevered and eventually produced its nuclear *force de frappe*. But after the failure of the Blue Streak missile Britain gave up this endeavour and bought Polaris from the US, thus ending the truly independent nuclear deterrent.

In conventional weaponry the UK preserved substantial independence for a while longer. But in 1985 the choice between Europe and the US was posed in a stark form by the famous quarrel between Mrs Thatcher and her Defence Secretary, Michael Heseltine, over the future of the Westland helicopter company. Westland was clearly too small to survive on its own, but the Ministry of Defence was anxious that it should not disappear, leaving it without a domestic source of helicopters. Two schemes were proposed for its salvation. It could join the Franco-German collaborative project which became Eurocopter, or it could put itself under the wing of the US company Sikorsky. The Prime Minister preferred the US option, Heseltine the European. Mrs Thatcher naturally won, but their disagreement was the start of the feud over Europe which would distract the Conservative Party for over a decade.

European integration has two related aspects: the formation of European arms companies and the creation of a common programme of military procurement, and both are full of difficulties. Just as monetary union implies a common economic policy, so common procurement is hard to envisage without a common military and political strategy, which is often proclaimed as desirable

but in practice runs up against differences of national interest and ideas of national sovereignty. Thus plans for a truly 'European' warplane were hamstrung when France declined to take part. There were technical and strategic disagreements, but the main factor was the French fear that its aircraft industry, technically excellent but economically inefficient and usually loss-making, would come off worst in a collaborative venture. The UK, Germany and Italy went ahead, first with the Tornado and then, reinforced by Spain, with its successor the Eurofighter or Typhoon. France appeared to be justified by the results: the Tornado found no external customer with the admittedly large exception of Saudi Arabia, whereas French Mirages were sold around the world. However, the Eurofighter's French rival, the Rafale, has yet to be sold to anyone but the French Air Force.

In spheres other than that of aircraft, collaboration was even more hesitant and limited. The Trigat anti-tank missile, planned in the 1980s, has still not materialised and will probably be abandoned as obsolete and redundant, having been intended for battle on the north European plain (JDW, 12.07.00). The Horizon common frigate project has been whittled down to a total of four ships for France and Italy, the UK having decided to go its own way. Ideas for a European tank have got nowhere: the UK's Challenger 2, France's Leclerc and Germany's Leopard equip their own countries' armoured forces without competition and fight one another for export markets, and Europe still has no fewer than 15 independent makers of light armoured vehicles. Recent ambitious plans for a European mobile reconnaissance armoured vehicle or 'battlefield taxi' are limited to orders from the UK, Germany and possibly the Netherlands, France having backed out. In helicopters rather more progress has been made. The Franco-German Eurocopter company has had some success with Cougars and high hopes for its Tiger gunships, and has coopted Agusta of Italy and Fokker of the Netherlands to make the NH90 series of tactical and naval helicopters.

During most of the '90s advances towards structural integration of the arms industry were even more crablike. There was, it was said, 'much chatter and few firm deals' (Financial Times, 30.8.96). Co-operation was achieved by a bewildering network of joint ventures, 'strategic partnerships' and exchange of shares, all stopping short of merger. Thus GEC worked with Thomson-CSF of France on sonar and military optronics, and also had an association with Alenia, a subsidiary of the Italian state arms company Finmeccanica. GKN Westland was likewise in partnership with Agusta of Italy, which was simultaneously linked to Eurocopter. The Tornado was designed and built

by a consortium called Panavia, comprising BAe, DASA and Finmeccanica. In 1996 British Aerospace and the French company Lagardère created a joint subsidiary called Matra BAe Dynamics to create a guided-missile organisation that could rival Lockheed and Raytheon. BAe contributed a short-range air-to-air missile, Matra a medium-range one, and the deal was cemented by a UK government order for cruise missiles (Financial Times, 14.5.96).

Over the years, in fact, a mind-boggling web of relationships has developed, so that it is possible to speak of an international arms complex. For example, the Italian company Aeromacchi is currently working with Russian industry to develop a specialised trainer for Eurofighter pilots. Some crucial equipment for these planes is to be provided by the UK firm Dowty, now a part of Smiths Industries, in collaboration with a BAES subsidiary based in California and with Teleavio, which is a joint venture of the Italian combine Finmeccanica and the UK's Marconi (JDI, January 2001).

In all these arrangements the independence of the parent companies was untouched. Even in civil aircraft manufacture the successful Airbus Industrie was not a true corporate entity but only a peculiarly French device called a groupement d'interet economique. Such arrangements were felt to be cumbrous and costly, especially by the British companies, which disliked the French insistence on *juste retour*, the principle that work-share should be proportionate to investment. They wanted a more radical kind of integration, so as to make maximum use of the edge that their leaner structures and more commercial ethos would give them. British politicians wanted this too, and so did Continental European politicians, but for different reasons, which reflected different ideas of what 'Europe' was for. French Gaullists looked to a French-led Europe as a power that could challenge the hegemony of the United States. As one spokesman put it in the immediate aftermath of the Cold War, 'the Europe of tomorrow will at last be liberated from the tutelage of the US whose decline has already begun ... There will be no place for the subtle, complicated and dangerous game of alliance of opportunities in which Britain has excelled in the past.' (DAH 100, Nov.1990). Ten years later, public Anglo-French differences over the role of the proposed European Rapid Reaction Force showed that this argument has not gone away (see the Guardian 7.12.00).

In industrial terms, it was hoped not only to achieve European military self-sufficiency but also to achieve the critical mass which would enable Europeans to compete with the US in third markets. Not only US but also UK leaders

rejected this programme, which they derided as 'Fortress Europe', and a UK government Minister, Baroness Symons, has recently re-affirmed 'absolute opposition' to it. As in financial and political matters, the UK wants European integration, but on its own terms: European arms companies, she insisted, should follow the UK example and 'shed over-capacity and end duplication'. They would then be able to compete with the US, but not in an antagonistic spirit. 'A consolidated and globally competitive European defence industry ... as part of a global defence equipment market, is integral to the UK vision' (RUSI Journal, June 2000). This is in harmony with the broader political objective: Europe as a partner with the US in the New World Order, and the UK as the indispensable bridge between the two power-systems. The big UK arms companies likewise wanted greater size and industrial power, not in order to defeat the US giants but to join them on favourable terms; and their government appeared to give the green light to their ambitions. In March 1998 Margaret Beckett, then in charge of the Department of Trade and Industry, accepted that 'consolidation will not stop at Europe's borders; some companies have found transatlantic alliances to be more important than European ones, and we are not seeking to overturn such choices.' The Germans took an intermediate position; the French alliance remained the sheet-anchor of their policy but they did not want to use it in an anti-American sense. And Daimler, owners of the German aircraft industry, put transatlantic ideals into practice by buying the Chrysler car company in 1998.

In spite of these tensions, agreement appeared to have been reached between the new leaders of Europe, Tony Blair, Gerhardt Schröder and Lionel Jospin, in 1998. In a Letter of Intent dated 6 July they promised to advance towards common procurement policies, using a new organisation called OCCAR, and they virtually ordered the leading arms companies in each country to unite in a single 'Euroco'. To make things easier, the French government carried out a measure of privatisation. The private company Lagardère was induced to merge its military arm, Matra, with Aérospatiale, in which it became a major shareholder and the moving force, and that now largely private corporation also took over the government's minority holding in Dassault. The upshot was that in both aircraft companies private interests predominated. This did not satisfy British Aerospace, which feared that the French government's continuing stake would prevent the application of pure commercial principles in any merger. So it entered into negotiations with Germany, hoping that Paris would have to give way in the end. But it was not entirely happy with DASA either, since it was a Daimler subsidiary, not an independent company of which they could be in effective control. For their

part, the Germans were reportedly upset by the dominance of 'shareholder value' concerns in the UK (JDW, 3.2.99). So in November 1998 BAe shocked Europe by dropping its courtship of DASA and announcing instead the purchase of Marconi Electronic Systems, the military arm of its UK rival, GEC, for £7bn. The future of GEC had been 'subject to intense political pressure from both sides of the pro- and anti-European spectrum' (JDW, 6.1.99) The general expectation had been that it would unite its military interests with those of Thomson-CSF. In other words there would be vertical integration across Europe, with one company for aircraft and another for electronics. This would probably have provided the best industrial and political logic (Observer, 3.1.99). Instead there was a massive horizontal integration, combining most of the UK's arms production in a single company. At one level the explanation was simple. Thomson, an expanding company that was currently struggling to keep out of the red, could not match the offer from BAe, which was flush with the income from its sales to Saudi Arabia. But it also seems that the new boss of GEC, Lord Simpson, saw his company's future in telecoms and the like rather than in the uncertain business of arms production. The markets initially appeared to agree; after the merger the share price of Marconi, as the residual, mostly civil, GEC was now called, rose sharply, while that of BAe has lost about a third of its value. Recently, however, Marconi too has lost the good opinion of the City.

Though both parties have denied this, there is little doubt that BAe's decision was very unwelcome to the Prime Minister, who described the outcome as 'too British' (Flight International, 27.1.99). Not only did it conflict with his European project, but it raised the spectre of a sole supplier able to dictate the price of UK military equipment. New BAe, re-christened 'BAE Systems' (pronounced 'base'), owned most of what was left of the UK shipbuilding and ordnance industries. (Its newly acquired shipyards actually lose money, and it is thought that it was made to keep this industry going as a condition of government approval for the merger. JDI, November 2000.) More usefully, it was now dominant in military electronics, having acquired parts of Siemens Plessey and Sema as well as Marconi Electronic Systems. In fact it was reckoned to be able to supply 70 per cent of all the UK's military equipment. To counter this near-monopoly, the government encouraged Thomson-CSF of France to increase its already substantial stake in the UK arms industry, acquiring the missile business of Belfast-based Shorts and the electronics company Racal (JDI, February 2000), and bidding against BAES for the role of prime contractor for the UK's two new aircraft carriers. This French company, which has the former UK defence minister Lord Freeman on its

board, and which, incidentally, makes the safety system TPWS favoured on UK railways, has become the second largest arms manufacturer in the UK and the third in Europe. Like BAE Systems, it has recently re-branded itself, appropriating the name of the ancient Greek proto-scientist Thales.

Europe Alone?

The leaders of BAES were (and probably still are) confident that their French and German rivals would have to swallow their wrath and come to terms in the not distant future. The immediate reaction, however, was to close ranks against the perfidious British. In October 1999 there was announced the formation of 'European Aeronautics Defence and Space Co.' (EADS Inc), pooling the resources of DASA and Aérospatiale Matra. Shortly afterwards they were joined by the state-owned Spanish aircraft company CASA. These moves took everyone by surprise. It had been thought that the French and German organisations were too far apart in ethos and structure to come together. And indeed it has been remarked (in London) that EADS is 'a very unusual creature indeed' (Financial Times, 7.7.00). It has a complicated structure which gives 30 per cent of the shares to Daimler Chrysler, 15 per cent to Lagardère, 14.5 per cent to the French government, 5.5 per cent to the Spanish government and 6 per cent to other French institutions, while 34 per cent have been floated on the market. It has French and German co-chairmen and chief executives. It is an arms and aerospace company which is in effect an alliance between a German car-maker (Daimler Chrysler) and a French media group (Lagardère); a commercial company in which the French and Spanish governments retain a substantial stake; a continental organisation whose name and operating language are English. What is more, the French are thought to have secured a guarantee against factory closures, so that few economies are likely to result. The company will have to achieve a delicate balancing act, preserving national capabilities while returning shareholder value (JDW, 24.3.00). In 1998 BAe achieved a profit margin of 10.6 per cent, the components of EADS only 5.6 per cent. The markets confirmed an unfavourable view: when shares were offered to the public they immediately fell below the flotation price (Independent, 11.7.00); and in the first half-year of 2000 the new company made a loss of over Eu200m, mainly because of currency problems.

There ensued a fierce struggle over the rest of Europe's arms industry. EADS defeated BAES not only in Spain but also in Italy, where it struck a deal with Alenia Aeronautica. Since this was part of a state combine, the arrangement was a joint venture rather than a full merger - and to UK observers it 'reeked

to come. The French are now floating the idea of a 'naval airbus', combining the resources of France, Germany and Italy to build the fifty new frigates their navies plan to acquire in the period 2008-20, and combined ordnance and tank companies have also been mooted (JDW, 25.10.00, 8.11.00).

On the face of it, the European arms industry has now divided into two rival groups: on the one side, the core countries of the European Union, on the other the UK plus Sweden; BAES has consolidated a long-standing partnership by taking a 35 per cent stake in SAAB, combining Swedish technology with British marketing skills. Appearances, however, are somewhat deceptive. For one thing, there is still a web of partnerships and joint ventures cutting across the divide, such as Matra BAe Dynamics and the Italian links of GEC, now taken over by BAES, not to mention the Airbus enterprise, of which 20 per cent is now owned by BAES and 80 per cent by EADS. BAES, Aérospatiale Matra and DASA have pooled their space activities in a new company called Astrium (Times, 19.10.99). Altogether, it is estimated that 70 per cent of EADS's business is in joint ventures with BAES (Flight International, 23.5.00). Another loose end is Dassault, which has stayed out of EADS although 43 per cent of its shares are held by Aérospatiale Matra, with the odd result that EADS has an interest in promoting both the Eurofighter and its rival the Rafale. And Dassault has for some years been working with BAES on plans for the next-generation 'Future Offensive Air System', while Rolls-Royce has a joint venture with the French company Snecma to develop its engines. EADS, from which 'Thales' has so far stayed aloof, is weak in electronics, and is thus dependent on its UK connections.

A good example of the complexities of arms-industry politics is provided by helicopters. In the 1980s, anxious to contest the supremacy of US manufacturers, the French government persuaded the Germans to launch an enterprise called Eurocopter .This was the organisation that Michael Heseltine wanted Westland to join in 1985. Instead, the UK company was saved by a deal which allowed it to assemble the US company Sikorsky's Black Hawks, while ownership later passed to the UK engineering company GKN. It has also established a partnership with the Italian company Agusta. This has been described as 'the most significant pro-European move by a UK company for some time' (JDW, 10.3.99), but that appears to be a misunderstanding. An Italian link was part of the package favoured by Mrs Thatcher in 1985, and the long-projected alliance has been strongly opposed by France (Flight International, 22-28.2.98). The upshot is that Westland makes its own series of Lynx helicopters for the Royal Navy and for export. It has a share in the

manufacture of the Boeing Apache gunships which have been ordered in large numbers by the RAF. And with Agusta it is developing EH101s for the UK and Italian navies. Yet Agusta also works with EADS on the NH90 series and now, with the rest of the Italian arms industry, appears to be passing into the EADS orbit (JDW, 12.7.00). Helicopters, of course, have civil uses; but Westland's output is entirely military (Financial Times, 17.4.98).

In spite of these confusing details, the outlines of the big picture are very clear. There are now four global aerospace organisations, two European and two based in the US. In terms of projected sales in 2000 Boeing is far ahead of the 59 4
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The Special Relationship?

There is no doubt, however, that the ambitions of BAES will not be satisfied within Europe. Its chief executive was explicit that the Marconi merger was a preliminary to 'transatlantic globalisation' (JDW, 3.3.99). Like other former state corporations - British Petroleum, British Airways, British Telecommunications - it hopes to use a commanding position within the UK as a platform from which to climb on to the world stage. Like them, it has deliberately reduced the word 'British' in its title to a mere initial B so as to disguise its national base, and it has made no secret of its aspiration to be one of the two or three large aerospace and arms companies that it expects to remain in the world in a few years' time. Merger with EADS being ruled out for the time being, this means that it hopes to merge on at least equal terms with one of the US giants, probably Boeing, with which it already has close links (Financial Times, 14.1.00). GEC had also been tempted by the idea of an American merger, with Lockheed or Northrop, but had decided that it had insufficient mass to avoid being swallowed. This was even more true for BAe before the merger; only a united UK industry could look the US giants in the eye.

Even so the transatlantic ambitions of BAES were, on the face of it, remarkable for a company based in a country with a far smaller domestic market and a far weaker industrial and technological base than the United States. It is not even as though its products are of exceptional quality. Its two successes in recent decades have been the sea-borne Harrier and the Hawk advanced trainer and ground-attack fighter. Both are versatile niche planes, for which the US had no direct equivalent (in fact the Harrier has been manufactured by Boeing under licence), and both date from the 1970s or even earlier; Harrier production in the UK has ceased, and many Hawk workers have been laid off for lack of orders (Flight International, 20.6.00). The Tornado multi-role fighter, developed in collaboration with Germany and Italy, has had very limited operational success and has been sold to no other country except Saudi Arabia; it too has ceased to be produced. Lockheed, by contrast, has sold 4,000 of its F-16s to twenty countries, and updated versions still dominate the world market. By contrast the Tornado's successor, the Eurofighter or Typhoon, has yet to prove itself internationally; and BAES's short-term hopes rest mainly on the Swedish-designed Gripen, the first 'fourth-

generation' fighter to go into production, which it is marketing for SAAB. Again there are as yet no confirmed orders except from the Swedish Air Force (whose first two planes have crashed) and from South Africa. The company's strong financial position, which enables it to think of buying into the US, is almost entirely due to the very lucrative Al Yamamah deals which it negotiated, with high-level ministerial assistance, in 1985, 1988 and 1993 with the princes of Saudi Arabia (See the CAAT publication, *The Arabian Connection*, 2000). Sir Dick Evans, the main architect of the present company, is a salesman and diplomat, and the company's main asset is its remarkable talent for the manipulation of governments, its own and others.

BAES's aspirations need to be put in their economic and political context. The US runs an enormous trade deficit; that is to say, it borrows vast sums of money from the rest of the world, which is glad to invest its capital in an economy with apparently limitless prospects. Japanese and other thrifty East Asians tend to put their savings into US bonds, but European capitalists generally prefer to invest directly in US businesses. BP's purchase of the US oil companies Amoco and Arco and Daimler's acquisition of Chrysler are just the most spectacular examples of this trend. The possibility that BAES might make a partial or even total purchase of Boeing or Lockheed is thus not quite as outlandish as it might appear; Lockheed's shares in particular have been very cheap of late, as have Raytheon's, though they have now begun to pick up. And the incentive to seek such purchases is very strong.

The salient feature of the arms industry scene is the increasing dominance of the United States, not only as producer but even more as consumer. Military expenditure in the US in 1999 was almost double the combined total of the European NATO states: $292bn against $149bn. In arms procurement the gap was less: $49bn against $29bn; but very significantly the US spent four times as much on research and development as its European partners: $37bn against $9bn, so that its already long lead in military technology can be expected to lengthen further. Moreover, while military budgets have been flat or declining in most European countries the US budget has bottomed out and has begun a rise which is clearly set to accelerate, as its government seeks to guard against any conceivable threat to its global hegemony. 'We have an overwhelming advantage over any potential adversary,' said the then Defence Secretary William Cohen early in 1999. 'We like that and want to keep it.' (Financial Times, 2.2.99). More recently he told US businessmen that 'US economic power is still dependent on military strength and a strong defence industry' - or, as one expert has more bluntly put it: 'behind the

hidden hand of the market is a hidden fist' (Thomas Friedman, quoted in Foreign Policy in Focus policy report, 24 April 2000). That is to say, the world free market desired by the US will in the last resort be forced on the world by US air-power, in much the same way as nineteenth-century free trade was guarded by the Royal Navy. A Pentagon spokesman has confidently predicted that the US will be engaged in a major conflict, hot or cold, within the next ten or twenty years (JDW, 9.8.00). What is more, since Western, especially American lives are no longer expendable, high-tech equipment, which must be survivable as well as having maximum lethality, has to substitute for fighting men. (The US Army, for example, envisages a robot-operated electro-magnetic gun which would be 'a lightweight, lethal, highly deployable, self-sustaining and survivable system of systems', JDW, 26.1.00). Procurement thus takes an ever larger share of the budget total. In fiscal year 2001 it is planned to exceed $60bn for the first time in a decade, and by 2005 it should have risen to $75bn. Influential think-tanks are demanding much more than this, and Presidential candidates' promises to that effect in the summer of 2000 were greeted with applause. One commentator has even described the US armament programme as a tsunami (JIDR, January 2001).

Access to this huge and growing market, which 'makes Europe look like a backwater' (JDI, May 2000), is therefore a prime objective for BAES - and for EADS as well, since few if any European governments are likely to raise their spending enough to sustain a purely European industry (Financial Times, 9.6.00). But the obstacles are formidable. The US has long been notorious for advocating universal free trade while practising protection. And in the matter of arms there is a special argument for protectionism: the need to defend national security by denying foreigners access to secret military technology. Until recently a foreign company seeking to bid for a Department of Defense contract was required to set up a shadow board of directors composed solely of US citizens, to whom alone the specifications would be disclosed; the real board was not allowed to know what exactly it was bidding for (Financial Times, 14.12.99). An EADS spokesman has, not surprisingly, complained of 'Fortress America' (JDW, 11.10.00). But here the 'special relationship' has proved its worth; the Pentagon accords a measure of trust to UK companies which it refuses to other Europeans, especially the French. In spite of the links it has cultivated with Raytheon, Thales 'has been rebuffed from the US market' (Times, 14.1.00). Consequently, informed opinion holds that BAES 'has the upper hand in the US market' thanks to its 'privileged political position' (Independent, 11.7.00; JDW, 3.5.00). The US arms companies, for their part, are desperate to penetrate the European and

especially the UK arms market, and have to accept a degree of reciprocity. Boeing, for instance, reportedly wants to be more global and less American (Financial Times, 14.1.00). In May 2000 the US government introduced reforms designed to move towards 'multilateralism', with the object of reducing the dangerous power gap that had opened up between the US and its European allies, and ensuring 'that US companies remain competitive in the global market-place' (ATN, Oct.2000). There is a possibility that military sales to the most trustworthy countries, for the time being just the UK, Australia and the Netherlands, will need no export licence. Earlier, in November 1999, a US-UK memorandum of understanding tried to lay down the ground rules of military-industrial co-operation. In particular it was conceded in principle that BAES could bid for US contracts as though it were a US firm (Guardian, 12.11.99; Independent, 14.11.99).

Its real ambition, however, is to *be* a US firm, and that is not so easy. The concession that made it an honorary American was accompanied by a warning not to attempt merger with any of the big three US companies. It has, however, made some headway. It inherited a transatlantic presence from Marconi, which, among other investments, had bought the important military electronics company Tracor shortly before the merger. As a result, by the end of 1999 BAES had 18,500 employees in North America, and its US sales were running at $2.5bn. Soon afterwards it was able to claim that it was 'the only European (arms) company that is truly big in the US and the only US company that is truly big in Europe' (JDI, May 2000). However, in 2000 it appeared to be 'losing its way in the hunt for merger partners', being still 'hampered by cultural differences and Pentagon secrecy' (Times, 8.5.00). However, though Lockheed remains beyond its grasp, it has been able to pick up fragments of that huge but financially shaky organisation. In the summer of 2000 it negotiated the purchase of its Aerospace Electronic Systems division for $1.67bn, having outbid Northrop Grumman and EADS (Sunday Business, 16.7.00). So with sales of an additional $1.78bn (and

Top arms companies

by military revenue, $bn, 1999.
(The Economist 2.12.2000)

BAE Systems	19.0
Lockheed Martin	17.8
Boeing	16.3
Raytheon	14.5
General Dynamics	9.0
EADS	6.1
Northrop Gumman	6.0
Thales (then Thomson-CSF)	3.6

(The figure for BAE Systems includes post-1999 purchases from Lockheed Martin)

over 5000 more US employees) BAES has edged ahead of Lockheed and become the world's biggest provider of military equipment.

Yet there is a sense in which this pre-eminence, and indeed the whole idea of being a global power, is an illusion. It has been remarked that BAES is 'mainly a second-tier supplier' (Sunday Business, 16.7.00). That is, it has a share in a great many arms-industry activities but controls very few.

A crucial case is the 'Joint Strike Fighter' (JSF), a huge project which is likely to lead to the production of at least 3000 and perhaps as many as 6000 planes costing perhaps as much as $500bn (JDW, 27.9.00). 'Joint' means that the aircraft is to be common to the US Air Force, Navy and Marine Corps, having a basic design which can be adapted to land-based and carrier-based flying. (Congress had banged the services' heads together in order to stop wasteful duplication.) But to a certain extent it is also a joint project between the US and the UK, which plans to buy at least 60 and perhaps as many as 150 of the naval variant to replace its Sea Harriers and to fly from its two new carriers. BAe (as it then was) formed part, with McDonnell Douglas and Northrop, of one of the three teams bidding for the contract, the others being Boeing and Lockheed. This team, however, was eliminated in 1996, forcing McDonnell Douglas to let itself be absorbed by Boeing, while BAe established links with Lockheed (Defence Review, Summer 1999) and has since hedged its bets by entering into partnership with Boeing as well. (For the engines, likewise, Rolls-Royce is a partner in the rival bids from the US companies Allison, which it now owns, and General Electric.) While BAES would prefer a Lockheed victory, both the US companies have promised that if they win the contract (due to be awarded in 2001) BAES will secure enough of the work to create or preserve between 8,000 and 14,000 jobs in the UK. While the UK remains the only full collaborator, the Netherlands, Belgium, Denmark and Norway have bought into the project as 'associates', and 'observers' include Canada, Italy, Israel, Turkey and Singapore (Flight International, 15.12.99). In all, the US companies hope that Europe will pay for up to 35 per cent of the project, receiving a similar proportion of the work and perhaps also of the product (JIDR, Oct.2000).

In fact the significance of the JSF is at least as much economic as strategic. It will enable US industry to 'leverage its technological advantages into defence and commercial aerospace programmes in both North America and Europe'. If Boeing wins the contract - perhaps even if it does not – it will have developed technology that will enable it to compete with Europe's super-jumbo. And

whichever company becomes the prime contractor will have 'a golden opportunity … to market systems integration skills'. The project also offers 'a chance for genuine corporate growth – by both infiltration and acquisition – to an extensive community of suppliers extending into the industry's second and third tiers' (JDI, Oct.2000).

The UK government has been involved in the JSF project since its inception in 1995. It committed $200m (10 per cent of the total) towards initial development costs (Engineer, 7.8.98), and in January 2001 it announced a further investment of $2bn. By this means it presumably hopes to buy a share in US military power as well as baling out a UK industry whose future, in the short term at least, is looking increasingly cloudy. Just previously, the market value of BAE Systems had fallen by almost a quarter in a single day's trading. Yet the advantage to BAES and to the UK economy is not entirely clear, since the JSF must be a formidable competitor to the Eurofighter, both in the UK and in external markets (and even more so to the still distant vision of an Anglo-French 'Future Offensive Air System'). It had, for example, been hoped that a navalised version of Eurofighter would be installed in the two projected UK aircraft carriers, but the US Navy's version of the JSF now seems certain to be used instead. And the countries being wooed by the JSF include some of those that are hoped-for customers of Eurofighter.

The real point is that the Joint Strike Fighter is essentially a US plane, designed to be the main instrument of US global military hegemony in the next generation. The Royal Navy will have a small share of the output, and so of the hegemony. BAES will have a somewhat larger share of the production, but still about 15 per cent at most. What is more, the project, and therefore a large part of the company's future, is at the mercy of the US Congress which could cut off funds at any time, if the politics of tax-cuts were to prevail over the politics of the pork-barrel. In fact the incoming President's advisers are thought to be sympathetic to the argument that this phase of aircraft production should be skipped. The existing and immediately forthcoming arsenal of F-16s, F-18s and F-22s will suffice for now, and the future lies with a revolutionary machine, possibly unmanned, that is a gleam in the eyes of military planners (JIDR, January 2001).

Other examples of transatlantic collaboration are few and far between. Germany and Italy agreed in 1999 to pay 45% of the development costs of a contract for a mobile air-defence system (MEADS) awarded by NATO to Northrop Grumman, in return for a share of high-tech work. There is a US/

UK project for a reconnaissance vehicle called TRACER, for which preliminary contracts were awarded in 1998 to rival teams, each including an array of companies from both sides of the water. Neither of these projects, however, has yet got off the ground.

One commentator has played with the thought that ultimately there will be a single aerospace and arms company called BoeingLockheedBAESEADS Inc. (Arms Trade Monitor No.42, Jan. 2000). This, however, is very unlikely, if only because of US anti-monopoly law and custom. Also, the conventional wisdom, that mergers automatically yield technological and financial benefits, is under challenge (E.Gholz, *Breakthrough, Spring* 2000); and concentration at the top may well have run its course for the time being. The four major components are likely to remain separate, and other companies such as Raytheon, Northrop Grumman and Thales will probably retain their independence and their ability to offer a measure of competition.

Back to Europe?

The larger transatlantic aspirations of BAES thus currently appear to be on hold; and there are some signs that the attractions of the New World for it and other European investors have begun to wane. It seems, for instance, that the marriage between Daimler and Chrysler, contracted as recently as 1998, is not working out. And in UK government thinking there is a new emphasis on the European project, the announcement of the EU's planned Rapid Reaction Force in November 2000 being perhaps the most obvious symptom. (Since France is the only other European state with serious military capacity, this is really a re-creation of the 'Suez alliance' of 1956.) It is significant that earlier in the year BAES received a series of inducements to stay in Airbus and in Europe. For some time, the company had been pressing the government for help in breaking three alleged American monopolies: Boeing's in large civil aircraft, Lockheed's in military transports and Raytheon's in beyond-visual-range air-to-air missiles; and it has gained its point on all three.

First, it received £500m in 'launch aid' for its part in the projected 'super-jumbo', the Airbus 3XX - a remarkable concession from a government which normally rejects industrial subsidies, and one which caused Boeing and the US government to cry 'foul'. The DTI had already waved through the merger with Marconi, overruling the Office of Fair Trading (Independent, 10.9.99).

Then the government, resolving a long-standing uncertainty, decided to meet its need for air transports by ordering the projected military version of the Airbus, the A400M, even though the Ministry of Defence would certainly have preferred a mix of readily available US planes – while some would have settled for much cheaper Ukrainian Antonovs. A combination of Euro-politics and job considerations appears to have tipped the balance. BAES would make the wings for the new plane, as for all Airbuses, and Rolls-Royce would have a politically determined share in the design and manufacture of its engines (Flight International, 11.7.00).

The government also decided to arm its Eurofighters with the Meteor air-to-air missiles being developed by Matra-BAe with other European companies but not likely to be in full production until 2008, two years after the aircraft, in preference to Raytheon's missiles, which were nearly ready to fire and less

than half the price - and were publicly backed by President Clinton himself (Financial Times, 9.12.99; Air Force Monthly, Sept. 2000). On the other hand, the contract would give the new Euro-Missiles Group based on Matra BAe world leadership in this field (JDW, 20.10.99) and its bid was backed by Chancellor Schröder among others. These 'highly political' decisions (Flight International, 23.5.00) were long-delayed and must have been agonising for a UK government which hates to have to choose between Europe and the US. It is interesting that Baroness Thatcher and Michael Heseltine lined up on opposite sides of the argument (Sunday Telegraph, 12.12.99; Financial Times, 6.12.99). The conflict, it is true, was not straightforwardly UK and European industry versus the US. The tentacles of Raytheon stretch far into Europe. It collaborates with Thales in several fields, and the new head of its UK operations was until recently a high official in the procurement division of the Ministry of Defence. For its missile bid, it had enlisted the co-operation of UK-based companies such as Shorts. On the other side, the Meteor coalition finally included Boeing (which wants to break Raytheon's missile monopoly) as well as UK and European companies. Nevertheless the decisions have had the effect of tying BAES into a European and partly civilian future.

Then in July 2000 there was quietly announced a 'Framework Agreement' between the governments of the UK, France, Germany, Italy, Spain and Sweden 'concerning Measures to Facilitate the Restructuring and Operation of the European Defence Industry' (*Cm* 4895, presented to Parliament by the Secretary of State for Foreign & Commonwealth Affairs, November 2000). This remarkable document signals a long step towards a common foreign and military policy. It stresses the need to 'harmonise the military requirements' of the parties and to define 'a common concept for force employment' (Art.45). In other words, it commits the governments concerned to agree on what military forces they need, how they are to be used, and how their equipment is to be procured. It is true that national sovereignty is not actually surrendered, since the only new machinery set up is an Executive Committee which must proceed by consensus (Art.3). (And in a delightful example of Euro-speak, it aims to establish 'a notion of interdependence in some fields as a complement to national independence'.) But it aims at 'common user requirements', so as to make procurement simpler. It appears that it will in future be more difficult for France to opt out of schemes for European fighter planes and armoured vehicles, or for the UK to insist on designing and building its own frigates.

There are clear signs that the Agreement is industry-driven. It is not a document of the European Union, but only of the six members with significant

arms industries. It is careful to note that 'the creation of Transnational Defence Companies is a matter for industry to determine', subject to competition rules (Preamble). And its main thrust is the removal of obstacles to the movement of technology, weapons and parts of weapons across national frontiers. From now on, 'exports' will be defined as transfers to countries other than the Parties to the Agreement (Art.2). The aim is clearly to establish and maintain European solidarity. Recently, for instance, the Spanish government had proposed to sell its loss-making ordnance company, Santa Barbara, to the US company General Dynamics. German industry was particularly alarmed, fearing that the Americans would acquire the technology built into its Leopard tanks, which Santa Barbara manufactures for the Spanish Army under licence (JDW, 19.7.00). Articles 7 and 24 are designed to make such 'treason' more difficult. To all appearance the Agreement marks a rapprochement between EADS and BAES-SAAB, and a certain turning away from the United States. There is no prescription for mergers or alliances, but the very title proclaims an entity called 'The European Defence Industry'.
The Preamble announces a main objective: 'to increase co-operation in Exports' (note the reverential capital letter) and 'maintain industry's capacity to export'. And perhaps its most important features are contained in Article 13, which deals with transfers outside the group.

Colonial Expansion: New Contours of the Arms Trade

One of the difficulties encountered by arms exporters is that they are usually in competition, allowing purchasers to play one vendor country against another. If the framework agreement works as intended, competition among Europeans will be greatly reduced, as most arms production will be in the form of co-operative projects. Nothing can be done directly about competition from the US, but the agreement is designed to make European industry stronger and better able to compete. Another problem, however, is that some governments impose more restrictions on the arms trade than others. There is strong moral opposition in Germany and Sweden to some kinds of arms sale, and in Germany the presence of the Green Party in government is a constant threat. Thus one reason for setting up the production of German tanks in Spain is thought to have been to evade possible restrictions on exports, especially to Turkey (Middle East Newsline, 7.12.00). French realpolitik, by contrast, recognises few restraints. The UK professes to observe certain criteria, which in practice have been interpreted very narrowly. The European Code of Conduct is too vague to have made any significant difference. But Article 13 of the new Agreement attempts to establish common standards, so that no country can gain an advantage over the others. Governments engaged in a Co-operative Armament Programme (such as Eurofighter or the battlefield taxi and others which are expected to follow) are to agree on a list of permitted export destinations, drawn up on the basis of 'national export control policies and the fulfilment of their international commitments, including the EU code of conduct criteria, and the protection of the Parties' defence interests, including the preservation of a strong and competitive European defence industrial base.' These words imply a bias towards permissiveness, and the fear is that France and the UK, the leading European exporters, will carry more weight than Germany and Sweden. Once on the permitted list, a purchasing country can be removed only if it commits aggression, or lapses into civil war, or its denial of human rights becomes more flagrant. It is encouraging that any one of the Parties may request the removal of a country from the list, and this will be effective unless it can be persuaded to withdraw its objections. But it is vital to recognise the pressures to which even well-intentioned governments are and will continue to be subjected. The main

object of the Agreement is not only to 'reduce European dependency on American goods' but also to 'secure a larger portion of lucrative third-party export markets in Asia, the Middle East and Latin America' (BASIC paper no.33, August 2000).

The fact is that, whether arms industry consolidation is European or 'global' – that is, transatlantic – one of its main objects is to make it even easier for Western arms to be sold profitably around the world, to reduce competition between states and companies for the favour of soldiers and politicians in Asia, Africa and Latin America. For arms exports beyond the West are still seen as crucial to the future of the industry; indeed, it is argued that 'American, European and Russian defence industries are increasingly dependent' on such sales, as only these can provide the long production runs without which the development process would be uneconomic (JIDR, Nov.2000). Moreover, Western governments nowadays allow only slender margins of profit to their contractors. Elsewhere, the military are usually in a position to buy what they want regardless of price - and while many of the UK's main customers are formally democratic, they are typically states in which the military wield undue influence. Hence one UK company apologised for poor results, explaining that in the past year the bulk of its sales had been to the Ministry of Defence.

The makers of Eurofighter set up a dedicated export sales organisation at the end of 1999. For though the costs of the project may be covered by the 620 planes ordered by the partner governments, the UK, Germany, Italy and Spain, 'exports are crucial to the success' of the project (JDW, 17.11.99). It is calculated that during the thirty years that are the probable life of the programme, there will be a demand for an additional 800 planes of this kind, and the makers hope to secure half of that market. This is a significant reduction from the original target of 600 planes. In fact, Greece, which has embarked on a very costly programme of military procurement, is so far the only firm customer, but there are hopes of orders from Norway, Saudi Arabia, Singapore, Malaysia and others. Likewise the 3000 Joint Strike Fighters planned for the use of the US and the UK are intended to be supplemented by between 2000 and 4000 for other customers; it is hoped that as many as 30 countries will buy them (Engineer, 7.8.98). Presumably none will use them against the West - but who can really be sure of that?

What may be called the traditional arms trade, the selling of mostly pointless weaponry to the oil-rich governments of otherwise backward countries, is by

no means extinct. The recent escalation in the price of oil may have dismayed UK motorists and hauliers, but it warmed the heart of BAES; for it has filled the coffers of favourite customers such as Saudi Arabia, which may be persuaded to purchase yet more expensive warplanes for which they do not have the pilots. But this kind of export may be eclipsed in the future by a rather different transaction, in which arms sales are sought not so much for immediate profit but as a means of bringing low-cost producers into the global network of the industry.

New BAe calls itself BAE Systems, thereby announcing its intention of withdrawing from manufacture in order to concentrate on the design and integration of electronic mechanisms (Flight International, 10.11.99), making the nerves and brains of weapons but not their bones and muscles. All the big arms companies plan to 'move up the value chain' in this way. They intend to be 'prime contractors' on massive projects, delegating lower-value processes to subcontractors and component suppliers. In the UK, general engineering companies such as GKN and Smiths Industries, as well as a host of smaller concerns, hope to increase their military business in the service of BAES. Smiths have recently bought the aerospace section of the Invensys conglomerate and plan to merge with TI, hoping to position the company as a first-tier supplier to the aircraft industry (Financial Times, 17.12.99; JDI, November 2000). These large companies may well succeed, but lesser concerns are likely to be disappointed – indeed they are sufficiently worried to be making a collective plea for government protection (RUSI Journal, June 2000). For, as we shall see, BAES and the other giants now look further afield for much of their outsourcing. As one observer has put it, 'former nationally-oriented defence companies such as Boeing, GM and BAe are now transnational corporations that roam the world in search of higher government subsidies and favourable tax incentives, lower wages and weaker labour standards' (S.Staples, 'Confronting the military-corporate complex', Hague Appeal for Peace, 12.5.99). Lockheed's F-16s have been described as the first 'world fighter planes', because bits of them are made in a dozen countries, including Israel, South Korea, Turkey and Taiwan (WPI, Arms Trade Research Centre Updates, Dec.99).

These are representative of a considerable number of middle-rank industrial or industrialising states which are creating their own arms industries with help from the West. South Korea, for instance, recently announced the formation of its own Aerospace Industries, but it seeks a foreign investor for 30 per cent of its shares; BAES is bidding against Lockheed plus Aérospatiale

Matra – a combination which shows how flexible the alignments are (Flight International, 22.12.99). When such countries order equipment from US or west European companies they regularly insist on being enabled to make it for themselves in future. The process begins with the assembly of planes or guns which are delivered in containers and ends in full-scale manufacture to which the seller contributes little more than the design. For example, Turkey's massive armaments programme in 1998 included a $3bn scheme for the co-production of 3,000 main battle tanks, Vickers of the UK being one of the possible partners. This was to be followed by local production of 2000 more, for which the chosen partner would either licence its design or help the Turks to design a new machine (JDW, 22.4.98). In December 1997 BAe signed a 'co-operative agreement' with Malaysia to help design and make aerospace goods. Sometimes, even, the finished product is sold back to the originating country. For example, the UK MoD recently invited tenders for a new armoured command vehicle, and among the bidders were Vickers, which offered a vehicle made by the Swiss company MOWAG, now owned by General Motors of Canada, and BAES, marketing a Turkish vehicle originally based on the Landrover (JDW, 11.10.00).

It might appear that Western companies which follow this path are putting short-term profit before long-term survival, turning customers into competitors. This is not really the case, however. These second-rank arms producers are targeted by the 'mega' companies not only as markets but also as investment opportunities. Thales (which is suspected of being an instrument of French government policy) has been particularly astute in buying its way into the arms industries of Australia, South Africa, Korea and Brazil, among others - mainly, it is thought, in order to pre-empt US expansion; indeed, its UK acquisitions can be looked at in the same light. Thus the countries which are trying to develop independent arms production as a symbol of rising international status are probably deceiving themselves. Ultimate control lies elsewhere, and however much technology transfer they extract from the West they will always be several steps behind.

Then there are states which can be classed as failed arms producers, whose dependence on the West is more obvious and more permanent. At the end of 1999 Greece's Hellenic Aerospace Industries was reported to be up for grabs, and now seems likely to fall into the orbit of EADS. India is too large and ambitious a country to let its arms industry fail, but its attempts at indigenous production of such items as tanks and fighter aircraft have been subject to embarrassing delays. It, however, looks for equipment and technical support

to Russia rather than to the West. (At present some 70 per cent of its military hardware is of Soviet/Russian origin.) The reasons for this preference are of some interest. In the distant past the link was partly ideological. Jawaharlal Nehru, India's first premier, though not a communist, had a soft spot for the Soviet Union and under his rule India was the leading neutral power. For this reason, both the US and China tended to support Pakistan, thus reinforcing India's pro-Soviet bias. But arms sales generate institutional and personal links, so that, even after the fall of the Soviet Union, India's generals and military bureaucrats habitually look to Russia as natural provider. There appears, however, to be also a pro-UK faction in New Delhi, which may enable BAES to clinch a large order for Hawk trainers (AFM, 10.2.00).

In the same vein, UK diplomats and arms salesmen have established good rapport with the rulers of Saudi Arabia, but have had virtually no success in the United Arab Emirates or Qatar, where France has been well ensconced. Perhaps because of its large Turkish population, Germany has established a footing in the Turkish arms market, which is mainly the preserve of the United States. It was only through BAe's purchase of the German small-arms company Heckler and Koch that the UK secured any kind of entry to that lucrative market.

A particularly interesting example of the new kind of arms buyer is South Africa. This is an industrial country with a good supply of indigenous scientists and engineers, capable of producing almost the whole range of military equipment, not excluding nuclear weapons. During the later years of the apartheid regime, when it was a pariah state, it actually did produce tanks and fighter planes and attack helicopters, with help from France and Israel and, even more covertly, from the United States. Given ten smnuccers of the

such as the mine-protected vehicles developed for use in the old regime's Angolan campaigns. Advanced US technology allowed it to create 155mm howitzers which have found a market in the Gulf. Kentron, a company set up in the 1970s allegedly with US help, has world-class skills in avionics and its R-Darter air-to-air guided missile is to arm South Africa's Gripens and could be a rival to Anglo-French and US models elsewhere (JIDR, Oct.2000), while its anti-tank missile may be installed in European helicopters. These are exceptions, however, and for most items South Africa has little chance of breaking into really sophisticated markets. Its prize product, the Rooivalk attack helicopter, originally intended for use in Angola, has been offered around the world without success. So the government has become less restrictive in its choice of customers, which have included Rwanda, Uganda, Algeria, Indonesia, Turkey and China (IDASA, 22.2.00). But, as a cynical commentator has noted, the only real market for South African arms is in Africa, where there are plenty of wars but no money; and, moral scruples apart, South Africa is not eager to sell on credit (New People, May-June 2000). Exports therefore have not reached the levels hoped for. The state arms production company Denel has been losing money, and private producers have not been much more successful.

These under-performing assets help to account for the otherwise inexplicable deal which was struck with European exporters, after years of negotiation, in September 1999. South Africa finally agreed to a package of arms purchases totalling nearly 30 billion rand – equivalent to £3bn or $5bn. (This figure has now mysteriously risen to £4bn). These comprised 4 frigates and 3 submarines from German yards, 24 BAES advanced-trainer Hawks, 28 BAES/ SAAB Gripen fighters, 40 AgustaWestland utility helicopters and 4 Lynx naval helicopters from Westland (Business Day, 15.10.99). These last were later cut from the programme but may yet be reinstated. Only 12 Hawks and 9 Gripens are for immediate purchase; the remainder are delayed and conditional.

US companies, it will have been noted, were excluded from the package, the reason being that relations between the US government and the post-apartheid regime have been strained; indeed the rationale for the warship purchases is said to be fear of a US attack! By contrast, liberal opinion in the UK and Europe is disposed to grant the new South Africa whatever it appears to want, even weapons for which there is no rational need. And here is a general truth about the arms trade: UK companies have succeeded only in markets which, for one reason or another, US competition has been absent, generally

because Congress objected to sales. President Suharto of Indonesia for instance was originally a US client, but by the 1990s he had become an embarrassment and there were political obstacles to the supply of further weaponry; and so the UK was able to move in. The US has poured weapons into Saudi Arabia, but from time to time Congress declined to approve particular sales to a country which, in theory at least, is an enemy of Israel; and again the UK could take advantage, securing warplane orders which were only a fraction of total Saudi purchases and yet were the lifeline of the UK industry. By contrast, it has virtually no access to continuing US clients such as Israel and Egypt, and very little to Turkey or Latin America.

The South African deal was, on the face of it, inexplicable on both sides: on the side of the purchasers because they have no enemies and no need for expensive weaponry – unless they are to undertake the role of Africa's policeman, which they have so far resolutely declined; and on the side of the vendors because it must be the first time that mackerels have been used to catch sprats. In return for the sales, they agreed to pay South Africa remarkable sums as 'offsets'. Figures mentioned during the negotiations ranged as high as £11bn (Business Day, 19.11.98), but later reports suggested £7bn, of which about half would be provided by BAES and SAAB (Financial Times, 17.9.99). The final figure has not been disclosed. Offsets of 100 per cent are now regularly demanded in major arms deals, but payments of more than double the purchase price are wholly unprecedented. For the South Africans it was on the surface a remarkably good deal – though the *Economist* (18.9.99) remarked that 'spending so much on high-tech weaponry, even at a discount, seems extravagant' - and the prospect of 64,000 jobs finally overcame the resistance of the Minister of Finance. That figure, however, related to the more optimistic estimate of £11bn offsets. Moreover, it is alleged that South Africa will be paying as much as 100 per cent over the odds for the Gripens, which are in any case very expensive planes. Of the total offsets, some £3bn are to consist of barter deals, or 'counter-purchases' as they are now called; for instance South Africa may supply components for the Swedish car industry. Another £1.5bn is accounted for by similar 'defence-related' arrangements, including components for BAES and SAAB planes. But most significant is the £2.5bn which is to take the form of 'industrial participation', that is, investment by European companies in South Africa. These include German schemes for a steel plant and a deep-water harbour. But it is also expected that the vendor companies will put money into the ailing South African arms industry, which will gain some input of technology and capital and will benefit from BAES's marketing prowess, at the cost of becoming no more than 'a

supplier of niche subsystems and components' (JDW, 23.8.00).

The state arms producer Denel is to be 'corporatised' and will then seek a 'strategic partner'. Not surprisingly, this is expected to be BAES, which will probably take a stake of 20 per cent or more in its Aerospace and Ordnance divisions (JDW, 25.10.00). It is in fact clear that South Africa's arms industry is being sold off piecemeal. BAES has already bought 51 per cent of the private Paradigm System Technologies and 20 per cent of Advanced Technologies and Engineering. Vickers, which still hopes to sell tanks to South Africa although this item was dropped from the current package, has bought the indigenous armoured vehicle manufacturer Olifant. Even the fireworks maker Pains Wessex may buy the pyrotechnics division of Denel Ordnance. The Grintek company has joint ventures with SAAB for radios and surveillance systems and (spreading its favours) with EADS for electronic warfare equipment. EADS has bought a third of Reutech Radar Systems, and Thales, which is to supply armament and control systems for the German frigates, has bought African Defence Systems outright (JDW, 23.8.00). These acquisitions will enable the European investors to source a substantial part of their production in a cheaper environment, to the detriment of their own employees. Thus the apparent generosity of the purchase terms offered by BAES conceals a shrewd investment. The sale of planes is in the long run less important than the assets that will be acquired in the process.

There will be gains for the South African arms industry and, it is strongly suspected, for some individuals in high places (Financial Times, 10.9.99, JDW, 25.10.00, ECAAR – SA, 4.9.00; the government has rejected Parliament's demand for an independent enquiry into the deal). But the benefits to the economy are confidently assessed as 'ultimately non-existent' (Coalition for Defence Alternatives, 15.10.99, quoting Neil Cooper). The steel plant and the deep-water harbour are alleged to be economically superfluous and environmentally damaging (Times, 3.8.00; ECAAR – SA, 26.5.00). And of course the taxpayers will have to find the money for the purchases. Quite apart from the procurement package, the regular defence budget is scheduled to rise by about 40 per cent between 2000 and 2002. This has been described by an informed observer as 'one of the biggest spending boosts ever for the military . . . Joe Modise (the former Defence Minister mostly responsible for the deal) listened too much to the old-guard South African generals and then to Western arms companies – both groups seem to have prodded him into making a series of bad decisions' (Africa Confidential, 14.4.00). Clearly the military interest is in the ascendant, and UK companies

and politicians have done much to put it there. Just as Mrs Thatcher interrupted a rare holiday to negotiate the Saudi arms deal in 1985, so Tony Blair took the opportunity of a family holiday in the Seychelles to act as salesman for BAE Systems in South Africa in January 2000.

Another and perhaps more important source of cheap components is expected to be eastern Europe, where the arms industries created for the Warsaw Pact have been struggling to survive its dissolution. The states which have recently joined NATO or which aspire to join it have been told that they must modernise their armed forces and make them NATO-compatible, which means in practice that they must spend large sums on Western arms. In particular, they are being pressed to acquire fleets of up-to-date fighter aircraft. To help them do this, the Western manufacturers again promise generous offsets, including investment in their own industries. The US company Textron has bought into Romania in the hope of selling its Bell helicopters, which will be largely manufactured in the country. Boeing, likewise, has bought a 35 per cent stake in the main Czech aircraft producer Vodochodny, maker of a cheaper alternative to the UK Hawk fighter-trainer, and after long delay the Czech government has invited tenders for 24 - 36 multi-role fighters at a projected cost of $2.4bn. In spite of its investment Boeing may not win the order. 'If anyone has convinced the (ruling) Social Democrats that it was time to buy new fighters, it was BAE Systems'. In fact no-one may actually be given a contract, since parliamentary critics have described the idea as 'absolutely ludicrous' (JDW, 25.10.00). There has been even stronger resistance in Poland. Despite offers of investment by BAES and SAAB on condition that it buys Gripens, the government appeared to have decided that it can only afford to lease some second-hand F-18s from Boeing (JDW, 8.11.00). However, it has now agreed to follow these with the purchase of up to sixty new multi-role fighters by 2006/7 (JDW, 10.1.01).

A National Asset ?

The UK arms industry now faces a fundamental contradiction. If it is global, can it also be national? And if it is not national, can it continue to enjoy public and political favour? It is true that, unlike industries which cater for mass consumer markets, it does not appear to depend on creating and preserving brand loyalty. All it needs is the patronage of governments, especially its own. But political privilege stems in the long run from public esteem; and this has so far been forthcoming because of the assumption that the industry provides both lucrative employment and national military security. It has therefore been able to claim the status of 'National Asset' - the title of the newsletter which BAES circulates among politicians and civil servants. In reality its 'brand' has been the word 'British' which used to appear in the title of the company but no longer does. This does not prevent it from playing a nationalist card whenever it suits its purpose. For example, in the matter of ammunition it is the UK government that would like to cut costs by buying abroad, especially from South Africa, instead of from Royal Ordnance, whose owners, BAES, complained of a 'lack of patriotic support'. They then threatened to sell the company to the Germans. This ploy worked: fearing that it would have no domestic source of ammunition at all, the MoD gave way and guaranteed Royal Ordnance supply contracts for the next ten years.

All the same, present trends weaken the national credentials of BAE Systems, even though it is now almost synonymous with the UK arms industry. In aspiration if not yet in fact, it is no longer a UK company. Its ownership is masked by nominee companies, but it is thought that well over a third of its shares are held by foreign institutions, mostly in the United States. (After privatisation, foreign shareholdings were limited by law, first to 15 and then to 29 per cent of the total, but that restriction has been removed.) It has had an American chairman. It claims to sell more to the US Department of Defense than to the UK MoD – that is to say, in so far as it serves any purpose other than profit, it arms US rather than UK power. Already some 40,000 of its 110,000 employees are located overseas, and the national character of its workforce, direct and indirect, is bound to be progressively diluted as it moves from UK manufacture to licensed production overseas and makes more and more use of foreign suppliers and subcontractors. The company does acknowledge a constraint: if it wants preferential treatment from the UK

government it will have to preserve a UK workforce, but the cost savings to be made from transferring work abroad are so tempting that the process is bound to continue (JDI, May 2000). In fact, BAE Systems is in process of becoming a transnational corporation like any other.

Or rather, it is not a corporation like any other, for its products have no utility. This goes far to invalidate the 'jobs' argument for the preservation of the arms trade, for no amount of employment can justify the production of things which do more harm than good. The government, for instance, is unlikely to licence cocaine factories, and few would dispute that it has a duty to discourage cigarette-smoking, even if this means redundancies in the tobacco industry.

The 'jobs' argument is in any case based on a confusion between particular cases and the general level of employment. It is necessary to acknowledge that, if the arms trade were suddenly suppressed, a considerable number of people would lose their jobs and there would be short-term damage to local economies in such places as Lancashire and the Bristol area. Direct conversion from military to civil production is not a quick or easy matter. But national employment does not depend on the fortunes of particular industries. It is determined, on the supply side, by the quality of management and the labour force, and on the demand side by fiscal and monetary policies which provide for steady economic growth. If these conditions are met, workers displaced from arms production, most of whom are of above average skill, should have little difficulty in finding alternative employment. Structural change is necessary in any healthy economy. And it is high time for the UK to grasp the nettle and begin the necessarily painful dismantling of an industrial structure which is really the legacy of the Second World War, so that its people may spend their working lives in more useful ways.

So is the UK arms industry essential to national 'defence'? CAAT has always avoided that question-begging term, replacing it by 'military' or 'arms' as the sense requires; and this usage is now more than ever justified. The UK does not face any military threat, and the aggressive interventions which the government appears to favour, though some may consider them to be virtuous, have nothing to do with the defence of the realm. In any case, the lingering popular belief, a legacy of two great wars, that 'munitions' work is patriotic, can be seen to be a fallacy, since only about 20 per cent of BAES's 1999 output was for UK use, and the company's aim is not to serve the national interest but to maximise shareholder value.

There is no strictly necessary connection between the arms trade and the arms industry. If the UK people believe that they need large, well-equipped armed forces, and do not want them to be supplied mainly from the US, they could decide to maintain an arms industry which did not depend on exports. Even if they might then have to pay a premium for their sense of security, this would surely be worth while if it enabled them to escape from the demeaning business of selling weapons around the world. However, if the savings on export subsidies are taken into account, there is likely to be little or no additional cost, and possibly a net benefit. But in practice production for national use and production for sale abroad have become so entangled that it will be very hard to separate the two.

The UK government does not merely permit arms exports, with rare and reluctant exceptions; it actively promotes them, with financial guarantees and, more importantly, with diplomatic backing. Deeply entrenched in Westminster and Whitehall is the conviction that the arms trade is not only a Good Thing, but a Very Important Good Thing. Three great departments of state, the Foreign Office, the Ministry of Defence and the Department of Trade and Industry have its promotion written into their mission statements. Early in 2000 the government announced that it had initiated a study into the benefits and costs of the trade – and in the same breath pre-empted its conclusions, saying that 'the government believe that defence exports foster a healthy, technically capable and competitive defence industry' (Hansard, 28.2.00, col.3510). Ministers – especially, surely, those who claim to be left of centre - must know in their hearts that selling instruments of death and destruction around the world is a disreputable business. Yet they remain committed to it, for probably two main reasons, in addition to the preservation of politically sensitive jobs.

First, arms exports are exports; they benefit the balance of payments; and they are exports which politicians and officials can do more to assist than any other. And it is a fact that BAES is the UK's largest exporter of manufactured goods. But this is a fact that needs to be, not simply accepted, but examined. Why is it that, 55 years after the end of the Second World War, weaponry is, with drugs, much the most important product of UK manufacturing industry? The country continues to build frigates and aircraft carriers, but merchant shipbuilding is practically extinct. It makes and sells fighter aircraft and missiles, but has to import radios and motor-cycles and machine tools and washing machines and computers. If there is still a UK car industry, it is only by courtesy of foreign capital and management. BAE Systems is not one of

the largest UK companies, but it dominates the engineering sector (and bids to dominate the engineering profession). A long way behind it come GKN and Rolls-Royce and Smiths Industries - all arms producers – and then almost nothing. There must be suspicion that these facts are related, that it is *because* we have lovingly preserved our arms industry that the rest of our productive capacity has decayed (See Webb, 1998, pp. 43 & 60). An obvious linkage is the use made of a limited pool of scientific and engineering talent.

The other reason why the government cannot break the arms-trade habit is more political. Without exports, it is argued, the UK would not have an arms industry. Without an arms industry it would not be a military power. And if it were not a military power it would lose ground in the international pecking order. Each link in this chain is fragile.

There is no necessary connection between arms production and arms exports. If we chose, we could manufacture arms solely for our own use, or for the use of our European and NATO allies.

Nor is it true that the UK cannot have effective armed forces without an arms industry. If military hardware is thought to be necessary, US products are usually cheaper and better, and preferred by the services that may have to use them.

The final link, between military power and national prestige and self-esteem, will be harder to break, so potent are the myths and memories of the Second World War. That is a matter beyond the scope of this paper, and indeed beyond the range of CAAT's specific concern. But this much may be said. The arms industry has shown remarkable resilience since the end of the Cold War, and is now enjoying something of a renaissance. Within it, there are fierce contests for survival and supremacy, but there is also an overriding common interest in high levels of international tension. It thrives, not perhaps on war, but on rumours of war, on insecurity, on fear and hate. It will gladly sell arms to Greece and to Turkey, to China and to Taiwan, to India and to Pakistan, and it will be delighted by the new strains between Israel and the Arab world which, together with the high price of petroleum, are likely to revive the flagging Middle East market for arms. Like other agglomerations of corporate muscle, it sometimes seems to have democracy in its pocket. But, like them, it enjoys power only so long as people can be persuaded to buy its products.

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Acronyms

ATN	- Arms Trade News
BAC	- British Aircraft Corporation
BAe	- British Aerospace
BAES	- BAE Systems
BASIC	- British American Security Information Centre
DTI	- Department of Trade and Industry (UK)
EADS	- European Aerospace and Defence Systems
ECAAR-SA	- Economists Allied for Arms Reduction – South Africa
GEC	- General Electric Company
GM	- General Motors
IDASA	- Institute for Democracy in South Africa
JDI	- Jane's Defence Industry
JDW	- Jane's Defence Weekly
JIDR	- Jane's International Defence Review
JSF	- Joint Strike Fighter
MoD	- Ministry of Defence (UK)
OCCAR	- Organisation for Joint Armament Co-operation (known by the acronym of its French title)
RAF	- Royal Air Force (UK)
RUSI	- Royal United Services Institute
WPI	- World Policy Institute

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