

FRIENDS AND RIVALS: TRANSATLANTIC RELATIONS IN AEROSPACE AND DEFENCE IN THE 21ST CENTURY



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Friends and Rivals: Transatlantic Relations in Aerospace and Defence in the 21st Century

A Specialist Paper prepared by

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SUMMARY

The political relationship between the US and European defence and aerospace industries is going through a rough patch. Given hopes for a closer relationship were so high five years ago, the current state of the relationship is particularly sad. There might be a happy ending, but there are ominous signs that the current tensions could deliver some lasting blows to that relationship. The UK in particular is facing some hard choices about the where it sits between the US and Europe.

This paper begins with a description of attempts over the last five years to improve the regulatory framework governing defence industrial co-operation. The paper then discusses some of the issues that have caused tension in the relationship such as the Galileo satellite navigation system, the 'Hush Kit' and Airbus–Boeing disputes and the affect of the EU proposal to lift its arms embargo on China. It concludes rather sombrely that we may have seen the high water mark of US–European defence-aerospace industry collaboration and the future is likely to see more intense periods of tension and conflict.

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GLOSSARY

Term	Definition
BDAC	Bilateral Defence Acquisition Committee
CFIUS	Committee on Foreign Investment in the US
DoP	Declaration of Principles
DTSI	Defence Trade Security Initiative
EAA	Export Administration Act
EASA	European Aviation Safety Agency
EDA	European Defence Agency
FOCI	Foreign Controlled or Influenced
GAO	General Accountability Office
HMG	Her Majesty's Government
ICAO	International Civil Aviation Organization
ITAR	International Traffic in Arms Regulation
JSF	Joint Strike Fighter
WTO	World Trade Organisation



A T-45 Goshawk takes the wire.



Two AV-8B Harriers.

1.0 INTRODUCTION

1. The political relationship between the US and European defence and aerospace industries, often turbulent and prone to bursts of mutual disappointment, now seems to be going through a particularly difficult patch. Given that the last five years or so promised to build a more mature and mutually beneficial industrial system that should have delivered increased efficiency for companies and government customers alike, the current state of the relationship is particularly sad. There might be a happy ending, but there are ominous signs that the current tensions could deliver some lasting blows to that relationship¹.

2. There are substantial links between the US and European aerospace and defence industries involving direct investment and collaboration on specific projects. There is also a wide and deep interpenetration of supply chains, especially on the civil side. But transatlantic co-operation represents a small proportion of US defence activity and is narrowly focused on a largely Anglo-Saxon axis. This might not be powerful enough to survive a period of sustained hostility; and for the UK — often sitting uneasily between Europe and the Atlantic — some permanent choices may have to be made.

3. This paper begins with a description of attempts over the last five years to improve the regulatory framework governing defence industrial co-operation. The paper then discusses some of the issues that have caused tension in the relationship such as the Galileo satellite navigation system, the 'Hush Kit' and Airbus-Boeing disputes and the affect of the EU proposal to lift its arms embargo on China. It concludes rather sombrely that we may have seen the high water mark of US-European defence-aerospace industry collaboration and the future is likely to see more intense periods of tension and conflict.

2.0 US-EU DEFENCE AND AEROSPACE INDUSTRY CO-OPERATION IN THE 21st CENTURY

4. The history of US-European defence and aerospace industrial co-operation reveals a succession of initiatives, proposals and projects, many of which petered out often amidst recrimination

¹GUAY, T.R. *The Transatlantic Defence Industrial Base: Restructuring Scenarios and Their Implications*, The Army College, Carlisle, PA, USA, April 2005, p 13.

²See HAYWARD, K. *The World Aerospace Industry*, London 1994, pp 170-176.

and ill-will². The US has rarely seen the need to buy from Europe or to collaborate in the development of weapons except where there has been a rare deficiency in US technical capability or for political reasons the US has sought to promote inter-operability through arms standardisation. The most prominent examples of collaboration have been the AV-8 Harrier, the CFM-56 aero-engine, and the T-45 Goshawk. More recently the Anglo-Italian EH101 won the competition to supply a new Presidential helicopter. In every case, there has been a defined US partner, and the bulk of production has been in the US. In the case of genuinely collaborative development, the US has led and determined the shape and scope of programmes³.

5. The easterly flow has been much stronger. American weapons have been bought in considerable quantities by European governments. Of the main industrial players, the UK has been more open to US (and other foreign) suppliers, although usually with a requirement for industrial participation, technology transfer and offset. Collaboration, or at least commercially driven sub contracting and risk-sharing has been easier in the civil sector, with both Boeing and Airbus suppliers drawn from both sides of the Atlantic.

3.0 GLOBALISATION AND INDUSTRIAL RE-STRUCTURING

6. Following the end of the Cold War, industry on both sides of the Atlantic was rapidly transformed, with a small group of large companies coming to dominate the US and European aerospace and defence industrial systems⁴. While individual programmes still provided a focus for collaboration, defence and aerospace industrial dynamics were increasingly affected by investment and the globalisation of production. The growing importance of leading-edge commercial technology in defence systems and government interest in capturing the assumed cost savings of commercial 'off the shelf' procurement further stimulated globalisation⁵.

³Most of the successful transatlantic programmes have involved the US and the UK. See LORELL, M.A. *et al*, *Going Global? US Government Policy and the Defense Aerospace Industry*, Rand 2002, pp 50-56.

⁴More rapidly at first in the US than in Europe, see HAYWARD, K. 'The Globalisation of Defence Industries', *Survival*, **43**, (2), summer 2001.

⁵The UK Government has stated that onshore location of production and technology generation and not ownership is a key determinant of DIB policy and the Pentagon has declared that the US search for 'transformational' technology will be global.

7. US primes have fewer overseas assets or, by European standards, less extensive networks of collaborative activity, but they too have increasingly international supply chains. There is an increasing flow of foreign direct investment in the defence-aerospace industries, especially among supplier companies. Much of this investment is directed at the US market, motivated by the need to get round US barriers to direct defence sales⁶. But the extent of genuine globalisation at the prime-contractor level has been limited, with “high expectations of an impending union between key US and European defence firms” falling “just short of consummation.”⁷

8. Tracing the exact flows and destination of aerospace and defence foreign investment is difficult; data are either not available or hidden within opaque statistical categories. The larger and politically more prominent examples of M&A activity can be identified traced through the US CFIUS (Committee on Foreign Investment in the US) process for clearing inward investment in the US defence industry and details of special clearances for foreign-owned defence firms. This provides some indication of gross numbers and national origins. Nearly half of these are British confirming UK industry as the leading overseas player in the US defence market, a process aided by the close political co-operation by the two countries in defence and security⁸. There are even less data on US investments in European defence and aerospace industries, but anecdotal evidence suggests that the bulk of US M&A activity and industry-led partnering located in the UK. However, the regulatory framework affecting much of this activity has yet to catch up with industrial realities.

4.0 REFORMING THE TRANSATLANTIC DEFENCE TRADE REGULATORY SYSTEM

9. Governments on both sides of the Atlantic have conceded in principle that globalisation in the defence and aerospace sectors needs a more effective and appropriate regulatory framework. Advocates of reform argue that this would lead to better economies of scale, lower development costs and reductions in the transaction costs of transnational defence business operations. Inter-governmental negotiations across the Atlantic and within Europe have focused on six issues:

- Security of Supply
- Common Requirements
- Intellectual Property
- Security Clearances
- Export and Technology Transfer Controls
- Technological co-operation

In general, the global defence industry community feel that while agreement on areas such as common R&D programmes and common requirements would be desirable, a better regime governing export regulation and technology transfer, and personnel security clearance would have a direct and immediate impact on core operations. International agreement in these areas would transform the global environment for defence industrial activity adding value to industrial operations and improving the efficiency and effectiveness of defence procurement.

⁶See Defence Science Board, *Globalisation and Security*, Office of the Under Secretary of State of Defense for Acquisition and Technology, Washington DC, December 1999, pp 11-13.

⁷GUAY, T.R. *The Transatlantic Defence Industrial Base: Restructuring Scenarios and Their Implications*, The Army College, Carlisle, PA, USA, April 2005, p 19.

⁸LORELL, *op cit*, pp 43-7.



EH101 Merlin during a US tour.

5.0 THE US DEBATE OVER REFORM

10. Defence industry regulation has been particularly difficult issue for the US. This is partly caused by tension between traditional concepts of national markets and national industries, with clearly defensible barriers and the more complex world of transnational defence companies operating in a global marketplace. But there is also “significant political and bureaucratic resistance in the United States to greater integration of the transatlantic defence market. US strategic and defence planning also emphasises autonomy, reducing the likelihood that the military services will look to Europe for military, technological or industrial co-operation.”⁹ US firms partnering or selling in Europe (and elsewhere) and non-US firms operating in the United States face bureaucratic hurdles governing technology transfer to third parties. The government process for approving defence exports is notoriously complex, cumbersome and slow. Domestic politics, including a stout defence by the State Department of its privileges as the guardian of export controls and negative attitudes of some key Congressional figures, have also affected events¹⁰.

11. Export controls were an important element of US security and foreign policy during the Cold War. As superior US technology acted as a counter weight to Soviet manpower, it was imperative to prevent the Soviet Union from eroding that edge through espionage or through inadvertent leakage. Control was obtained unilaterally through US law and multilaterally through agencies such as COCOM. Both, especially when the US sought to exert extra-territorial application of US law, could create friction with its allies, especially where dual technology goods were involved. The end of the Cold War, and a more complex trading and security environment eroded this often precarious consensus.

12. The current US system centres on the International Traffic in Arms Regulations (ITAR) and the Export Administration Act (EAA)¹¹.

⁹ADAMS, G. ‘Fortress America in a Changing Transatlantic Defence Market’, in SCHMITT, B. (Ed), *Between co-operation and Competition; the Transatlantic Defence Market*, Chaillot Paper 44, Paris, WEU, pp 3-49.

¹⁰ADAMS, *op cit*.

¹¹ITAR is the more comprehensive and restrictive and is controlled by the State Department. The EAA is controlled by the Commerce Department. Commerce also administers the US Security of Supply legislation (DPAS). The imposition of ITAR is shaped by the US Munitions list and by recommendations from the DoD. Congressional oversight of the ITAR is administered by the House and Senate International Relations Committees.

These apply to US companies working with a foreign company or foreign companies bidding independently for US contracts. The regulations cover the export of products, technology or services deemed by the US government to be sensitive. The penalties for infringement are severe. Even with a subsidiary in the US, a foreign company cannot repatriate the benefits of R&D investment without a US license¹². Moreover, technology 'exported' to the US and subsequently integrated into a US product is covered by ITAR.

13. Equally, US technology or products bought by an overseas customer are subject to the ITAR regime. This means that clearance may be required to facilitate onshore maintenance, support and upgrading, as well as integrating alternative weapons and equipment. This issue is especially acute where access is required to software source coding — a point which is at the centre of often fractious negotiations between the UK and the US over the JSF programme. The UK Government's position is quite clear: improvements to the ITAR system, specifically a waiver for UK companies, would "make a significant contribution to transatlantic defence industry co-operation and promote Alliance interoperability. At the same time it would ensure that comparable export controls were maintained on US and UK defence items."¹³

14. Foreign companies must also overcome significant administrative obstacles in order to enter the American market and once approved, firms must create separate governance and security arrangements that bar access to the non-American corporate owner. Initially, all acquisitions are vetted by the Committee on Foreign Investment in the US (CFIUS) — a Treasury led body. This has usually been a formality¹⁴. However, more important, the US DoD monitors foreign-owned, controlled or influenced (FOCI) defence contractors to control the unauthorised disclosure of US classified information. This can entail the establishment of proxy boards, special security agreements and limited facility clearances¹⁵.

15. To some in the US defence establishment, an over stringent application of export controls is increasingly detrimental to US security and economic interests. Alliance cohesion is challenged, inter-operability is undermined, coalition operations, even the safety of US soldiers, have been compromised. Potential allied customers, either governments or overseas contractors have deliberately 'designed out' US equipment and components to avoid ITAR entanglement. There is a clear risk that continued US reluctance to reform its procedures could encourage the formation of a closed European defence market and an even greater determination to reduce or even eliminate the American equipment and components in European programmes¹⁶. Interest in reforming the US system has come with the growing realisation of defence industrial globalisation and that the US does not have a monopoly on all of the key emerging military-relevant technologies. In short, there is strategic and operational value to the US in increasing defence industrial collaboration between close allies.

¹²Quadripartite Committee on Strategic Export Controls, First Joint Report, Session 2004-5, HC 145. para 162.

¹³Quadripartite Committee, *ibid*

¹⁴In the 17 years of operation and 1,530 applications, CFIUS has rejected only one.

¹⁵US Government Accountability Office, *Industrial Security: DOD Cannot Ensure Its Oversight of Contractors under Foreign Influence is Secure*, GAO-05-68, July 2005

¹⁶The French have led moves to free Europe of strategic dependence on outside sources of technology and components, especially those covered by ITAR. CNES, the French space agency has proposed the European Component Initiative to design out US components in European space systems.



The General Electric Rolls-Royce F136 engine for the JSF.

16. From this perspective, the US regime was failing on three grounds: it did not distinguish between high-risk technology transfers and routine application of rules; it did not give credence to equally sound policies and controls wielded by US allies and industrial partner nations; and it failed to distinguish between cutting edge military technology and commercially available or even obsolete products¹⁷. Increased domestic industry concentration was also reducing competition. The US should, therefore, focus compliance resources on policing the really sensitive stuff based on a simplified and modernised Munitions List. The system while becoming less adversarial could still contain stiff civil and criminal penalties, comparable for example, to the Securities and Exchange Commission¹⁸.

17. There was, in particular, a need to streamline the cumbersome US control bureaucracy. Six US government departments claimed a role in administering US regulations, with Defence, State and Commerce most routinely involved in license applications and processing. In the past, too often departmental prerogatives and prestige permeated the system. The need was for quick and effective interagency dispute resolution as well as the adoption of transparent government review procedures. Congress too would have to recognise that its oversight functions had to be more predictable and consistent. In short advocates of reform claimed that unless the US changed its approach, US and European industry will "drift further apart", and as technological change continues to accelerate "a more isolated industrial base" would mean "less competition and less innovation."¹⁹

6.0 THE DEFENCE TRADE SECURITY INITIATIVE (DTSI)

18. By the late 1990s, reform of the export control system had a growing body of adherents both in the Pentagon and in the White House. The Defense Department made a strong effort to reshape and streamline its export control process in order to accelerate review of export licenses. However, the State Department with executive responsibility for ITAR was much more reluctant to embrace reform or even improved efficiency. In the

¹⁷CEVASCO, F. *Alternative Multilateral Export Control Structures*, Henry L. Stimson Centre/CSIS, Washington DC, November 2000. pp 1-7.

¹⁸GUAY *op cit*, pp 11-12; CSIS, *op cit*, pp 9-32. The Munitions List defines what products and technologies covered by the ITAR.

¹⁹CSIS, *op cit*, p 32.

event, albeit towards the end of its term, the Clinton White House intervened decisively in favour of reform by introducing the Defence Trade Security Initiative (DTSI)²⁰.

19. The DTSI contained a number of measures designed specifically to improve the operational environment for US companies and allies involved in international partnerships. The DTSI contained 17 points of reform; the most important of these was the Major Programme Licence, Major Project Licence and the Global Project Licence. Each effectively proposed blanket approvals for international partnerships involving US firms and a standard comprehensive licence for government-to-government deals. The DTSI also contained provision for negotiating ITAR waivers for 'qualified countries' along the lines of a long established US-Canada agreement. This would cover in the first instance unclassified exports to foreign governments and companies who were determined to be 'reliable' by the US. Exemptions would be contingent upon adopting tight controls over third party arms exports. The UK and Australia were cited as the two countries most likely to be suitable for exemption.

7.0 THE DECLARATION OF PRINCIPLES (DoP)

20. With the largest foreign presence in the US defence market and an extensive bilateral defence trading relationship, the UK clearly had and still has much to gain from reform of the US control regime. Its government-to-government agreements on the most sensitive of defence and security data exchange, and as events would demonstrate, the staunchest of US allies, should have made the UK an ideal test case for reform. Indeed, even before the DTSI emerged, this was recognised by Declaration of Principles (DoP) of February 2000. This agreement aimed to enhance the environment for Anglo-American defence equipment and industrial co-operation and to facilitate new types of co-operation between defence companies leading to a more integrated industrial base. The intention was to ensure that UK industry doing business in the US would be treated no less favourably than US industry doing business in the UK. A key feature of the DoP was the US willingness to grant the UK an ITAR waiver on unclassified information²¹.

21. The UK waiver was in some respects similar to the Canada ITAR exemption; but while the Canadian waiver was demonstrably important to North American defence trade, co-operation with the UK and countries with comparable defence industries and holding more demanding views on technology transfer would demand more concessions from the US. State Department officials, backed by a growing chorus in Congress, despite pressure from the White House proved highly resistant to granting a waiver to the British²².

22. The change of Administration in November 2000 and long delays in confirming key staff in the DoD and State further hampered progress on the ITAR waiver. But once the Bush team had re-affirmed the principle of reforming the export control



Northrop Grumman/EADS Euro Hawk.

regime negotiations seemed to make progress²³. Agreement, in principle, was reached on a system whereby UK companies that wanted to use the International Traffic in Arms Regulations (ITAR) exemption would voluntarily register as qualified companies with the UK and US Governments, and commit themselves to abide by certain end-user and retransfer assurances. Changes in the UK domestic arms export control system were also presented as assurance that transferred data would be equivalent to an ITAR control. The UK and US agreed to enhance the already close relationship in law enforcement of export control violations and to exchange information on the operation of respective export control systems. The incoming Head of Political and Military Affairs at the State Department, Lincoln Bloomfield, also announced a sweeping review of the US arms export process with a view to making it more industry friendly including focusing the Munitions List on the really sensitive technologies that had to be subject to the strictest controls. But again, bureaucratic and Congressional opposition obstructed progress.

8.0 THE PRESIDENT PROPOSES, BUT CONGRESS DISPOSES

23. Bluntly, for a range of personal or constituency reasons, some key Congressional actors have found it hard to adapt to the advent of defence industry globalisation or to recognise its potential benefits to US security. In particular, the chairman of the House International Relations Committee, Henry Hyde has proved to be an intractable foe of reform²⁴. Having co-oversight responsibility with the Senate Foreign Relations Committee, Hyde's Committee has a crucial role in determining the pace of reform. The terrorist atrocities of 2001, and the subsequent 'War on Terror' only added to Hyde's determination to obstruct change.

24. In June 2004, the House International Relations Committee published a formal response to the State Department's request for a UK/Australian ITAR waiver²⁵. Its tone was uniformly hostile. Foreign export regulatory systems were still inadequate; even the

²⁰DTSI was publicly launched by Secretary of State Albright, but it was evident that her officials were reluctant to push matters through before the change of Administration.

²¹A waiver on unclassified data does not seem much, but it would allow companies to discuss and obtain information about potential deals/projects without needing a US licence. Agreement on the waiver would also be highly symbolic and could be the basis for further, more substantial change.

²²Even the Canadian relationship has experience compliance and enforcement problems and the Canadians have bridled at the extra-territorial demands of the US. 'State Dept. passive on License Reforms, Officials Say', *Defense News*, 5 February 2001, p 10.

²³'Bloomfield Vows Intensive Review of US Exports', *Defense News*, 18 June 2001, p 8.

²⁴'US Technology Export Bill Faces Opposition in House', *Defense News*, 18 June 2001, p 10.

²⁵House of Representatives Committee on International Relations (HIRC) US Weapons Technology at Risk: the State Department's Proposal to Relax Arms Export Controls to Other Countries, 1 May 2004.



Lockheed Martin X-35 JSF.

UK's new procedures were insufficiently 'ironclad', and the committee distrusted the 'politically binding agreements' with the UK government; and State could not show any benefits to the US from reform that could not already be obtained through 'fast tracking procedures'.

25. Matters were further complicated by the intervention of Congressman Duncan Hunter, chairman of the House Armed Services Committee who added an amendment to its version of the 2005 Defence Authorisation Bill threatening to tighten the Buy American legislation by demanding exclusive US content in all major US weapons systems. Hunter's general views on export control echoed those of Hyde. He supported the view that enforcement of export controls was vital for US national security; "weak export controls in general represent a vulnerability in the 'global war on terrorism' because of the ease with which items can be transferred to third parties... Inadequate safeguards can also lead to the proliferation of advanced conventional weapons that could threaten service (personnel) on the front lines."²⁶ But his legislation went further, seeking to limit the incorporation of foreign equipment and components and even the use of foreign made machine tools.

26. This was opposed by the US Aerospace trade association — the AIA — and leading US industrialists. According to Bob Trice of Lockheed Martin isolationist sentiments could harm US industry as, "'Buy American' tendencies ignored the reality of high technology manufacturing — aerospace like automobiles is a global industry." By-passing existing supply chains would imply expensive domestic solutions, especially given the relatively small numbers often required in defence work. Domestic tools in particular were simply not as good as Japanese or German. It would also pose serious threats generally to US partnerships and wider trading relations. The EU Commission warned that the Hunter legislation might trigger an action under the WTO rules governing government procurement²⁷. Hunter's continual sniping clearly threatened to damage relations between the US and its allies, especially as the JSF was emerging as one of his particular *bêtes noires*²⁸.

²⁶'Spotlight falls on UK, US export controls', *Jane's Defence Weekly*, **3**, March 2004, p 8.

²⁷GUAY, T.R. *The Transatlantic Defence Industrial Base: Restructuring Scenarios and Their Implications*, The Army College, Carlisle, PA, USA, April 2005, p 10.

²⁸'Bucking the trend', *Jane's Defence Weekly*, **25**, February 2004, pp 24 & 27.

27. Attitudes in the Senate were more positive, with Senator Lugar, chairman of the Foreign Relations committee willing to make some gesture towards the UK²⁹. In the event, the Hyde threat was seen off in the Senate-House Conference held to resolve differences in legislative wording. Nevertheless, it was a further sign that Congressional opinion, or at least among a few but powerful individuals was hardening.

28. The advent of the second Bush Administration generated equivocal signals. According to one report, the future of US-European collaboration was likely to be fraught as a 'gust of fear' pervaded Washington's pro-alliance officials. Despite strong resistance from the free trade White House, Hunter's aggressive stance resonated in many parts of Congress. For its part, the UK government was determined to press its case, but felt that they needed more overt support from US defence industry. Officials welcomed the more placatory words on UK and Australia in the final version of the Defence Authorisation legislation, but feared that this might be no more than a 'pat on the head'³⁰.

29. In April 2005, in response to a request from the House International Relations Committee, the General Accountability Office published a report on the export control system. The GAO argued that there was an urgent need to rethink policies and structures to cope with the new security environment dominated by the War on Terror. There was, however, a need to balance these security needs with legitimate defence trade with allies. The State Department was criticised for failing to make "significant changes to the arms export control system since the September 2001 terror attacks"³¹.

30. The GAO was also critical of the multi-agency involvement in the process. While State had the main arms export control functions, the Commerce Department, the DoD, Homeland Security and Justice have important legislative or advisory functions. Commerce's role in administering dual technology issues through the Export Administration Act is especially important. Commerce's approach was described as being less restrictive than State's, for example many Commerce-controlled items can be exported to China. This has reduced the clarity of administration with an increased likelihood that defence items will be "improperly exported" and licence conditions adhered to. Differences in jurisdiction and poor coordination between agencies have further increased US vulnerability and led to inconsistency in the application of rules and regulations.

31. State had made some efforts to streamline and expedite requests for licences and there were signs of improvement but the average time taken to process requests had begun to rise. "Further, the department's streamlining initiatives have generally not met established goals and have not been widely used by exporters." Between 2000 and 2003, State increased the number of licensing officers to 37; since then five have been transferred to other duties. Only 6% of applicants had chosen to use the new systems and over five years, State had received only three applications for comprehensive export authorisations which were designed to deal with multinational defence programmes such as the JSF. There was therefore, still an urgent need to develop a more coherent approach to export controls, defining more clearly and consistently what had to be controlled and to prioritise and

²⁹One idea was to take the ITAR issue out of the House entirely by negotiating a treaty with the UK and where the Senate had sole Constitutional authority.

³⁰'Bush second term strains defence co-operation', *Jane's Defence Weekly*, 1 December 2004, pp 22-23.

³¹US Government Accountability Office, *Defence Trade: Arms Export Control Vulnerabilities and Inefficiencies in the Post-9/11 Security Environment*, GAO-05-468R, 7 April 2005.

approve applications expeditiously. Above all, it was necessary to “step back and rethink whether the current system can appropriately protect US interests in the post-9/11 environment.”

32. Hyde’s response was immediate and intemperate. He seemed wilfully to misinterpret the GAO’s sentiments, asking why the State Department continued to pursue policies designed to ‘streamline’ or relax arms export controls. The system appeared to be aimed at promoting commercial interests and not protecting US security. He referred to the Committee’s ‘scathing report’ on attempts to exempt the UK and Australia from the control system and challenged the sanguine view that terrorists have so far failed to obtain US technology or equipment. He was determined to introduce legislation requiring a ‘top-to-bottom’ risk assessment of the arms export system.

33. British frustration with the US was increasingly evident. Lord Bach, the UK Procurement Minister publicly expressed his bitterness at the state of affairs. In June 2004, he said that while the Administration had agreed to the terms of an ITAR waiver in May 2003, “delivery of the waiver is now long overdue and the frustration that we feel and the messages that it sends are counter-productive.” There were threats that the UK might bar US defence contractors from bidding for MoD work if the Hunter legislation become law³². UK Foreign Secretary Jack Straw was only slightly more temperate: in evidence to the House of Commons Quadripartite Committee in January 2005, he said HMG was “greatly disappointed” that Congress had deleted the provisions for an ITAR exemption from the 2005 Defence Authorisation Act despite the fact that the UK had been a “close and reliable ally for the US through thick and thin.” Measures to facilitate UK license applications were welcome, and the Administration had done its best, but it was for “Congress to dispose and they came to a different view.”³³ For its part, the House of Commons Defence Committee did not mince its words in summing up the impact of over four years of failure: “We are dismayed that a waiver for the UK from the US ITAR has still to be secured and that protectionist measures in the US has re-emerged. In addition to the potential damage to both UK and US defence industries, there is a real risk that the close relationship between the US and the UK could be harmed.”³⁴

34. As matters currently stand, the UK’s ITAR waiver is stuck firmly in Congressional sand. Towards the end of 2003, Bush and Blair agreed to create a Bilateral Defence Acquisition Committee (BDAC) to facilitate co-operative defence acquisition. While better than nothing, BDAC has failed to resolve the central issues for industry. Agreement has been reached on improving co-operation in basic R&D between the US and the UK involving government research agencies, academia and industry. But while clearly useful and potentially important in establishing the ground work for future joint programmes for the ‘warfighters’ on both sides of the Atlantic, this still falls short of the aspirations expressed in the DoP and the real needs of industry³⁵.

9.0 THE JSF PARTNERSHIP — A CRITICAL TEST CASE

35. The JSF is a key test of US reliability as a partner and of its willingness to accept the logic of globalisation. Conceived as an answer to several emerging US requirements, and although

aimed at the export market, the JSF was not in the first instance seen as a collaborative programme. The influential US Defense Science Board (DSB) reported that international collaboration was a ‘sub optimal’ approach to procurement and the sensitivity of several key technologies made the JSF unsuitable for technology transfer agreements. But once the Marine requirement for VSTOL was incorporated, partnering with the UK was acceptable, following collaboration on the AV-8B. In the MoU of 1995, in return for paying 10% of the development costs, the UK became a full partner of in the JSF, with BAE Systems and Rolls-Royce playing an equal if subordinate role to the selected US prime contractor Lockheed Martin. Several other leading UK companies, many of whom like BAE and Rolls-Royce had American subsidiaries became sub contractors. As a Level One partner, with an important if caveated role in the design and development of the aircraft, the UK government helped to shape the specification and to participate in the selection of the final design and prime contractor. Other countries were subsequently signed up as lower level partners, including Denmark, Holland and Norway, part of the 1970s F-16 European co-production team. Italy also signed up as an ‘Informed Partner’³⁶. The JSF is now the DoD’s “largest co-operative programme.”³⁷

36. As the programme internationalised, technology transfer was always likely to prove a difficult issue to resolve, even for the UK as a Level One partner with a large public investment and technology to trade. As the GAO noted in 2003, “International participation in the programme ... presents a challenge because of the transfer of technologies necessary to achieve the DoD’s goals for aircraft commonality is expected to far exceed past transfers of advanced military technology.” The JSF would test the US procedures for clearances, requiring detailed planning to avoid delay and resulting cost escalation³⁸. From the outset, the US government would not guarantee that participating governments would recoup their investment through direct industry contracts on the JSF. As it was clear that the JSF would “push the boundaries of US disclosure policy for some of the most sensitive US military technology,” as prime contractor responsible for managing both partner expectations and satisfying US regulations, Lockheed Martin would face a major challenge³⁹.

37. As a Level One partner, the UK has had access to some very sensitive US technologies but transfer rights have had to be negotiated at crucial points in the programme. To date, this has involved nine individual technology assistance agreements (TAAs). TAA 9 was negotiated in 2004 and enabled BAE Systems and other lead UK contractors to complete system development and demonstration. TAA 10, covering aspects of production and support, has been especially troublesome. The dispute centres on the degree to which the US will allow full access to core technologies such as source coding which is needed to give the UK sufficient autonomy in aircraft support and maintenance and an ability to upgrade and undertake its own weapons integration⁴⁰. A central question is whether a second final assembly and check-out (FACO) should be set up outside the US. The economics of a second line may be debatable, but the issue is more about politics and autonomy than industrial efficiency. A number of other JSF partners are seeking FACO responsibility,

³²House of Commons Defence Committee, Sixth Report, Session 2003-4, *Defence Procurement*, HC 572, Paras 139-40.

³³House of Commons Quadripartite Committee on Strategic Export Controls, First Joint Report, Session 2004-5, HC 145.

³⁴House of Commons Defence Committee, Sixth Report Session 2003-4, *Defence Procurement*, HC 572, para. 141.

³⁵‘US, British Experts Team for Defense Research’, *Defense News*, 22 August 2005.

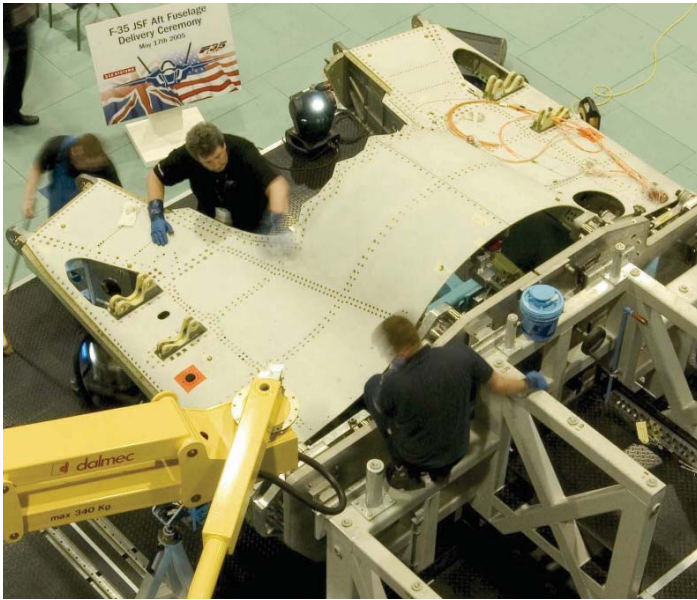
³⁶KAPSTEIN, E.B. ‘Capturing Fortress Europe: International Collaboration and the Joint Strike Fighter’, *Survival*, 46, (3), 2004, pp 141-3.

³⁷General Accounting Office, *Joint Strike Fighter Acquisition*, GAO-03-1012T, Washington DC, July 2003, p 2.

³⁸GAO 2003, *op cit*, p.7.

³⁹GAO 2003, *op cit*, pp 8-9; ‘JSF Seen Testing US as a Reliable Partner’, *Aviation Week*, 14 May 2001, p 38.

⁴⁰‘Aerial Combat’ *Financial Times*, 31 January 2005. Access to source coding would be needed to integrate the MBDA Meteor missile for the RAF instead of the Raytheon AMSRAAM.



The first F-35 JSF aft fuselage being prepared for delivery from BAE Systems Samlesbury.

including Italy where it has become an industry and government priority. However, the UK — government and BAE Systems — made an equally strong if “quieter” bid⁴¹.

38. Several of the other JSF partners are generally disappointed with their level of work share and the degree of technology transfer involved. This has been due partly to the ‘best athlete’ principle adopted by Lockheed where contracts are won on merit. This has enabled the UK to win over 20% of the initial contracts. But for Europeans used to classic work sharing agreements, it has been a less pleasant experience. The integration of technologies such as stealth into the aircraft’s structure has also limited the allocation of production and structural sub contracts⁴².

39. JSF technology transfer was the subject of intense negotiation through the spring and summer of 2004. In what was described as ‘fiery transatlantic exchanges’ involving Bach and Secretary of Defence Hoon and their US counterparts, progress in resolving key questions of UK access was slow. The US was reluctant even to disclose what they considered to be the most sensitive elements. Both government and industry expressed dissatisfaction with the position. Mike Turner, BAE System’s ceo even hinted of a British withdrawal — a bluff perhaps, but an indication of how serious the problem had become. RAF Chief Sir Jock Stirrup admitted that there was “a growing urgency” in addressing technology access and the UK’s ability to support and upgrade the aircraft. This was echoed by the Armed Forces Minister, Adam Ingram, “we have a requirement for maintenance, repair and upgrade capability to provide sovereign support.” Matters have not been helped by an apparent or potential leak of component technology through a European supplier to China with growing pressure on the DoD to tighten still further JSF technology transfer procedures⁴³.

⁴¹The US would prefer all such in service support issues to be managed by Lockheed Martin based at the US-located final assembly ‘DoD Eyes Stiffer Tech Controls’, *Defense News*, 27 June 2005, p 1; ‘Fighter Flap’, *Aviation Week*, 11 July 2005, p 38. ‘Partners jockey for JSF assembly’, *Flight International*, 14 June 2005, p 4.

⁴²The UK government has invested \$2 billion in the programme, and over 50 leading UK companies are involved in one or other of the two prototypes. *Jane’s Defence Weekly*, 24 January 2001, p 2; ‘Hoon scrap’s Britain’s last ever warplane’, *The Daily Telegraph*, 13 July 2001, p 1.

⁴³‘Fighter Flap’, *Aviation Week*, 11 July 2005, p 38; ‘Happily ever after?’ *Jane’s Defence Weekly*, 13 October 2004, pp 26-29.

40. The JSF could dominate the defence aerospace business on both sides of the Atlantic for a generation. With over 2,500 units planned to be bought by the US and its partners, with more likely to follow from export sales and a development programme that could stretch beyond the 2020s, this is a huge contract. For the UK, the JSF is probably the only post-Eurofighter game in town. Almost certainly the last manned strike aircraft the JSF is casting a massive shadow over the European aerospace industry⁴⁴. Dissatisfaction with work share and technology transfer may cost the JSF some of its partners in Europe and elsewhere, but it is still likely to bind a large chunk of European aerospace to the US — a “Trojan Horse, entering foreign markets with the promise of job creation and technology transfer.”⁴⁵ Fear of losing its position on the JSF has already constrained British views about participation in future European programmes.

10.0 CONTINUING US-EU TENSIONS

41. The JSF is a pivotal issue in US-European defence aerospace relations. But this, like much of the flow of transatlantic defence industry investment is largely an Anglo Saxon affair. Other European companies such as Thales and EADS want to increase their business in the US market and there are a number of conventional joint venture proposals involving American and French and German prime contractors, some centring quite sensitive technologies. EADS is fighting hard for the USAF Tanker contract in an alliance led by Northrop Grumman⁴⁶. But the prospect of a high level link between these companies and a US prime would put pressure on the US government to clarify its attitude towards defence industrial co-operation with France and other European states. Given the increasingly fraught state of relations between the two, this is becoming less likely. In any event, none so far have quite the depth or the centrality of the US-UK relationship. However, the long drawn out struggle over JSF technology transfer has begun to merge into a success of other aerospace and defence industry related problems involving the US and Europe. These include the long running Airbus-Boeing subsidy dispute, the EU decision to build the Galileo satellite system, and various regulatory concerns⁴⁷. More recently, the EU’s attitude towards trading with China has intensified the problems.

11.0 THE PERCEIVED THREAT TO US AEROSPACE DOMINANCE

42. At its highest level, the US perceives a concerted effort by Europe to challenge its position in the global aerospace industry. The US has seen various European aerospace industry plans, such as *Vision for 2020*, *STAR 21* and growing EU support for aerospace as a direct challenge to its historic leadership of the world industry. This concern underpinned the Presidential Commission

⁴⁴For some Europeans, the JSF is already a major threat to European strategic independence. See for example, WEU Assembly, Transatlantic co-operation in the field of defence technology, Document A/1883, 30 November 2004, paras 47-49.

⁴⁵Kapstein, *op cit*, p 150.

⁴⁶The defence division of EADS is already working closely with Northrop Grumman on UAVs including developing the Global Hawk as the platform for the ‘Euro Hawk’, NATO surveillance project. ‘Defence and Civil Systems is growth and profit oriented’, *Interavia*, June 2001, pp 4-7. ‘EADS, Northrop to bid jointly on US Contract’, *Wall Street Journal*, 8 September 2005.

⁴⁷Including disputes over ‘Open skies’ in the airline sector and clashes over mergers and acquisition policies involving aerospace companies, for example the rejection by the European Commission on anti trust grounds, of the GE-Honeywell merger. The main reason for rejection related to the financial power the new company which could have used leasing packages to shape civil aircraft engines and equipment procurement decisions.

on Aerospace as well as a number of Congressional Hearings on the state of US aeronautical R&D and the threat posed by Airbus. With the emergence of institutions such as the European Aviation Safety Agency (EASA), some Americans also fear that Europe might seek to shape the international regulatory framework to its competitive advantage. US industry believes that the 25 national European votes at the International Civil Aviation Organization (ICAO) where the international standards for aviation are established “leads to the real possibility that Europe could dominate ICAO proceedings to their competitive advantage.” The European Union ban in the 1990s on the use of all aircraft powered by older US engines with hush kits to bring their noise emissions within the ICAO standard is still cited as a clear example of European regime manipulation⁴⁸. The fact that the EU aviation industry largely backed the US position and that the pressure for the hush kit ban came from the green lobby cut little ice.

43. The US remains concerned about national deviation from international standards. It is monitoring developments to ensure that the regulatory framework in other areas such as engine emissions is not manipulated to threaten US competitiveness⁴⁹. From the EU perspective, the creation of EASA and the development of common positions on regulation is simply an attempt to match the US’s historical power to influence international regimes affecting aerospace. So far, the threat of “competitive regulative” behaviour has been muted, but it could become another arena for transatlantic dispute as Europe’s competence to shape international standards increases⁵⁰. There are more immediate and substantive areas of tension and disagreement.

12.0 THE AIRBUS-BOEING DISPUTE

44. The long running dispute between the US and Europe over commercial aircraft subsidies got closer to a full-scale trade war in October 2004 when the US abrogated the 1992 Agreement on large commercial aircraft and filed a case with the World Trade Organisation (WTO)⁵¹. The EU counterclaimed. Both sides tried to resolve the dispute, but talks broke down in May 2005, leaving the WTO to sort out this 20-year-old struggle. The outcome could be very messy for both sides and for the global aerospace business generally. But neither side is prepared to back down and there are signs that things could get worse as the WTO may take a closer look at tax incentives for R&D⁵². The issue is now formally subject to WTO panels which may take several years to report, but what ever the final result, the dispute has intensified opposition in the US to reform of transatlantic defence trade and European presence in the US market⁵³.

⁴⁸Statement by DOUGLAS, J. Aerospace Industries Association of America Hearing on ‘The US Jet Transport Industry: Global Market Factors Affecting US Producers’ House Committee on Transportation and Infrastructure, Subcommittee on Aviation, 25 May 2005

⁴⁹Department of Commerce, *The US Jet Transport Industry*, Washington DC, March 2005, pp 94-100. Although the Department of Commerce now appreciates the influence of the European environmental lobby.

⁵⁰There is a hint of this in reports that the US FAA is investigating the likely effects of A380 air turbulence on ATC separation, as well as the possibility of imposing unprecedented limits to ground manoeuvring speed. This would have serious consequences for the A380’s ability to operate into US airports. ‘Airbus A380’s Engine Wake Stirs US Safety Concerns’ *Wall Street Journal*, 5 October 2005.

⁵¹For background to this dispute see, HAYWARD, K. Trade Disputes in the Commercial Aircraft Industry: a Background Note, Royal Aeronautical Society, April 2005.

⁵²‘Taxing Discussions’, *Aviation Week*, 18 July 2005, p 37.

⁵³Although the Airbus partners have ‘deferred’ taking up government investment the A350, a direct competitor to the Boeing 787, the US has so far shown little sign of backing down.



A380 maiden flight.

13.0 GALILEO

45. The EU development of a space-based location and navigation system Galileo, as a complement to the American GPS and the Russian GLASNOS systems, also caused difficulties with the US. While formally a civil only system, in its most accurate mode, Galileo promises levels of precision as good as if not better than GPS. This was the main area of US concern, and the US wanted a number of safeguards to ensure both compatibility with GPS and security against misuse. The US generally felt Galileo to be an unnecessary duplication of the GPS provision and was sceptical that the EU would make money from their service. The Europeans, on the other hand, viewed Galileo as a clear statement of space autonomy in a sector so clearly dominated by the US and its military space operations⁵⁴. The EU also argued that Galileo, with improved technology, would offer a superior capability.

46. The involvement of Israel, India and China further underlined EU determination to assert political and strategic independence in a critical technology (even if ostensibly dedicated to civil functions). However, Chinese participation further disturbed the US and the American government was not convinced by assurances from the EU that the Chinese would not have access to the most accurate signals⁵⁵. However, the June 2004 agreement will enable the US and NATO forces to locally jam other satellite navigation signals (GPS civil codes, GLOSNAS and all Galileo signals) while preserving the GPS military code. But again, European ambitions in aerospace had added generally to tensions in the US–EU relationship.

13.0 THE CHINESE ARMS EMBARGO

47. Proposals to lift the EU’s embargo on arms sales to China in place since 1989 was even more problematic. In December 2004, the EU Council stated that it would work towards lifting the embargo, although the EU Code of Conduct on arms sales generally would still apply to individual cases. Congress’ reaction was uniformly hostile⁵⁶. On 2 February 2005 the House of Representatives passed overwhelmingly a resolution condemning the EU’s position. It warned that such a development was

⁵⁴LINDSTROM, G. and GASPARINI, G., *The Galileo satellite system and its security implications*, ISS Paris, Occasional Papers, No 44, April 2003.

⁵⁵GUAY, T.R. *The Transatlantic Defence Industrial Base: Restructuring Scenarios and Their Implications*, The Army College, Carlisle, PA, USA, April 2005, p 13.

⁵⁶Senate Committee on Foreign Affairs, *The Lifting of the EU Arms Embargo on China* 31 March 2005. Opening Statements by Senator Richard Luger (chairman), Senator Joseph Biden (Ranking Minority Member), Dr Richard Grommet Congressional Research Service National Defence Specialist, Bates Gill, CSIS and Peter Brookes Heritage Foundation.

"inherently inconsistent with the concept of mutual security interests that lies at the heart of US laws for transatlantic defence co-operation at both the governmental and industrial levels and would necessitate limitations and constraints in these relationships that would be unwelcome on both sides of the Atlantic."⁵⁷

48. The damage spread to the Senate, with a bipartisan resolution, albeit non-binding, issued on 17 March warning that lifting the embargo "would potentially adversely affect transatlantic defence co-operation, including future transfers of United States military technology, services, and equipment to European Union countries." It urged the EU to strengthen the embargo, to make its code of conduct "legally binding and enforceable in all European Union member states" and "more carefully regulate and monitor the end-use of exports of sensitive military and dual-use technology."⁵⁸ Even if the Americans seemed ill-informed of the details of the EU's procedures and overestimated the relevance of the embargo to EU arms sales to China, what mattered was the perception that the EU seemed on the verge of opening the door to uncontrolled arms sales to China and that US security interests (especially in respect of Taiwan) would be seriously compromised⁵⁹. US Senators also believed that the EU was also lifting the arms embargo for the crudest of commercial reasons such as selling European commercial aircraft and other industrial products⁶⁰.

49. The Bush Administration reiterated its opposition to the EU's actions. Senior US officials warned that the US would regulate US technologies more closely and implement more restrictive rules on co-operation with EU entities that traded with China — moves that would counteract the White House's desire for a deepening of EU-US defence co-operation. Lifting the embargo would also strengthen those in Congress who supported the protectionist 'Buy America' provisions, driving more moderate colleagues in their direction. The Bush administration said that it would not stand in the way of Congress enacting punitive legislation that would not necessarily distinguish between EU members who did not engage in defence trade with Beijing and those that did⁶¹. This was a hint that the US would take a more stringent view of co-operation in general if there was any chance of US technology turning up in the wrong hands. It certainly strengthened the position of known hawks in the State Department with warnings of a severe 'spanking' from Congress⁶².

50. The UK government and the House of Commons were firmly opposed to lifting the embargo without an adequate alternative. The House of Commons was concerned that the UK was the only EU member to have published a clear position on what was embargoed and this had led to confusion about the intentions of the EU collectively and of individual member states, especially in the US. This was supported by cases where UK companies had been refused licenses but other EU companies had been allowed to export to China⁶³. With perhaps less to lose from provoking the US and more to gain generally from demonstrating warmth towards the Chinese, the French government was less inclined to compromise. According to French Foreign Minister Michel Barnier, there was a strict arms export regime in place and the embargo made little real difference to trading with China. Threats from the US would not help to improve transatlantic relations⁶⁴.

⁵⁷Cited Quadripartite Committee, *op cit*, para 130.

⁵⁸'EU Stands firm on lifting embargo', *Jane's Defence Weekly*, 30 March 2005.

⁵⁹Quadripartite Committee, *op cit*, para 134.

⁶⁰Senate Committee on Foreign Affairs, *op cit*.

⁶¹'EU Stands firm on lifting embargo', *Jane's Defence Weekly*, 30 March 2005

⁶²Greg Suchan, Dep Asst Sec, Political Military Affairs, State Department, 'US warns EU on China Arms Ban', *Flight International*, 29 March 2005, p 4.

⁶³Quadripartite Committee, *op cit*, paras 115-16.

⁶⁴'French Foreign Minister defends EU move to lift arms embargo on China', *Financial Times*, 7 March 2005.



EADS/Northrop Grumman KC-30 tanker submission to the USAF.

51. British companies (especially those with extensive US interests) rushed to distance themselves from the EU's position. Mike Turner, ceo of BAE Systems, expressing concern that the US might block the proposed acquisition of the US defence company UDC, stated categorically that his company would not sell equipment to China⁶⁵. Other European companies with interests in the US or joint ventures with US companies (Thales again) and those concerned to develop business there were "keen that a solution be found in agreement with Europe and the US."⁶⁶ EADS, mindful of its bid for the USAF tanker contract, also stated that it would not sell weapons to China even if the embargo was lifted. However, the position of Airbus, owned by EADS and BAE Systems, and clearly focused on the Chinese market was more ambiguous⁶⁷.

52. Congressional hawks were not impressed, claiming European sales of components and technology transfer were just as dangerous to US security as complete weapons systems. Henry Hyde warned that the dispute raised "fundamental questions about whether defence industrial co-operation with Europe is becoming a national security liability for our country." He went on to single out the JSF and the prospect that technology could leak via European partners to the Chinese⁶⁸. While the EU backed off immediate confrontation by deferring a decision on the embargo to after the end of the British Presidency at the end of 2005, its actions have clearly increased tension in transatlantic relations⁶⁹. Henry Hyde, now backed by the ranking Democrat on

⁶⁵*Aviation Week*, *op cit* 14 February 2005, pp 38-39. In the event, the UDC deal met no US CFIUS objections, 'BAE clears big takeover hurdle', *Financial Times*, 19 April 2005. Other British commercial interests seemed more exercised by the wider commercial opportunities afforded by the Chinese market. For example, the SBAC, the UK Aerospace Trade Association stated that it was in favour of lifting the embargo, as the tight UK controls over arms sales should prevent technology leakage. *Financial Times*, *op. cit* 7 April 2005.

⁶⁶Manfred Bishoff, co-chairman EADS, 'Arms Embargo on China divides defence industry', *Financial Times*, 6 April 2005.

⁶⁷'For EADS, US Market Trumps China', *Defense News*, 18 April 2005.

⁶⁸'Congress Worries That West Arms China', *Defense News*, 18 April 2005.

⁶⁹'Europe ponders consequences of US threat', *Flight International*, 5 April 2005, p 32. The continuing saga of the Chinese Arms Embargo seems to have had a greater impact on the state of US-EU relations than relations with China. China buys and will continue to buy most of its military equipment from Russia, but its continued application to China puts it on the same level as Burma, Congo and Zimbabwe. Lifting the embargo would be a clear political signal to the Chinese government — and one which the Chinese have implied would bring considerable benefits to EU trade. The US was already sensitive to potential security threats emanating from EU collaboration with China, notably over agreements to participate in the Galileo satellite positioning system which while formally a civil programme with strictly controlled access to the most accurate data, has military potential. See GRANT, C., 'The Lure of Beijing', *the guardian*, 25 May 2005.

the House International Relations Committee, has proposed a whole new raft of reporting measures for European companies selling arms to China. This would include a new export licensing regime and Congressional notification of deals. He made no distinction between individual states, but singled out France, Germany, Italy and the Czech Republic, as well as the UK for showing no signs of “ceasing or even moderating” sales⁷⁰.

14.0 EUROPEAN DIB PROTECTIONISM

53. Signs of increasing US protectionism have led to a resurgence of possible European counter measures. The French have consistently advocated the need for a stronger response to the US with the British usually defending a more open market position — albeit with a commitment to European programmes where appropriate. As we have noted, there have already been several moves to ‘design-out’ US components and equipment in European programmes. The creation of the European Defence Agency (EDA) in June 2004 — the latest and arguably one of the most important steps towards creating a more coherent European defence market — has signalled another round in the debate over the future of European procurement⁷¹.

54. There have certainly been hints that the EDA might take a more aggressive view of US access to the European market. According to its first director, Nick Whitney, “The jury is still out on whether the European Defense Agency’s forthcoming plan to promote cross-border procurement within the European Union should eventually include a buy-European preference. ... The member states are still too split on the issue. I will say, however, that I do find it disturbing that European defence technology flows freely to the United States, while US technology does not go the other way. This weighs heavily in our thinking about what should figure in a healthy defence industrial base for Europe in the future.”⁷²

55. There are signs that some elements of European industry would support a stronger assertion of European preference. Again there is a clear difference between the French who tend to see the EDA as a platform to create a European DIB with a regional preference and the British who view it as a capability driven organisation that should be able to acquire the most advanced solutions to military needs⁷³. On a similar plane, French national moves further to obstruct foreign investment in the defence and aerospace sectors will hardly help to encourage US attitudes towards wider transatlantic defence trade⁷⁴.

15.0 EU-US RELATIONS — RIFT OR REPAIR?

56. Over the past ten years, the US and European defence and aerospace industries have become more closely engaged than probably at any time since the 1970s. Much of this has been due to linked supply chains and investment, with the JSF and one or two other important programmes providing a focus for collaboration⁷⁵. But there is also much hostility. The Presidential

helicopter campaign was accompanied by a lot of US flag-waving. The Airbus dispute and the Chinese embargo affair have unquestionably increased anti-European sentiment. And it should be remembered; only the UK really has that much to lose from an open breach with the US over defence trade.

57. The House of Representatives has continued to stir the pot by inserting in its version of US defence budget legislation passed in May 2005, a requirement barring any company of a WTO member state in receipt of government subsidies from bidding for DoD contracts⁷⁶. The primary target was EADS and its Airbus-based bid for the USAF tanker programme, but there is an implicit threat to all of the Airbus partners including BAE Systems⁷⁷. While the Senate would have to pass similar legislation, the move is being closely watched by the UK Government and has been the subject of high level representations⁷⁸. But even if not legally binding, such actions clearly reflect a political climate that might be less welcoming to European companies. This time US industry was less quick to condemn Congressional actions. Speaking for the US aerospace trade association, AIA, John Douglas said that “if Europe wants to do business in the USA, then they have to get along with us in the WTO. Absent the dispute, the markets are open.” Hunter and other colleagues are also targeting the CFIUS process, arguing that it has been far too lax in authorising foreign take-overs of US defence assets. Other critics of the process have suggested that Congress should reassert its Constitutional prerogatives in regulating commerce with foreigners⁷⁹.

58. There are then, ominous signs of a growing tension in US-European defence industrial relations⁸⁰. As one US analyst observes; “the dominance of the US in the defence industry and the European response will likely speed up a drifting apart of the transatlantic relationship.” While this does not translate into enmity, it does imply more and perhaps increasingly serious disputes over trade and trading with states to which one pole of the old alliance objects⁸¹. Inevitably perhaps, this could put the UK in an increasingly difficult position. Clearly linked to Europe in the civil sector and participant in a wide range of defence programmes, UK industry nevertheless has a large and still growing interest in the US. On the one hand, this is creating difficulties with its European partners. The success of the JSF will largely determine the future health of the UK defence aerospace sector and the links with the US are also affecting British willingness to embrace European programmes in UAV and UCAV

⁷⁰*Financial Times*, 30 June 2005. US firms can also get caught in a China issue: Boeing might have infringed US law by selling a controlled gyrochop in 90 aircraft sold to China.

⁷¹‘European Defense Agency May Buy UAVs’, *Defense News*, 25 April 2005; ‘Unmanned Ventures’, *Aviation Week*, 30 May 2005, p 27.

⁷²Evidence by Nick Whitney to House of Lords European Union Committee, 9th Report Session 2004-05, HL 76 paras-5-10.

⁷³GUAY, T.R. *op cit*, p 13.

⁷⁴‘France to List Firms Off-limits to Foreign Buyers’, *Defense News*, 5 September 2005. Possible German attempts to protect MTU would not help either.

⁷⁵This includes a wide-ranging MoU between EADS and Northrop Grumman. However, the main output so far has been marketing agreements for US technology in Europe such as the Global Hawk UAV.

⁷⁶‘Between us and them’, *Flight International*, 7 June 2005, pp 52-56. The GAO has also produced a critical report on the DoD’s ability to implement its FOCl procedures governing foreign-owned contractors. GAO July 2005, *op cit*.

⁷⁷EADS has tried to outflank US protectionism by proposing to team with Northrop Grumman and by declaring that a production line would be located in the US. ‘Game Changer’, *Aviation Week*, 13 June 2005, p 36.

⁷⁸‘Bill threatens BAE in US’, *Independent on Sunday*, 29 May 2005.

⁷⁹‘US Lawmakers Target Foreign Acquisitions’, *Defense News*, 25 July 2005. Hyde and Hunter are set to retire at the next Congressional elections but one should not necessarily expect a mellowing of Congressional opinion.

⁸⁰This is already affecting a critical area of potential collaboration to facilitate inter-operability in a network centric context. The Network Centric Operations Industry Consortium, a 70 company international grouping has had to separate its US and non-US members citing problems with US technology transfer licences. This has led to the emergence of a different non US group led by Rheinmetall posing a threat to transatlantic and wider standardisation. The EU has also expressed concern that the US will block foreign bids for Homeland Security programmes by seeking to extend WTO defence exemptions to the sector. ‘Between us and them’, *Flight International*, 7 June 2005, pp 52-56; ‘transatlantic Rift’, *Defense News*, 13 June 2005, p 48.

⁸¹JONES, S.G. *The Rise of Europe’s Defense Industry*, Brookings Institute, May 2005, p 7.



The STOVL version of the X-35 JSF.

development⁸². For the moment, the UK is backing a domestic technology acquisition programme, 'Nightjar', but the MoD has signed up to a US research initiative and 'Nightjar' looks like an option on leveraging UK technology in a US-led programme⁸³.

59. This could be a Faustian bargain as the UK becomes even more dependent on the US for support and up grade technology and requiring US permission to integrate new weapons. And as BAE Systems concedes, continuing problems over technology transfer hampers collaboration — to the detriment of both sides — in existing programmes such as JSF or in new areas such as data fusion. As Dick Olver, chairman of BAE Systems observed, "combined with US capability, we believe we would be cutting-edge. But we are waiting for approval to contribute what we know in order to develop more capable, interoperable solutions." The fact remains, he continued, "the US and the UK defence partnership has yet to produce a coherent response to the phenomenon of globalisation."⁸⁴

60. The lure of US defence money and technology tends to overcome the formal barriers to co-operation. ITAR *et al* and a few Congressional hawks notwithstanding there's money to be made in the US. BAE Systems and many other UK firms have continued to invest in the US, and other European companies have not given up hope of following the UK's lead. In 2004 alone, UK companies announced over \$2 billion worth of deals in the US and in 2005, BAE bought United Defence Industries for \$4.2 billion. QinetiQ bought several US research orientated companies amounting to over \$300 million. Chris Geoghegan, BAE System's coo put things in context: "There is no doubt today we are not dependent on technology transfer for the business model we are pursuing, but if we are able to overcome the problems, you have an even bigger premium to that business, it would be the icing on the cake."⁸⁵ Indeed, with BAE opting out of a number of European joint ventures, its US orientation grows ever more evident. Nevertheless, it is a less than

optimal situation if a foreign investor is still unable to repatriate technology and to run his business in the most effective globalised fashion. It is a constraint on autonomy and forces companies into dependent rather than interdependent modes of co-operation.

61. The strong Anglophone bias to the relationship threatens to bring its own problems. Other European companies are trying to play catch up with the UK, but most are still very high on the learning curve, largely confined to after-sales and marketing agreements. One implication has been a slow drift away from Europe on the part of a large element of the UK defence aerospace industry. This could weaken the European DIB in the long term; but it may also create higher levels of dependence in the UK as companies lose the more egalitarian access to technology usually associated with European programmes. It also poses an interesting set of potential problems for the UK defence customer if its main domestic suppliers find the Pentagon a more attractive prospect⁸⁶. There have been some hints from British ministers that the lack of progress on the technology transfer front may be re-invigorating interest in stimulating European defence industrial strategies. However, the weight of UK corporate investment would still tend to maintain the UK orientation towards the US, especially if European government were to increase their barriers to transatlantic trade⁸⁷.

62. From a wider transatlantic perspective, a narrowly defined collaborative framework increases its vulnerability to the kind of wider disputes over security and aerospace trade such as in commercial aerospace, autonomy in space and broader diplomatic tensions such as the rift over China. For the moment, commercial pragmatism and the global web of suppliers and sub contractors provides cement to hold the edifice together. But this is not a happy position for the longer term. It is nothing like the binding relations found in 'normal' industries such as automobiles, telecommunications and IT. It should also be remembered that while US companies might generate useful additional business in European defence markets, the Europeans potentially have much the better return from liberalisation. Perhaps simply due to this fundamental difference in market power, US and European aerospace and defence industries, even after decades of attempts to build better relations, are little closer in fundamental terms than they were three decades ago.

⁸²The WEU Aerospace Committee has reported that the JSF programme is seriously undermining future European programmes tying the UK and Italy to the US for a generation and denying their capabilities to European options. 'Europe warned on F-35 dangers', *Flight International*, 14 June 2005, p 4.

⁸³'UK UCAV', *Aviation Week*, 13 June 2004 p 44.

⁸⁴Olver was deputy ceo of BP. 'BAE Chief: Lower US Tech Transfer Rules', *Defense News* 12 July 2005.

⁸⁵'UK Firms Flex Muscles in US Market', *Defense News*, 22 August 2005.

⁸⁶Paradoxically, the gap in Britain may increasingly be filled by foreign-owned entities such as Finmeccanica and Thales.

⁸⁷'UK to Share Industrial Strategy', *Defense News*, 19 September 2005.



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