



Calhoun: The NPS Institutional Archive
DSpace Repository

Faculty and Researchers

Faculty and Researchers' Publications

2000

The NATO capabilities gap and the European Union

Yost, David S.

International Institute for Strategic Studies

Survival, vol. 42, no. 4, Winter 2000-01, pp. 97-128.

<http://hdl.handle.net/10945/38796>

This publication is a work of the U.S. Government as defined in Title 17, United States Code, Section 101. Copyright protection is not available for this work in the United States.

Downloaded from NPS Archive: Calhoun



Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

Dudley Knox Library / Naval Postgraduate School
411 Dyer Road / 1 University Circle
Monterey, California USA 93943

<http://www.nps.edu/library>

The NATO Capabilities Gap and the European Union

by David S. Yost

The defence-capabilities gap that divides the United States from its European allies is real, and it matters. The gap can most usefully be viewed as the aggregate of multiple gaps relating to the organisation and conduct of large-scale expeditionary operations. Large transatlantic disparities in the ability to mount such operations became painfully obvious during NATO's Kosovo intervention in March–June 1999 and spurred commitments on both sides of the Atlantic to narrow the gap. However, a close examination of the European Union's post-Kosovo efforts to develop an autonomous military capability reveals the serious obstacles to improving European forces.

Defining the Gap

It is difficult to make comparisons between US and European military capabilities for at least three reasons. First, scenarios differ, and the employment of capabilities is scenario-dependent. Different capabilities can be used to achieve similar results; similar capabilities can be used in different ways to achieve distinct results and so on. Second, even in a simple comparison of similar capabilities – for instance, air-refuelling aircraft – basic problems in counting rules arise, quite aside from the quality of the aircraft and the readiness and proficiency of the personnel.

The most fundamental 'counting rule' question is, who is coming to the party? What forces are likely to be made available in specific contingencies? For example, with over 600 tanker aircraft (KC-135s and KC-10As), the United States has about ten times as many aerial-refuelling tankers as the NATO European countries put together. It is obviously preposterous, however, to suppose that all US tanker aircraft would be available to deal with a crisis in Europe: under all foreseeable circumstances, the United States would retain some tanker aircraft in East Asia, the Persian Gulf and North America. For that matter, France, the United Kingdom, and other European nations would also probably retain some tanker aircraft at home for national defence purposes, unless the contingency at hand threatened their own national survival.¹

David S. Yost is a Professor at the Naval Postgraduate School, Monterey, California. He is the author of *NATO Transformed: The Alliance's New Roles in International Security* (Washington DC: United States Institute of Peace Press, 1998). The views expressed are his alone and do not represent those of the Department of the Navy or any US government agency.

As this judgement suggests, on the European side as well, the 'who is coming?' question also involves political and force-allocation issues. Which European nations should be counted in a gap assessment? Should all the European Union nations be counted, or all the European members of NATO, or both?² Would it not be misleading to count all the capabilities of all these nations when (a) participation in a 'Petersberg task' crisis-management operation is voluntary and hence optional and (b) no nation is likely to commit all of its military forces to such an operation?³

Furthermore, the 15 members of the European Union have approved the principle of *ad hoc* crisis management consultations with 15 other countries in so-called '15-plus-15' meetings.⁴ The other 15 countries consist of the six NATO European countries not in the EU (the Czech Republic, Hungary, Iceland, Norway, Poland, and Turkey) and nine countries that have applied for EU membership (Bulgaria, Cyprus, Estonia, Latvia, Lithuania, Malta, Slovakia, Slovenia, and Romania). Should the US capabilities presumed available for a specific operation be compared with those of all 30 countries that might hypothetically participate in an EU-led operation?

The third factor complicating a US-European capabilities-gap assessment also involves complex political judgements: the possibility of EU access to common NATO assets and even, in some circumstances, US national assets under the auspices of alliance-approved Combined Joint Task Forces (CJTF). What are the NATO assets of interest to the European allies in CJTF? According to one definition, NATO assets are those funded by NATO common infrastructure budgets, such as Airborne Warning and Control System (AWACS) aircraft, headquarters elements, pipelines, radars and other air-defence and air command-and-control systems, communications equipment, airfields and storage depots. By another definition, NATO assets also encompass the US capabilities regularly put at the disposal of NATO: air-refuelling capabilities, heavy long-distance air transport for troops and equipment (such as C-141s, C-5s, and C-17s), and satellite intelligence, communications, and navigation data. US national assets clearly remain ultimately under US control, however, and should not be attributed to Europeans in a gap assessment.

An Operational Definition of the Gap

The US-European capabilities gap should be defined as an aggregate of many gaps. In some areas, there are technology gaps.⁵ In most areas, there are investment and procurement gaps. These gaps add up to US superiority, quantitative to be sure and sometimes qualitative, in many areas of military capability. These include strategic mobility assets (such as aerial refuelling and air transport), surface ships and submarines, precision-strike munitions, electronic warfare, power projection (in the sense of long-range air and missile strikes), and what the US military calls C⁴ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance).

The multiple gaps add up to significant US advantages. The United States is currently superior to any combination of its European allies in its ability to plan, conduct and sustain theatre-wide expeditionary operations. Of all the

NATO allies, only the United States can project power in the form of large-scale long-range non-nuclear air and missile strikes at great distances from its homeland. Only the United States can deploy hundreds of military aircraft far beyond its homeland and even transport the logistics to upgrade airfields with limited facilities. The synergistic effects of pre-eminence in these areas (and others) imply an even greater overall superiority.

Broad-brush descriptions of the gap are abundant. According to US Secretary of Defense William Cohen, 'NATO [European] countries spend roughly 60% of what the United States does and they get about 10% of the capability. That has to change.'⁶ As François Heisbourg, the French expert who chairs the Geneva Centre for Security Policy, has pointed out,

With defence spending close to 60% of America's, the Europeans could in theory be expected to achieve 60% of US capabilities. They are probably below 10% in the realm of strategic reconnaissance and theatre-level C⁴ISR, at substantially less than 20% in airlift capacity (by volume or tonnage), and possibly at less than 10% in terms of precision guided air-deliverable ordnance.⁷

For George Robertson, the NATO Secretary-General and former British Secretary of State for Defence,

The Kosovo air campaign demonstrated just how dependent the European Allies had become on US military capabilities. From precision-guided weapons and all-weather aircraft to ground troops that can get to the crisis quickly and then stay there with adequate logistical support, the European Allies did not have enough of the right stuff. On paper, Europe has 2 million men and women under arms – more than the United States. But despite those 2 million soldiers, it was a struggle to come up with 40,000 troops to deploy as peacekeepers in the Balkans. Something is wrong, and Europe knows it.⁸

Origins of the Gap

In contrast with most of its European allies, the United States has been preparing forces for trans-oceanic power projection for decades. The Cold War scenario of a major NATO–Warsaw Pact war called for most NATO European military establishments to 'fight in place' rather than to project troops or firepower at great distances. Only Canada, the Netherlands and the United Kingdom were prepared to assist the United States with tasks such as reinforcing Denmark, northern Italy, northern Norway and eastern Turkey; and the United States was the main source of reinforcements for allied forces at the inter-German border. Partly because the United States was deploying forces from North America or even further afield, the US defence establishment for decades built and improved fleets of large air-transport aircraft, air-to-air refuelling tankers, carrier-battle groups, amphibious ships, and other mobility assets relevant to trans-oceanic power projection and expeditionary operations.

The Americans also put more into logistic support than most of the other allies, who were generally even less prepared for prolonged operations than the United States. This pattern explains the situation alluded to by Robertson.

Several European allies have found it difficult to organise forces to send to the Balkans for peacekeeping because their troops lack logistic support. During the Cold War, most NATO European troops were expected to leave their garrisons and defend their nations against a Warsaw Pact assault; the Soviet and other Warsaw Pact troops were expected to come to them. Several European allies have, however, adapted slowly to the new circumstances and requirements; they have continued with conscription and with Cold War force structures, training and procurement patterns, with comparatively little investment in mobility or logistic support.

Throughout the history of the alliance, the United States has spent a higher percentage of its GNP on defence than most of the other allies and, to be sure, far more in absolute terms. Because the European defence ministries have generally spent significantly more than the Americans on personnel, they have spent proportionately less on procurement. Moreover, the Europeans have generally spent this smaller budget share less efficiently, partly because they have bought less and partly because they have paid more for comparable weapons.⁹ Furthermore, the Europeans have invested much less than the Americans in military R&D, and the European efforts have for the most part been scattered and dispersed in national programmes.

While the duplication of overhead costs in separate national procurement and training establishments accounts for part of the European capability shortfalls, the long-standing reliance on large conscript armies in most NATO European countries, with the exception of Britain, is even more significant. According to Heisbourg,

the single most important cause of the massive discrepancy between US and European capabilities flows from European force structure policies ... Indeed, the Europeans reign supreme in one area, that of unusable and ultimately unaffordable manpower. The forces of the European Union countries field 1.9 million under uniform versus 1.4 million in the US ... The net effect is that after spending for the corresponding force structures, there is little left for European R&D, acquisition or for O&M [operations and maintenance] spending. An extreme case is provided by Germany, Greece, and Italy, which together field 800,000 military personnel (close to 60% of the US total) whereas they spend 12% (\$8bn) of what the US does on procurement (NATO definition).¹⁰

As Heisbourg suggests, some cases are more extreme than others. According to an Italian analysis, 'After Luxembourg, Italy is the alliance country which currently spends most from its defence budget on staff expenditure (72%, which mainly goes toward military pensions and the upkeep of the national service system). Thus, in 1998, only 12.7% of its budget was left for hardware ... as against, for example, Great Britain's 27%.¹¹ The most recent NATO analyses indicate that the UK's estimated procurement spending in 1999 as a percentage of the defence budget (27.5) was matched only by Turkey (also 27.5), followed by the United States (24.4) and Norway (23.5).¹² Political and organisational obstacles often hamper attempts to introduce new defence

spending priorities or to change methods of force recruitment and procurement. France has, however, nearly completed its 1996–2001 transformation towards all-professional armed forces. Italy, Portugal and Spain have also decided to end conscription. Germany is, however, unlikely to abandon conscription entirely in the foreseeable future.

François Cailleteau, a French expert in defence economics, has compared the US military posture with the aggregate of the military postures of the five largest members of the European Union (the UK, France, Germany, Italy, and Spain), which together account for over 80% of its defence spending. Relying on data from the IISS *Military Balance*, Cailleteau has concluded that US naval tonnage is three times greater than that of the 'EU five' for nuclear-fuelled ballistic-missile-bearing submarines (SSBNs) and surface combatants, and four times greater for operational transport and support ships; that the United States has 66 nuclear-fuelled submarines (SSNs), and the 'EU five' 18 SSNs; that the US Navy has 12 catapult-launch aircraft carriers and 29 cruisers, and that the 'EU five' collectively have only one cruiser and one catapult-launch aircraft carrier. While the 'EU five' have about 100 frigates against America's 40, the US frigates are of a single type and displace 2,800 tons; and the European frigates are of 'innumerable' types and a third displace 1,300 tons or less.¹³

Cailleteau's conclusions are similar for other military capabilities. For modern combat aircraft, the United States has a 2.5:1 edge over the 'EU five.' For airlift, the US advantage is 3.5:1 in numbers of aircraft; and two-thirds of the 'EU five' planes are C-160 Transalls, a third smaller than the C-130, the smallest US transport aircraft. For tanker aircraft, the ratio is around 30:1. The United States has 7,600 main battle tanks, all variants of the M1 *Abrams*, while the 'EU five' have 4,800 main battle tanks, of six highly different models (AMX 30-B2, *Leclerc*, *Leopard 1* and *2*, *Challenger 1* and *2*). The US Army and Marine Corps together have 1,664 attack helicopters, of which 753 are AH 64 *Apaches*, with 'firepower very superior to that of the Gazelles and BO-105s in the European armies.' Moreover, the US Air Force has 366 A-10 ground-attack aircraft, for which the Europeans have no equivalent.¹⁴ The asymmetries are also acute in C⁴ISR capabilities such as submarines, intelligence and communications satellites,¹⁵ aircraft for intelligence and reconnaissance,¹⁶ and offensive electronic warfare.

Capabilities gaps have furnished the backdrop for burden-sharing debates, which have been virtually continuous since the founding of the alliance. These debates have, for the most part, consisted of Americans asking Europeans to increase their level of defence spending. During the 1950s, as their post-war economic recovery proceeded, the Europeans could plead incapacity. Since the 1960s, Europeans have repeatedly stressed certain 'output' measures instead of the input measures based on GNP percentages favoured by American critics of European 'free-riding.' The outputs stressed in some European-authored comparisons have downplayed capabilities gaps or have portrayed them as favourable to NATO Europe. In 1990, Jane Sharp, a British commentator, deplored

the myth that the US bears a disproportionate share of the NATO burden, especially in terms of the contribution of conventional forces. Despite continued complaints about 'free riders,' European NATO countries provide 90 percent of the manpower, 85 percent of the tanks, 95 percent of the artillery and 85 percent of the combat airpower in the Atlantic-to-the-Urals area covered by the CFE [Conventional Armed Forces in Europe] negotiation.¹⁷

Sharp's statement is representative of the arguments advanced by Europeans in burden-sharing debates during the Cold War. Except for aircraft, it omits most of the advanced military capabilities relevant to power projection; and it obviously makes no allowance for the qualitative distinctions that matter more in combat than in arms-control negotiations.

Since the late 1970s, when the last great US defence build-up began with President Jimmy Carter, the European allies have been unwilling to invest in military forces, notably in modernisation and research and development, at levels approximating those in the United States. The Carter administration persuaded the allies to approve a Long-Term Defence Program (LTDP) and a goal of increasing defence spending by 3% a year in real terms, but the performance of the allies in meeting the goals was uneven. The LTDP objectives included capabilities that are currently identified as key elements of the gap, such as logistics, electronic warfare, and command, control, and communications (C³).¹⁸ Similarly, the Reagan administration pursued a Conventional Defence Improvements (CDI) programme that was formally endorsed by NATO's Defence Planning Committee in 1985. The CDI focused on several of the same capabilities as the LTDP, but was equally unsuccessful in preventing a widening of the US-European gap in conventional military capabilities. The magnitude of the gap in logistics, C⁴ISR, and long-range precision-strike capabilities became publicly manifest during Operations *Desert Shield* and *Desert Storm* in 1990–91, but it was apparent to experts in the late 1970s and early 1980s.¹⁹

Despite reductions in defence spending in the United States and most other NATO countries since the late 1980s, the gap between US and European investments in advanced military capabilities has widened since the late 1970s. The United States is far ahead of its NATO European allies in the assets needed for large-scale joint and combined operations such as airlift, sealift, and command, control, communications and intelligence (C³I). While this is especially true of operations beyond Europe that would require the airlift and sealift necessary for genuine 'strategic mobility,' it also applies to operations within Europe.

Even in Bosnia, in close proximity to NATO European territory, the United States had to augment existing NATO capabilities with unique communications assets. According to General Klaus Naumann, the German officer then serving as chairman of NATO's Military Committee, the United States provided 46 of the 48 communications satellite channels used by the Implementation Force (IFOR) in Bosnia in the period December 1995–December 1996. In Naumann's words, 'It indicates quite clearly that without American

support, an operation like [IFOR in Bosnia] could not be done ... There is no security for Europe without the Americans.²⁰

Many French analysts and officials argue that, despite the obvious capability gap, there is no technology gap. European science, technology, and industrial assets are up to US levels, but the Europeans have spent less than the Americans and have pursued different research and development strategies and procured different types of equipment. According to an official French Ministry of Defence analysis,

This conflict illuminated the differences between the military means of the United States and Europe. The United States has developed extremely large military means that are justified by America's world ambitions since the end of the Second World War. These [European-American] gaps also result from the research efforts and armament programs underway [in the United States] since the beginning of the 1980s. ... Our technological backwardness in certain areas, such as information mastery in real time or stealth, is linked to the lower level of financial means allocated to research (Europe's defence research budget is a third of the US one) rather than to the know-how of European companies. The Kosovo conflict has, moreover, revealed quantitative deficiencies that could affect our ability to sustain an operation of long duration as well as capabilities that were completely lacking (cruise missiles, radar satellite observation systems, offensive jammers, aircraft identification systems).²¹

Some French observers contend that the United States has spent more not only because it has security interests and commitments in several regions with correspondingly immense logistical requirements, but also because it has been engaged in over-insurance and excessive investment in the innovations associated with the so-called Revolution in Military Affairs.

The Gap in Operation Allied Force

Operation Allied Force consisted mainly of air operations, which involved 14 of NATO's 19 members. Four nations – the Czech Republic, Iceland, Luxembourg, and Poland – did not participate because they lacked relevant capabilities, while Greece chose not to for political reasons. While non-US aircraft carried out over 15,000 sorties, about 39% of the total, US aircraft delivered over 80% of the weapons.²² Certain capabilities were provided solely or almost entirely by the United States, including offensive electronic warfare, airborne command and control, all-weather precision munitions, air-to-air refuelling, and mobile target acquisition. As a result, while non-US allies conducted 47% of the strike sorties (principally during the later weeks, when weather conditions had improved), they accounted for only 29% of combat-support sorties for refuelling, command and control, and suppression of enemy air defences (SEAD).²³ Indeed, an average of three American support aircraft was required for each European strike sortie.²⁴

For airborne command-and-control during *Operation Allied Force*, the allies relied on a US Air Force EC-130 Airborne Battlefield Command, Control and

Communication (ABCCC), a C-130 designed for airspace traffic control and battle management.²⁵ Within NATO, only the United States has a dedicated aircraft for this purpose. The NATO AWACS aircraft are optimised for early warning, not for airspace and battle management. The United States also provided most of the mobile target-acquisition capability via the two JSTARS (Joint Surveillance and Target Acquisition System) aircraft it deployed to the Balkans.

According to some US accounts of the operations, only the United States employed air-launched all-weather precision munitions and the only all-weather precision munitions utilised by any of the Europeans were the US-built *Tomahawks* launched from British submarines. The French Ministry of Defence's two official 'lessons learned' analyses imply, however, that *Mirage 2000D* aircraft delivered laser-guided bombs at night and unguided bombs in all-weather conditions.

France has very precise strike capabilities thanks to its laser-guided armaments, by day for all of the offensive aircraft of the air force and navy (*Mirage 2000D*, *Jaguar*, *Mirage F1 CT*, *Super Étendard*), and by day and night for the *Mirage 2000D* ... Moreover, the demonstrated capability of *Mirage 2000D* crews, in all weather conditions and with sufficient accuracy, to deliver unguided bombs made us the sole Europeans capable of participating in all the strike missions of the coalition. The arrival of the *Rafale* will make new progress possible in this capability.²⁶

With regard to air-to-air refuelling, over 90% of the sorties were accomplished by US aircraft. The published sources are not entirely consistent on European aircraft contributions. According to the IISS, the United States had 'some 150 deployed,' while 'France and the UK each had 12 tankers available for the operation, and Italy and Turkey had two each.'²⁷ The French Ministry of Defence indicates, however, that France was able to deploy only 10 tankers (KC-135s), while the British Ministry of Defence reports employing only 9 tankers (4 *Tristars* and 5 VC10s).²⁸ The US Department of Defense indicates that 39 British aircraft took part in *Operation Allied Force*, while the British Ministry of Defence lists 48 British aircraft contributing to the operation.²⁹

European contributions in *Operation Allied Force* were particularly strong in combat air patrol; air-to-ground strike operations in good weather; and in surveillance, reconnaissance, and battle-damage assessment with unmanned aerial vehicles (UAVs) and manned aircraft such as *Tornados*, *Étendard* IVPs, and *Mirage* IVPs. While the Europeans and the Americans both made successful use of UAVs, the capabilities of the US *Predator* far outweighed those of the Franco-German *CL-289*.³⁰ Thanks in large part to its satellites, superior UAVs and reconnaissance and surveillance aircraft, the United States met 'approximately 95% of NATO's intelligence requirements' in *Operation Allied Force*.³¹ As noted above, non-US allies made 47% of the air-to-ground strike sorties, but the Europeans and Canadians were generally dependent on good weather conditions; and most of their aircraft lacked secure anti-jamming radios and digital- data links.

Operation Allied Force also revealed that information systems pose great interoperability challenges. As in many areas, the problems derive from the rapid pace of US innovation and modernisation compared to that of the other allies. The US military services have retained old-fashioned communications capabilities, euphemistically called 'legacy' systems, to accommodate the 'low-end' communications capabilities of US allies and security partners. In national or coalition operations, it is essential for all participating forces to have a 'common operational picture' (COP).

Some European observers have argued that an innovator in information systems must be cognisant of the potential as well as the limitations of allies. As a British observer has put it, when colour television was introduced, those with old TV sets could still get the picture in black and white.³² The interoperability gap in information systems is worse than this analogy suggests, however, because most allied navies have only a limited ability to receive imagery; their encrypted communications capabilities rely mainly on voice and written messages. According to one expert, 'the biggest complaint of the allies' is the reduced reliance of the US armed forces on previous methods of communications – encrypted voice and teletype messages. The US shift to electronic transmission of schedules, maps, images, etc, via the SIPRNET, a US-only secure communications network, is seen as excluding the allies.³³

During *Operation Allied Force*, a significant proportion of allied air forces lacked even encrypted voice communications:

Some of the operations security concerns were caused by disparities in the communications security equipment available to US forces and their NATO allies. The major differences were in the numbers and types of secure telephones at the various headquarters and secure radios aboard aircraft ... Some allied aircraft were not equipped with either the cryptograph devices or keying material needed to conduct secure communications with other elements of the force. As a result, airborne command-and-control aircraft and other allied aircraft had to pass information in the clear, severely compromising operations security. This situation can only be corrected by ensuring all allied forces have the kinds of technologies, equipment, communications, planning, and training that will make them fully secure and interoperable.³⁴

With time, some experts have argued, the retention of 'legacy' systems for communications with allies and coalition partners will become costly, burdensome, and impractical, if new US information systems cannot readily communicate with the old systems. As a matter of principle, the US armed forces will not 'dumb down' information systems or decline to develop them to their full potential for the sake of interoperability. Current US policy is, however, to retain 'legacy' systems for essential coalition communications.³⁵

Interoperability problems highlighted in Kosovo include communications connectivity and divergences in computerised planning capabilities. But the most significant issues concern security. From a US viewpoint, there are concerns about the security of US technology, intelligence, communications,

and plans. These concerns derive from the implications for the security of US and allied forces and their ability to conduct operations successfully.

The pace of the modernisation of US information systems has been much more rapid than that of allied forces; and this has led to a widening gap in capabilities. The officially proposed remedies include simplifying the constraints on the release of information, reviewing and (when it is appropriate to do so) eliminating or simplifying licensing requirements, and carrying forward alliance efforts to establish interoperable communications architectures.³⁶ The fact that information systems are increasingly based on commercial off-the-shelf products could facilitate allied procurement of interoperable systems, if the allies chose to make the necessary investments.

Increased use of off-the-shelf products would not, however, solve all the problems created by the tendency of the US armed forces to rely increasingly on US-only secure communications and information networks, such as the SIPRNET. US reliance on the SIPRNET and other information security constraints have forced the allies to devise what one expert has called 'jerry-rigged work-arounds' and to institutionalise practices such as 'air-gapping'.³⁷ That is, once a message has been certified as legally releasable and placed in a releasable format, it is put on a disk and taken to a computer linked to the other system; in this way, unwanted links and data transfers are avoided.

Electronic attack capabilities constitute one of the most significant areas of continuing NATO European dependence on US military forces. Such capabilities are essential to conduct air operations with minimal losses. Aircraft flying at a high altitude beyond the range of anti-aircraft artillery are still vulnerable to surface-to-air missiles (SAMs) unless the target-acquisition radars are neutralised by jamming or direct attack. Direct attack with a high-speed anti-radiation missile (HARM) is feasible only if the enemy radars are switched on. As in *Operation Allied Force*, however, the direct-attack capabilities may deter an enemy from switching on the radars. The operational significance of America's EA-6B *Prowlers* has been well summarised as follows:

The fundamental mission of the *Prowler* is to seize control of key segments of the electromagnetic spectrum in wartime, assuring that they can be exploited by friendly forces while denying their use to adversaries ... Control of the electromagnetic spectrum has assumed a significance similar to command of the air, and that is precisely what the 19 squadrons of *Prowlers* – 11 carrier-based (including one reserve) and four expeditionary Navy squadrons, and four Marine Corps squadrons — are designed to achieve ... [T]he proliferation of advanced air-defence systems around the world has severely compromised the survivability of nonstealthy aircraft unless they receive continuous EW [electronic warfare] protection in combat.³⁸

Aircraft with capabilities like US Navy and Marine Corps EA-6Bs are essential to NATO air operations, because NATO European air forces lack comparable capabilities.³⁹ According to a French Ministry of Defence analysis, 'The effectiveness of the American offensive jamming means is hard to quantify, but their absence constituted grounds for cancelling the air raid'.⁴⁰

The United States is unlikely to sell such capabilities to the allies because of the technology-transfer and intelligence-sharing issues (for instance, about the design of enemy radars). The allies must therefore develop such capabilities on their own or continue to depend on the United States to provide this protection, as in *Operation Allied Force*.

The NATO European allies have at least two programmes to develop jamming capability for tactical aircraft: the *Spectra* integrated countermeasures system for France's *Rafale*, under development by Dassault/Thomson-CSF/Aérospatiale Matra; and the EuroDASS (Defence Aids SubSystem), under development for the *Eurofighter* by BAe Systems/Elettronica/ML Aviation. Neither programme concerns a dedicated tactical jamming aircraft, however.⁴¹ This implies a degree of continuing NATO European dependence on US EA-6Bs in combat contingencies. As the French Ministry of Defence pointed out,

Electronic warfare is an essential component of conflicts. In the framework of air operations, the SEAD [suppression of enemy air defences] capability aims above all to neutralise or to destroy the anti-aircraft threats that use radars for the guidance of missiles or guns. It is composed of two complementary facets: the anti-radar mission itself and the offensive electronic jamming to accompany attack aircraft ... In the operations in Kosovo, offensive electronic warfare means enabled the coalition to destroy part of the surface-to-air systems and to reduce markedly the effectiveness of the rest because of its threatening character for the adversary. *We do not have this capability, while other European countries possess anti-radar missiles and the Americans have both these missiles and offensive electronic jammers.*⁴²

The missiles for attacking radars employed in *Operation Allied Force* were US HARM on US, German, and Italian aircraft and British air-launched anti-radiation missiles (ALARM) on British aircraft. The French have lacked an equivalent capability since they abandoned the *Martel* in the early 1990s.⁴³

Scenario-Dependence and Capability Gaps

Electronic attack assets may help to illustrate another gap: that between America's capabilities and its official aspiration to be able to conduct two major theatre wars almost simultaneously. Assessing America's capability to carry out its declared strategy of being ready to fight two major-theatre wars obviously involves judgements about reasonable risks and many capabilities in addition to electronic warfare.⁴⁴ It is nonetheless worth noting that the United States reportedly deployed more than 40 of its available fleet of approximately 95 EA-6B *Prowlers* in the Balkans during *Operation Allied Force*.⁴⁵ In view of the redeployments of EA-6B aircraft and crews in Turkey, Japan, and the United States to permit a concentration of these capabilities in the Balkans, Loren B. Thompson has concluded,

Operation Allied Force proved that, at least in the case of electronic-warfare aircraft, the United States did not have the capacity to prosecute two major theatre wars simultaneously. In fact, it was not so clear that even one such conflict could be supported over a long period while meeting other global commitments.⁴⁶

Some experts maintain that US authorities insisted on standards of performance – such as no US or allied casualties – that called for force protection requirements more rigorous than were envisaged prior to *Operation Allied Force*. On some occasions, the ratio was one EA-6B to one strike aircraft, a higher level of electronic attack protection than had previously been planned for. Setting this high standard for force protection inevitably drove up requirements. This explains why it can indeed be argued that, at this level of electronic attack protection, the US lacks ‘the capacity to prosecute two major theatre wars simultaneously.’ As with *Operation Desert Storm* in 1991, *Operation Allied Force* has established new expectations and assumptions about acceptable risks, at least in some circles.

In October 1999, US Secretary of Defense William Cohen and General Henry Shelton, Chairman of the Joint Chiefs of Staff, noted that US participation in *Operation Allied Force* could not have been sustained at a high level if major conflicts had erupted elsewhere:

Consistent with our defense strategy, US forces could not have continued the intense campaign in Kosovo and, at the same time, been prepared to fight and win two major theater wars ... Should we have faced the actual threat of war [in Southwest or Northeast Asia], we have detailed plans for redeploying committed assets to these potential warfighting theaters. Ultimately, should we have faced the challenge of withdrawing US forces to mount two major wars in defence of our vital interests elsewhere, we are confident that we would have been able to do so, albeit at higher levels of risk.⁴⁷

This statement implies that *Operation Allied Force* was conducted with exceptionally demanding force-protection criteria because they could be met, in view of quiet conditions elsewhere. If US forces had been rapidly withdrawn for action in the Persian Gulf or North-east Asia, *Operation Allied Force* would have probably taken a different form. The NATO European allies might have carried out a much larger proportion of the operations; and they might have adopted different policies about force protection, targeting and collateral damage.

Thus, as British and French observers have pointed out, *Operation Allied Force* should not be seen as the last word on understanding US–European capability gaps. Official French analyses have hinted at the limited value of the Kosovo experience as an indicator of these gaps:

The United States has the quasi-totality of the capabilities employed in this type of operation. The Kosovo conflict represents but a single scenario, from which it would be impossible to derive complete and enlightening lessons in every domain.⁴⁸

In other words, the nature and scale of the capabilities gap should be evaluated across multiple cases, not a single scenario tailored according to US specifications. The capabilities-gap concept too often reflects an unexamined American assumption that US military forces and concepts of operations represent the sole standard of excellence. According to one British expert, the

US-European capability gap is 'irrelevant if the Europeans can deal on a reasonable basis with the threats at hand and conduct any necessary interventions.'⁴⁹

Some French and British observers have argued that the American-defined way in which *Operation Allied Force* was conducted artificially inflated the apparent gap between US and European military capabilities. It was the Americans, according to this argument, who insisted on fighting much of the war with stand-off air-launched weapons at a height of 15,000 feet; and this approach played to American strengths in airpower and precision-strike munitions. These observers assert that it was the United States that insisted on a 'zero death' strategy in *Operation Allied Force*. In their view, the Europeans could have done this operation by themselves, even though it might have lasted longer and would have meant accepting greater risks and losses. Without US electronic warfare assets and other capabilities for the suppression of enemy air defences, it is argued, the Europeans might have engaged in air-to-air combat or resorted to other measures (perhaps the use of special forces or ground force operations to create a 'safe haven' enclave for the Kosovar Albanian refugees).⁵⁰ One French observer has estimated that the Europeans would have lost 20 to 30 aircraft, but that this loss would have been accepted by European publics.⁵¹

In this event, the losses would have probably extended beyond aircraft to at least some crew members – killed or taken hostage, without US combat-search-and-rescue capability at hand to try to save them. France alone among the European allies had such capability ready for use in *Operation Allied Force*. The effectiveness of the US capability (as during *Operation Deliberate Force* in 1995) and the comparative scarcity of European capability underscore how a European-only *Operation Allied Force* might have taken a different form. The British Ministry of Defence notes the advantages of such capability:

We relied on our Allies, particularly the US, for Combat Search and Rescue (CSAR) capability. The effect on the morale of Allied aircrew of the successful operations to rescue the US aircrew on two occasions was very considerable, and showed the professional competence of the Allies, while denying Milosevic propaganda opportunities. We are looking at the requirement for a UK or European capability.⁵²

If the Europeans had conducted *Operation Allied Force* by themselves, with a different strategy, including a greater willingness to risk casualties, it is unclear when and where the level of unacceptable losses would have been reached. British and French observers have for years declared that the European allies – or, at least, France and the United Kingdom – are not as reluctant as the United States to take casualties; but it is hard to know to what extent this could compensate for deficiencies in military capabilities. Britain gave every impression during *Operation Allied Force* of being more willing to conduct a ground campaign and to accept the attendant losses than any other ally, with Germany and the United States at the other end of the spectrum. The French Defence Minister, Alain Richard, has nonetheless declared that there was 'no

US–Europe gap’ on the ‘zero-casualty’ issue in this conflict: ‘Both the Americans and Europeans agreed to impose limits on operations in order to spare lives.’⁵³

It is certainly true that no single case can be taken as a definitive indicator of a capability gap, and that the choice of strategy in *Allied Force* reflected American strengths and preferences. In fact, the same pattern applied in three major military interventions undertaken under US leadership with significant European participation over the last decade: *Desert Storm* in 1991, *Deliberate Force* in 1995, and *Allied Force* in 1999. The pattern reveals some facts about capability gaps in specific types of operations, especially if conducted in certain ways.

Why the Gap Matters

While the gap has many implications, including industrial and economic repercussions, the relationship between the operational and political aspects is particularly noteworthy. As suggested above with regard to allied information systems in NATO’s Kosovo intervention, interoperability deficiencies can impede effective combined operations and lead to vulnerabilities. Communications security problems provided the most obvious examples in *Operation Allied Force*. Moreover, the gap transfers disproportionate political responsibility to the United States (in relation to America’s economic and demographic stature in the alliance) because US operational assets are decisive in conducting ‘high end’ demanding missions.

Capability gaps have been a constant irritant throughout NATO’s history, most acutely during crises and conflicts. During various Cold War crises, including those centred on Berlin and Cuba and on NATO nuclear force modernisation, the most prominent capability gap resided in European dependence on US nuclear forces and commitments. While the alliance remains a collective defence organisation, in post-Soviet, post-Cold War conditions its main operational tasks have included embargo and no-fly-zone enforcement, humanitarian relief, large-scale interventions (*Deliberate Force* in 1995 and *Allied Force* in 1999), and peacekeeping (in Bosnia since 1995 and in Kosovo since 1999).

Americans resent European ‘dependents’ telling the United States how to run alliance operations, while Europeans resent dependence on US capabilities. The US resentment has never been great enough to place the alliance’s future in jeopardy, and the European resentment has never been great enough to motivate European governments to substantially improve their capabilities through increased spending and other measures. In its current and prospective form, however, the gap could lead to unhealthy divisions of labour, new resentments and burden-sharing debates, industrial ‘fortress’ competitions, a weakening of alliance cohesion, and/or marginalisation of the alliance. As far as unhealthy divisions of labour are concerned, two hypothetical risks are often highlighted: that the Europeans might find themselves increasingly responsible for manpower-intensive operations with a high risk of casualties, while the

Americans would carry out the high-technology lower-risk stand-off precision attacks and intelligence functions; and that the EU would take on the low-end crisis management and peacekeeping tasks, while the Americans would conduct the more demanding interventions and thus bear the main responsibility for collective defence.⁵⁴

In short, the gap has significant implications for the conduct of military operations and for trans-Atlantic relations. There is no shortage of US members of Congress willing to accuse the Europeans of being 'free-riders' and to deplore NATO arrangements that seem to subsidise America's economic competitors. In *Operation Allied Force*, the irritations in some US political-military circles regarding NATO's 'consensus' decision-making system, which requires unanimity, were summed up in Lt. Gen. Short's declarations:

It's my evaluation that NATO cannot go to war in the air against a competent enemy without the United States. If that's the case, and we're going to provide 70 percent of the effort ... then we need to have more than one of 19 votes.

In General Short's view, the United States should have told its allies: 'We will take the alliance to war and we will win this thing for you, but the price to be paid is we call the tune'.⁵⁵

Of course, from the perspective of some Europeans, the United States did in fact call the tune. The post-Kosovo EU decisions to seek a defence dimension – including the December 1999 Helsinki 'headline goal' – may be attributed in part to European frustrations during the Kosovo war (and during the diplomatic manoeuvres that preceded it) with US political dominance, which stemmed directly from US preponderance in military capabilities.

Increased EU and NATO European military capabilities would be in US interests. Under current US national-security strategy, the United States has many commitments in several regions and its military capabilities are severely taxed in peacetime, to say nothing of crisis contingencies. Increased European capabilities would lessen the overall load placed on US forces. Moreover, enhanced European capabilities could neutralise the 'burden-sharing' argument for reducing or withdrawing the US military presence in Europe.

Improved military capabilities would also be in the interests of the EU and NATO European countries. America's European allies would be well-advised to recognise the limits to US military power and the multiplicity of US security commitments in other regions of the world. US military power is finite. If the United States was engaged in another Korean War and/or another Taiwan Straits crisis and/or another Persian Gulf war, it would have less military power to dedicate to contingencies in Europe. Once the US Secretary of Defense, on the advice of the Chairman of the Joint Chiefs, declared that a particular regional commander in chief – a CINC – was a 'supported CINC,' the military assets would start flowing in that direction. If it was, for example, CINCPAC – the commander of US forces in the Pacific – NATO would see a 'Kosovo in reverse,' with US assets flowing from North America and, if necessary, Europe and elsewhere to support operations related to Korea or

Taiwan or wherever that CINC had identified a requirement that had been endorsed by his political masters.

The finite character of US capabilities and the risk of US attention being focused elsewhere have been recognised intermittently during NATO's history, for instance, during the Korean War and the Vietnam War. It was also recognised in the years immediately after the fall of the Shah in Iran and the Soviet invasion of Afghanistan in 1979, when the United States was so preoccupied with South-west Asia that the allies became aware that some US forces were 'dual-hatted' – that is, committed to serve as reinforcements in both Europe and the Persian Gulf. Furthermore, as the French have pointed out over the decades, despite the fact that the United States has remained faithful to NATO for over 50 years, the future course of US politics is unpredictable.

The potential constraints on US force availability could undermine the hypothetical solution of EU reliance on US assets in Combined Joint Task Forces to make up for European capability shortfalls. Although CJTF initially appeared to some French observers as a means for the EU or WEU to gain automatic access to alliance assets for European-led operations, the North Atlantic Council has been defining 'arrangements for the release, monitoring and return or recall of alliance assets and capabilities' lent to European governments for an EU- or WEU-led operation.⁵⁶ The formula approved in April 1999 – 'The presumption of availability to the EU of pre-identified NATO capabilities and common assets for use in EU-led operations' – represents a rhetorical increase in the willingness of the United States and other allies to support European-led operations through CJTF; but it falls short of the automaticity originally sought by France.⁵⁷

According to some European observers, particularly in France, *de facto* US constraints (via the North Atlantic Council) on European access to commonly funded NATO assets could become a point of contention in European-US relations. Simplifying access by abandoning NATO's consensus principle seems improbable, however. If this principle was abandoned, an 'easy-access' arrangement for the EU could erode alliance cohesion and lead to potentially risky situations – for instance, European-led operations utilising NATO assets without the full endorsement of all the allies. If the contingency became an Article 5 case (that is, if it threatened the security of one or more members of NATO and therefore constituted a basis for action under the mutual-defense pledge in the North Atlantic Treaty), the European allies would in all probability expect US support. However, if the United States is expected to be present for the 'crash landings', it will understandably want to be in for the 'take-offs' as well.

Purposes of the EU's Defence Initiative

What do the European Union countries want autonomous capabilities for, and what capabilities do they need for these purposes? The phrase 'Petersberg tasks' is used as shorthand for the political and strategic purposes of these projected force improvements. According to the June 1992 Petersberg

Declaration of the WEU's Council of Ministers, in addition to the continuing collective-defence obligations of the WEU members under the 1948 Brussels Treaty and the 1949 North Atlantic Treaty, 'military units of WEU member States, acting under the authority of WEU, could be employed for: humanitarian and rescue tasks; peacekeeping tasks; [and] tasks of combat forces in crisis management, including peacemaking.'⁵⁸ In NATO parlance, these are non-Article 5 tasks, including 'crisis response' missions. However, there is no official definition – by NATO, the EU or the UN – of any of these terms. Moreover, 'peacemaking' as carried out by NATO in *Operation Deliberate Force* in 1995 and *Operation Allied Force* in 1999 looks like war-fighting.

In February 2000, French Defence Minister Alain Richard identified three options for crisis-management interventions. The first would be a NATO action, as in Bosnia and Kosovo. In the second option, 'the EU would take overall responsibility' and 'would make use of NATO headquarters such as CJPS (Combined Joint Planning Staff) and SHAPE for the planning of its operation, of the chain of command organised under Deputy SACEUR for the command of the operation, and of the operational headquarters and troops earmarked for NATO for its implementation.' In the third option,

Should the NATO Allies decide not to commit themselves as such and the EU members decide to do so, there is a possibility that the EU might have to rely on strictly European capabilities to run an operation ... For the moment, the Petersberg tasks on the high end of the spectrum (similar for example to *Operation Allied Force*) would require some capabilities that the Europeans do not yet have, but that they have nevertheless decided to acquire. In the short term this option will therefore be available only for more limited military operations.⁵⁹

It is far from clear, however, that all EU nations share the objective of acquiring the capabilities necessary to conduct interventions similar to *Operation Allied Force*. Indeed, some expert observers, even in Paris, doubt whether the objective of pursuing such capabilities would be endorsed by EU nations such as Denmark, Finland, Ireland and Sweden.⁶⁰ The 'illustrative scenarios' envisaged in the EU's force-planning process may throw light on this question. No geographical boundaries are indicated for the Petersberg tasks. It remains to be seen whether the Europeans will select scenarios that are relatively modest, such as humanitarian and rescue tasks close to home, or whether they will pursue more ambitious aims. In September 2000, French Prime Minister Lionel Jospin suggested that the EU could intervene in Africa, under UN auspices and in close cooperation with the Organisation of African Unity.⁶¹

For all the shortcomings of NATO's classified C³ networks, they represent the principal multinational C³ networks in NATO Europe. A key indicator of the EU's serious pursuit of autonomy from the alliance would therefore be the development of classified C³ networks and associated intelligence and information systems outside NATO. In view of the unwillingness of most EU countries to increase defence spending, it is hard to imagine them investing in

expensive C³ networks and information systems to avoid dependence on NATO.

In other words, financial as well as political and operational considerations stand behind the principle of minimising gratuitous duplication with NATO in the pursuit of EU military capabilities. To be sure, as François Heisbourg and others have noted, it is important to distinguish between ‘useful or damaging’ (or simply wasteful and irrelevant) forms of duplication.⁶² The Europeans (and the alliance) need enhanced capabilities in air transport, in-flight refuelling, precision-strike munitions, electronic warfare and other areas. The duplication that could be most harmful to the alliance’s political cohesion (as well as being militarily unwise and financially wasteful) would be establishing a separate EU defence-planning process and command structure. In October 2000 US Secretary of Defense William Cohen proposed that the 23 nations in NATO and/or the EU establish a consolidated NATO–EU defence planning mechanism, a ‘European Security and Defence Planning System,’ with the European officer serving as Deputy SACEUR functioning as a ‘strategic coordinator’ between NATO and the EU.⁶³

Major EU investments in classified C³ networks and associated intelligence and information systems distinct from those of the alliance are most improbable because of their cost. But it is worth noting that they also could be wasteful and divisive, at a time when it is imperative (as became evident in *Operation Allied Force*) to improve these capabilities within NATO. As the British Ministry of Defence noted in a discussion of the problems caused by the lack of secure air-to-air communications during *Operation Allied Force*,

[W]e were unable to exchange freely some operationally sensitive information. Along with most Allies we used frequency-hopping technology and transmission security measures, which provided some degree of protection. Increasing advances in the technology available to countries such as Yugoslavia will make these procedures and systems more vulnerable and there is a need to enhance the security of communications in a combined and joint framework.⁶⁴

The EU’s ‘headline goal’ for 2003

At the European Union summit meeting in Helsinki in December 1999, the member governments agreed on a ‘headline goal’ for improved military capabilities:

To develop European capabilities, Member States have set themselves the headline goal: by the year 2003, cooperating together voluntarily, they will be able to deploy rapidly and then sustain forces capable of the full range of Petersberg tasks as set out in the Amsterdam Treaty, including the most demanding, in operations up to corps level (up to 15 brigades or 50,000–60,000 persons). These forces should be militarily self-sustaining with the necessary command, control and intelligence capabilities, logistics, other combat support services and additionally, as appropriate, air and naval elements. Member States should be able to deploy in full at this level within 60 days, and within this to provide smaller rapid response elements available and deployable at very high readiness. They must be able to sustain such a deployment

for at least one year. This will require an additional pool of deployable units (and supporting elements) at lower readiness to provide replacements for the initial forces.

Member States have also decided to develop rapidly collective capability goals in the fields of command and control, intelligence and strategic transport.⁶⁵

The EU's 'headline goal' for 2003 is cast in such broad terms that the member states are almost certain to declare victory in meeting it. The 'headline goal' suggests that the EU's current aspirations extend to being able to undertake operations like the SFOR and KFOR peacekeeping missions, not a combat action like *Operation Allied Force*. As François Heisbourg has pointed out, despite the 'most demanding' phrase employed in the 'headline goal,'

Since the Council decision indicates that the number mentioned includes both logistic units and combat support units, only 20,000 combat forces may be available. Such a fighting force could not be deployed for the *most demanding* Petersberg tasks. With such a force the EU could take over from NATO the KFOR operations in the Federal Republic of Yugoslavia. Conversely, an intervention in a non-permissive environment in Kosovo could not be carried out with such a force. And it is questionable whether it would be sufficient in a semi-permissive environment. For relatively large-scale sustained combat operations, the EU might need 50,000 to 60,000 combat forces. This would thus require a headline goal of 150,000–180,000.⁶⁶

The capabilities required for combat actions – such as precision-guided munitions, air-to-air refuelling tankers, heavy air-transport and electronic-warfare systems – are expensive. To the extent that these are pursued, they will be sought above all by France, Britain and a few other European countries. The EU as a whole is likely, however, to remain heavily dependent on US forces for C³, aerial refuelling, electronic attack, precision strike, intelligence, and other functions. An official French analysis highlighted the assets of only a few European allies:

Our principal European allies possess:

- certain specific technological skills: UAV [Unmanned Aerial Vehicles] for Germany, and SEAD [Suppression of Enemy Air Defences] for Britain;
- operational abilities in certain areas of combat, such as cruise missiles for Britain, observation and intelligence with *Hélios* for Italy and Spain, in-flight refuelling for all of these countries and the Netherlands, and SEAD for Italy and Germany.⁶⁷

Britain's official 'lessons learned' analysis concluded in general terms that NATO as a whole should improve its capabilities 'in such areas as precision attack weapons, secure communications and strategic movement assets' and that 'we Europeans need to improve the readiness, deployability and sustainability of our armed forces and their ability to engage in both high intensity

operations and those of an expeditionary nature.⁶⁸ In contrast, France's official analysis drew more precise and pointed inferences as to European military requirements. According to the French Ministry of Defence,

Specific points requiring further European consideration are:

- command and control of forces,
- all-weather intelligence acquisition,
- autonomous navigation systems,
- real-time data links,
- targeting and battle damage assessment,
- cruise missiles,
- all-weather strikes,
- offensive jamming and suppression of enemy defence systems,
- autonomous identification systems,
- support of operational means, [and]
- permanent presence of an aircraft carrier group.⁶⁹

France's aspirations for European autonomy in these areas are not mirrored with any precision in the EU's headline goal. It appears that it was necessary to define the headline goal on a lowest common denominator basis that all the EU countries could endorse politically and contribute to militarily, hence the focus on ground forces for peacekeeping. The vague phrase in the French document about 'support of operational means' may refer, among other things, to the EU's choosing not to articulate a requirement for a Combined Air Operations Centre (CAOC) similar to the several CAOCs maintained by the alliance.

Even for peacekeeping, the EU's dependence on US military support is likely to continue. SFOR and KFOR require US assistance for many functions in addition to the troops on the ground. These functions include the C⁴ISR architecture, including many types of technical intelligence (for instance, electronic and signals intelligence and various forms of imagery); electronic warfare capabilities to be able to suppress Serb interference at short notice; and logistics assets for the movement of large bodies of forces. Moreover, US forces in Europe, including Marines afloat in the Mediterranean, are key elements for emergency reinforcements for SFOR and KFOR to call on if they find the situation getting beyond their capability. If a crisis led to a decision to extract SFOR and/or KFOR, augmented capabilities for C⁴ISR, close air support, electronic warfare, large-scale logistical movement and other purposes would be required; this circumstance also implies continuing EU dependence on NATO and the United States in particular.

Even with regard to the 'headline goal' of 50,000–60,000 troops, there are ambiguities. If the deployable force includes, as the document implies, 'the necessary command, control and intelligence capabilities, logistics, other combat support services' and other support staff, the 'tooth' put forward by this 'tail' may be well below 30,000 troops. It is also unclear whether the goal of 50,000–60,000 troops deployable for 'Petersberg tasks' will count the forces of EU member states in Bosnia and Kosovo, on the assumption that NATO-led peacekeeping forces are still deployed in these territories in 2003. (In August

2000, 27,344 troops from EU member states were serving in KFOR.⁷⁰ Since there are about 12,000 troops from EU countries in SFOR, the EU today already has around 40,000 troops engaged in 'Petersberg tasks.') Another unanswered question is whether – despite the reference to 'an additional pool of deployable units (and supporting elements) at lower readiness to provide replacements for the initial forces' – the EU member states will be prepared to generate the 180,000 troops that would be required for orderly rotations of a force of 60,000 troops.⁷¹

From another perspective, the EU's declared force goals for 'Petersberg tasks' appear remarkably unambitious, since they are similar to the goals France announced for itself on a national basis in 1996. In February 1996, President Jacques Chirac said,

We are in an era in which crisis prevention is of capital importance ... Finally – remember the Gulf War and the difficulties we had in assuming our responsibilities, despite the quality of our men and their leaders – it is imperative that France be capable of projecting abroad a significant number of men, 50,000 to 60,000, and not 10,000 as is the case today, in rapid and organised conditions.⁷²

President Chirac advanced this goal as one of his justifications for abolishing conscription and announcing that France would have all-professional armed forces by 2002. According to Heisbourg, 'By the time we [the French] complete our reforms in 2002, ... Britain and France together could by then be able to field close to 100,000 fully-trained, fully-equipped professional soldiers in short expeditionary operations.'⁷³ Heisbourg's judgement appears to confirm the impression that the EU's 'headline goal' was designed to be readily feasible, with minor budgetary consequences. The EU's aim seems to be to project a sense of progress and movement by establishing a vague goal that could, with minimal effort, be met.

If necessary, the EU could even plausibly pretend that the goal had been met by assigning certain units special readiness categories: a 'creative bookkeeping' means of meeting the target. Recourse to such solutions may be attractive in an era in which the defence spending of most EU countries seems likely to decline further. The disadvantages of such solutions for EU governments could include a loss of credibility *vis à vis* other countries (including the United States) and their own publics if the EU's operational performance in the next crisis revealed little real improvement in capabilities.

The EU's 'headline goal' implies an EU aspiration to serve in an SFOR or KFOR-type peacekeeping role, and this implies in turn that the 'peacemaking' action would be undertaken by NATO, with a large role for US military forces. For the foreseeable future, at least in major contingencies, European crisis-response decision-making and action will in all likelihood require close consultation with (and possibly participation by) the United States.

EU and NATO Efforts to Improve Capabilities

How is the European Union tackling the challenge of improving the military capabilities of its member states? France has proposed that the EU examine

scenarios of the Petersberg tasks, from the simplest level to the level of an army corps; this would make it possible for EU military leaders to estimate requirements. In the presidency of the WEU and the EU during the latter half of 2000, France convened a meeting of the EU defence ministers in September 2000 to examine the requirements flowing from the EU's crisis-scenario analysis and to consider potential force contributions by the member states. This is to be followed by a capabilities-commitment conference in November 2000, with the commitments to be endorsed at the highest level at the EU summit in Nice in December 2000.⁷⁴

Reflections in the EU about capability goals beyond the fulfilment of the 'headline goal' in 2003 appear embryonic, where they exist at all. The June 2000 Venusberg Group report, authored by a group of defence and security experts from EU and NATO European countries, stands out as a noteworthy exception. The goals recommended in this report include an ability to 'carry out a full Kosovo-type operation without recourse to US assets' by 2015 and 'a common defence by 2030'.⁷⁵ The Venusberg Group report goals have not won support from EU governments, however.

NATO's Defence Capabilities Initiative (DCI) originated in US proposals in 1998. The DCI's goals were initially articulated in terse conceptual terms. *Operation Allied Force* gave an impetus to the DCI and provided concrete indications of operational shortcomings. In April 1999, at the Washington Summit, the allies approved the DCI in the following terms:

We have launched a Defence Capabilities Initiative to improve the defence capabilities of the Alliance to ensure the effectiveness of future multinational operations across the full spectrum of Alliance missions in the present and foreseeable security environment with a special focus on improving interoperability among Alliance forces (and where applicable also between Alliance and Partner forces). Defence capabilities will be increased through improvements in the deployability and mobility of Alliance forces, their sustainability and logistics, their survivability and effective engagement capability, and command and control and information systems.⁷⁶

The DCI involves 58 areas for the improvement of NATO capabilities, to be pursued through the Force Goals established in NATO's collective-defence planning process,⁷⁷ an arrangement that includes all the allies except France. In February 2000, Defense Secretary Cohen provided a list of allied shortfalls in meeting DCI-related commitments:

- Less than half of the nations who have agreed to do so have made their full contributions to an asset-tracking system for better logistical support.
- Less than half of the requested nations have contributed their full share to an advanced intelligence network.
- Less than half of the nations asked to provide deployable command-and-control modules – which will improve interoperability – have done so.

- Only two of the seven nations now providing air-to-air refuelling assets for the alliance have met their contribution targets for a Rapid Reaction Force.
- Only one out of 14 nations assigned to work on a deployable headquarters that can withstand biological and chemical weapons attacks is on track to meet the goal by this year.⁷⁸

This pattern is consistent with the continuing tendency of most NATO European allies, including major countries such as France and Germany, to cut their defence spending. The only exceptions to this tendency remain Greece, Turkey, and the United Kingdom.

The US Defense Department's March 2000 report to Congress on DCI implementation by NATO allies referred to an 'information deficit' in this regard, noting that 'the information so far available does not provide a sufficiently comprehensive picture of national implementation plans and activities.'⁷⁹ According to Frank Kramer, Assistant Secretary of Defense for International Security Affairs, 'While allies acknowledge their capability shortfalls, few have made concrete efforts towards their amelioration by increasing their defence budgets and reallocating funds.'⁸⁰ Within the DCI priorities, Kramer has indicated, the High-Level Steering Group is emphasising 'strategic lift, especially outsized air transport; air-to-air refuelling; suppression of enemy air defences; support jamming; precision-guided munitions; and secure communications.'⁸¹

While DCI goals have been incorporated into the alliance's defence-planning process, the allies set no deadline for their achievement. According to Diego Ruiz Palmer, who served until July 2000 as the head of policy and planning in NATO's defence support division, 'We have a window of opportunity. Now there is an interest in defence issues because of Kosovo ... [However,] a year from now, there could be a crisis somewhere else. There could be economic problems. Other issues could take over, and then everybody will forget about DCI and Kosovo ... The nations have said they are not going to spend a lot on defence, and not to expect miracles.'⁸²

What is the relationship between the EU's 'headline goal' and associated EU efforts and NATO's Defence Capabilities Initiative? EU documents generally avoid referring to NATO's DCI, just as they refrain from employing the NATO expression 'European Security and Defence Identity'.

There are nonetheless overlaps between the DCI and the EU's headline goal, in that both argue that ground forces should have improved C³I, sustainability and strategic mobility. The DCI differs from the EU's 'headline goal' in placing more emphasis on improvements in 'effective engagement' – that is, power projection and precision strike. Another major difference is that the DCI highlights requirements that the EU documents generally do not even mention: the need for defences against cruise and ballistic missiles and against chemical and biological weapons; and the need for improved electronic attack capabilities. As James Thomas has pointed out, more ambitious EU capability goals would entail greater overlaps with the DCI:

Meeting the requirements of the most difficult Petersberg tasks would also furnish many of the capabilities needed to participate alongside US forces in large-scale combat operations in, or beyond, Europe. This would help to reconcile the EU's Headline and Capability Goals with NATO's DCI objectives of improved deployability, logistics, strike assets, force protection and communications, command and control. On the other hand, if EU states choose more modest scenarios that emphasise threats closer to home and only at the lower end of the Petersberg spectrum, this is more likely to justify the continued slide in their defence budgets, making transatlantic imbalances more enduring.⁸³

Conclusion: Narrowing the Gap May Be Difficult

Efforts to build a European Security and Defence Identity (ESDI) in NATO – or a Common European Security and Defence Policy (CESDP) in the European Union – have been pursued under various labels for the past half-century. Basic obstacles have proved difficult to surmount: a lack of political cohesion and unity in Europe, an absence of a shared vision of strategic requirements, and (on the part of several NATO European governments) an unwillingness to spend more than minimal levels on military capabilities.

The reversal of current trends toward reducing defence spending in most EU countries depends on at least three factors: economic growth; threat perceptions; and the prominence of social priorities other than national defence. Whether economic growth will lead to increased defence spending depends in large part on the other two factors. As far as threat perceptions are concerned, it is worth recalling that the EU's Petersberg tasks – like non-Article 5 missions in NATO – are not vital matters of national or collective defence, but optional interventions. Such interventions do not provide compelling grounds for increased defence budgets in most NATO countries. Moreover, anecdotal evidence suggests that threat perceptions in the European Union are not as acute as those in the United States, which helps to explain European non-comprehension of the US interest in National Missile Defence. Thus, increases in Western European defence spending are unlikely. In an interview in April 2000, a highly placed French observer offered the following forecast:

The European military budgets will not be increased, because there is no sentiment of being threatened in Europe. The increase in the US defence budget is incomprehensible for a European today, when there is no obvious threat and when the United States enjoys an overwhelming superiority over any potential enemy.⁸⁴

As far as social priorities other than national defence are concerned, the increased demand for pensions and health care is likely to constrain defence spending in all NATO countries. According to Paul Hazell, the Director from 1992 to 1998 of the SACLANT-sponsored study *The Implications of New Technology for Maritime Operations in 2015*,

In spite of the fact that NATO defence spending through 2005 is likely to be relatively stable, thereafter the prospects look grim. All NATO nations will come under increasing pressure to fund the retirement and social security/health costs of

a growing number of post-Second World War 'baby-boomers.' At best, defence budgets will remain level; at worst they could fall to 1% of Gross Domestic Product. From 2005 to 2020, when the pressures on defence budgets will peak, the need to replace major assets that were built at the height of the Cold War will become paramount. Because of the reduced budget levels, and the continuing growth in unit costs due to technical sophistication and falling production, the build rate for new ships and submarines may fall to 25% of Cold War levels. This will have a massive impact on fleet numbers, and could reduce the US Navy to 150–200 ships.⁸⁵

The French economist Claude Lachaux has argued that demographic and economic factors – these 'stubborn facts' – are likely to constrain West European defence spending more than that of the United States. The first fact Lachaux has emphasised is the changing demography of Western Europe: the decline in birth rates and the decline in the number of workers relative to the growing numbers of retired people receiving government pensions. According to his analysis, the growing pension and health care demands of ageing populations will make it difficult for European governments to increase spending on defence: 'How will governments be able to obtain funds from their parliaments for high-tech armaments if the elected representatives of an aged population are only disposed to vote for funds for high-tech medicine?'⁸⁶ Other studies have reached similar conclusions about the implications of demographic change:

In the United States, there will be one person older than 65 for every three of working age in 2030, according to International Monetary Fund estimates. In Italy and Germany, by contrast, the ratio will be one to two. In both those countries, experts believe, the official figures hide the full impact because so many people retire before 65. In all likelihood, experts say, Italy and Germany will have one worker for every retiree in about 30 years. By some calculations, taxes will rise so much in Germany and Italy that half of workers' incomes will go to taxes to support retirees, with taxes for other purposes on top of that.⁸⁷

Lachaux's second stubborn fact is the cumulative US advantage in spending a greater proportion of GNP on defence and in pursuing greater efficiencies, with less duplication and more attention to procurement, new operational requirements and military R&D. In view of the fact that the United States federal budget appears well enough balanced to permit Social Security reforms and real increases in defence spending in the coming years, while balanced budgets in Europe 'appear, for a long time ahead, to be a dream,' Lachaux has forecast that the United States will continue to make a greater defence effort than its European allies.⁸⁸

Finally, Lachaux has highlighted the enlargement of NATO and the EU, in conjunction with Balkan reconstruction efforts. Such endeavours also burden the economies of the EU countries and promise to limit the funds available for military capabilities improvements. Unless the Europeans can surmount such stubborn facts, Lachaux has concluded, 'their speeches on European Security and Defence Identity will pass for pure rhetoric'.⁸⁹ In short, continued declines

in defence spending in NATO Europe are in prospect, except perhaps for Greece, Turkey and the United Kingdom. Since 1992, NATO European defence spending has dropped 22% in real terms.⁹⁰ While US defence spending declined by 37% in real terms from 1985 to 2000,⁹¹ the United States nonetheless retained many of its capability advantages. An increase in US defence spending in real terms will begin in fiscal year 2001.⁹²

Representatives of EU organisations and like-minded European officials and experts frequently assert that the EU will be more effective than NATO in getting its member states to increase defence spending or, at least, to gain force improvements through more efficient spending. This remains to be seen; a number of European observers expect the pattern of US–European capability asymmetries to remain essentially unchanged, although marginal improvements may be achieved via measures such as a projected pooling of air transport assets by some European countries.

Britain, France, and the United States are the three nations most determined to do something about the US–European capabilities gap.⁹³ London, Paris, and Washington all want to stimulate their European allies and partners to acquire improved military capabilities. Their motives are different, of course. Most Americans want more capable allies and coalition partners, though some have at times manifested reservations about diminished European dependence on the United States. The British and the French both seek more political and military options under national and/or EU control (and diminished dependence on the United States) and the greater influence in defining NATO strategy that would flow from increased capabilities. The British have played a leading role in this regard since late 1998, when Prime Minister Tony Blair announced, in a major change in British policy, an unprecedented readiness to bring security and defence matters into the EU. The British nonetheless remain more inclined than the French to think in terms of developing the EU's military potential within a broad NATO framework and in close cooperation with the United States. The French are more apt to think of an EU capability distinct from that of the alliance and US forces. As in the past, the concept of the EU as an autonomous great power – what the French call '*l'Europe-puissance*' – commands more interest and respect in France than in any other EU country.

Long-standing patterns of capability dependence in transatlantic relations appear likely, however, to be prolonged and may well be deepened by factors affecting the willingness and ability of governments to spend on military forces, such as the low level of threat perceptions in NATO Europe and the imperatives of other social priorities in the EU. London, Paris and Washington therefore face great challenges in their attempts to get significant improvements in capabilities. The way forward will demand shared determination, trans-Atlantic cooperation and coordination,⁹⁴ and increased European defence spending. This appears to be the only way to narrow the gap.

Acknowledgements

This article is based on a presentation at the conference on *The Transformation of NATO and the Question of European Unity*, University of Washington, Seattle, 5–6 May 2000. Special thanks are owed to those who commented on earlier drafts of this article, though they naturally bear no responsibility for the views expressed: Commander Steve Benson, USN, William Bodie, Captain Simon Branch-Evans, Royal Navy, Corinne Caballero, Emmanuel Chavasse-Frétaz, Roger Cockram, Alain Crémieux, Commander James Dale, Royal Navy, Captain Robert Deal, USN, Jaymie Durnan, Captain Michael Durnan, USN, Rear Admiral Anthony Dymock, Royal Navy, LCDR Scott Ewing, USN, Commander Kevin Farrell, USN, Captain Donald Fennessey, USN, Roland Galharague, Commander Ed Gunning, USN, Thomas Handel, Jolyon Howorth, Rupert Holderness, James Hurd, Colonel Georges Kuttlein, French Army, Captain Gary Leaman, USN, Commander Kevin Newmeyer, USN, Diego Ruiz Palmer, LCDR Tony Parisi, USN, Commander Ronald Parson, USN, Dmitry Ponomareff, Commander Chris Real, USN, Paul-Ivan de Saint-Germain, Kori Schake, LT Kevin Shaeffer, USN, Captain Sam Tangredi, USN, James Thomas, James Townsend, and Captain Jan van Tol, USN.

Notes

¹ Since the end of the Cold War, allies have distinguished between such a general war scenario and the possibility of a limited regional conflict involving a single ally – for instance, aggression against Turkey. Aggression against an ally within the geographical area defined by Article 6 of the North Atlantic Treaty would necessitate a response by the allies under Article 5, but most allies would probably retain some of their forces to hedge against

other risks. National survival would, by definition, not be at stake for any NATO country in a non-Article 5 contingency. The US–European capabilities gap has implications for both Article 5 and non-Article 5 contingencies.

² The four EU members not in NATO are Austria, Finland, Ireland, and Sweden. The six NATO European countries not in the EU are the Czech Republic, Hungary, Iceland, Norway, Poland, and Turkey.

³ The unresolved issues in EU crisis-response decision-making (for example, the possibility of a ‘mercenary scenario,’ in which some nations might offer financial support while others contribute forces to specific operations) are lucidly examined in Jolyon Howorth’s forthcoming Chaillot paper, to be published in October 2000 by the Institute for Security Studies, Western European Union, *European Integration and Defence: The Ultimate Challenge?*

⁴ European Council, Presidency Conclusions, Santa Maria da Feira, 19–20 June 2000, Appendix 1.

⁵ Discussions of US–European technology gaps in ‘manufactures’ and specific industries go back at least as far as Cobden and Tocqueville in the 1830s. US–European gaps in certain fields of military and space technology have been identified repeatedly since World War II and have at times provoked debates within the alliance. See, among other sources, Richard R. Nelson, *The Technology Gap: Analysis and Appraisal*, P-3694-1 (Santa Monica, CA.: The Rand Corporation, December 1967).

⁶ US Secretary of Defense William Cohen quoted in Elizabeth Becker, ‘European Allies to Spend More on Weapons,’ *New York Times*, 22 September 1999, p. A13.

⁷ François Heisbourg, ‘Emerging European Power Projection Capabilities,’ paper presented at the Joint RAND and GCSP Workshop, ‘NATO’s New Strategic Concept and Peripheral

Contingencies: The Middle East,' Geneva, 15–16 July 1999, available at www.gcsp.ch.

⁸ Lord Robertson, 'Rebalancing NATO for a Strong Future,' remarks at the Defence Week Conference, Brussels, Belgium, 31 January 2000, available at www.nato.int.

⁹ For a fuller discussion of economic issues in the alliance, see David S. Yost, *NATO Transformed: The Alliance's New Roles in International Security* (Washington DC: United States Institute of Peace Press, 1998), pp. 62–70.

¹⁰ François Heisbourg, 'Emerging European Power Projection Capabilities,' paper presented at the Joint RAND and GCSP Workshop, 'NATO's New Strategic Concept and Peripheral Contingencies: The Middle East,' Geneva, 15–16 July 1999, available at www.gcsp.ch.

¹¹ Federico Fubini, 'The Italian Paradox: We Are Important But We Count for Little,' *Limes*, 20 October 1999, in Foreign Broadcast Information Service, 3 December 1999.

¹² Comparative data – defence spending by category, as a percentage of GNP, etc. – for most of the allies may be found in 'Defence Expenditures of NATO Countries 1975–1999,' *NATO Review*, vol. 48 (Spring/Summer 2000), pp. D13–D16. The two exceptions are Iceland, which has no military forces, and France, which declines to furnish data according to NATO definitions for this exercise, just as it declines to respond to the Defence Planning Questionnaires that form part of the alliance's collective defence planning process.

¹³ François Cailleteau, 'E pluribus unum,' *La Revue Internationale et Stratégique*, no. 34 (Summer 1999), p. 32. These numbers are subject to change, of course. A subsequent edition of the *Military Balance* reported, for example, that the number of US SSNs had declined to 57 and the number of cruisers to 27. See *The*

Military Balance 1999–2000 (London: The International Institute for Strategic Studies, 1999), p. 22.

¹⁴ François Cailleteau, 'E pluribus unum,' *La Revue Internationale et Stratégique*, no. 34 (Summer 1999), pp. 32–33.

¹⁵ France's two *Hélios* optical reconnaissance satellites, with Italian and Spanish shares, are the only European intelligence satellites. No EU or NATO European country has satellites for radar, infrared, or signals intelligence. Britain has a dedicated military communications satellite, Skynet, while France relies on its Syracuse system, part of the Telecom family of telecommunications satellites.

¹⁶ Britain and France alone among the 'EU five' have invested in national AWACS aircraft. Three European allies have electronic-intelligence aircraft – the British *Nimrod* R-1s, the French *Sarigue* DC-8 and *Gabriel*-160s, and the German *Atlantic*-1s.

¹⁷ Jane M. O. Sharp, 'Summary and Conclusions,' in Jane M. O. Sharp, ed., *Europe After an American Withdrawal: Economic and Military Issues* (New York: Oxford University Press, 1990), p. 49.

¹⁸ See Robert Komer, 'Ten Suggestions for Rationalizing NATO,' *Survival*, vol. 11 no. 2, March–April 1977, pp. 67–72; and 'The Origins and the Objectives,' *NATO Review*, June 1978.

¹⁹ The United Kingdom was better prepared for the operational demands of the conflict than any other European ally. Despite their expeditionary warfare traditions, the French found the magnitude of the Gulf War's requirements (and the military–technical gap with the United States in strategic intelligence and other areas) a sobering revelation. See David Yost, 'France and the Gulf War of 1990–1991: Political–Military Lessons Learned,' *Journal of Strategic Studies*, vol. 16, September 1993.

²⁰ Rick Atkinson and Bradley Graham, 'As Europe Seeks Wider NATO Role, Its

Armies Shrink,' *Washington Post*, 29 July 1996, pp. A1, A15.

²¹ Ministère de la Défense, *Premiers Enseignements des Opérations au Kosovo* (Paris: Délégation à l'Information et à la Communication de la Défense, June 1999), pp. 8–9. The British, of course, have cruise missiles and used some of them in the Kosovo operations – *Tomahawk* land-attack missiles (TLAMs). Perhaps the British TLAMs were disregarded in this French analysis because the United Kingdom purchased them from the United States.

²² 'Military Developments,' *The Military Balance 1999–2000* (London: The International Institute for Strategic Studies, 1999), p. 30.

²³ Prepared statement of US Secretary of Defense William Cohen to the US Senate Armed Services Committee, Hearings on Operations in Kosovo, 20 July 1999.

²⁴ Carla Anne Robbins, 'No Parades: To All but Americans, Kosovo War Appears a Major US Victory – Display of Military Might Makes Allies, Adversaries Doubt Their Relevance,' *Wall Street Journal*, 6 July 1999, p. A1.

²⁵ See Robert Wall, 'Airspace Control Challenges Allies,' *Aviation Week and Space Technology*, 26 April 1999.

²⁶ Ministère de la Défense, *Premiers Enseignements des Opérations au Kosovo* (Paris: Délégation à l'Information et à la Communication de la Défense, June 1999), p. 6.

²⁷ 'Lessons From Kosovo: Military Operational Capabilities,' in *The Military Balance 1999–2000* (London: The International Institute for Strategic Studies, 1999), p. 290.

²⁸ Ministère de la Défense, *Premiers Enseignements des Opérations au Kosovo* (Paris: Délégation à l'Information et à la Communication de la Défense, June 1999), p. 7; Lord Robertson of Port Ellen, Secretary of State for Defence, *Kosovo: An Account of the Crisis* (London: Ministry of Defence, October 1999), p. 30.

²⁹ Department of Defense, *Kosovo/ Operation Allied Force After-Action Report to Congress* (Washington DC: Department of Defense, 31 January 2000), p. 79; and Secretary of State for Defence, *Kosovo: Lessons from the Crisis*, Cm 4724 (London: The Stationery Office, June 2000), p. 70.

³⁰ The CL-289 has an altitude of up to 600 metres and an endurance of up to 30 minutes, and is fitted with electro-optical video cameras and infra-red sensors. By comparison, the *Predator* can reach an altitude of up to 7,600 metres and has an endurance of up to 24 hours. In addition to the CL-289's sensors, it also boasts a synthetic aperture radar, signals intelligence collection radar and full data links to JSTARs. 'Lessons From Kosovo: Military Operational Capabilities,' in *The Military Balance 1999–2000* (London: The International Institute for Strategic Studies, 1999), p. 288.

³¹ James P. Thomas, *The Military Challenges of Transatlantic Coalitions*, Adelphi Paper 333 (London: Oxford University Press for The International Institute for Strategic Studies, 2000), p. 52.

³² Author's interview with a British observer at SACLANT (Supreme Allied Commander Atlantic - NATO) headquarters in Norfolk, 24 February 2000.

³³ Author's interview in London, 13 April 2000. The SIPRNET (Secret Internet Protocol Router Network) is an encrypted global communications network employed by the US Department of Defense (DoD) and some other agencies.

³⁴ Department of Defense, *Kosovo/ Operation Allied Force After-Action Report to Congress* (Washington DC: Department of Defense, 31 January 2000), pp. 74–75.

³⁵ Rear Admiral Kenneth Heimgartner, USN, speech at the Surface Navy

Association International Navies Luncheon, 13 January 2000, pp. 7, 8, and 12 of text furnished by OPNAV.

³⁶ Greg Schneider, 'US Will Relax Arms-Sale Curbs: Allies to Gain Greater Access,' *Washington Post*, 24 May 2000, p. E1.

³⁷ Author's interview at the Department of Defense, Washington, 18 June 2000. For a valuable discussion of air-gapping and associated issues, see Colonel Dennis Treece, 'Moving Sensitive U.S. Electrons Around in a Coalition Environment – Without Spilling Any,' *IA Newsletter*, vol. 2, no. 4 (Spring 1999). The *IA Newsletter* is published by the Information Assurance Technology Analysis Center, Defense Information Systems Agency.

³⁸ Loren B. Thompson, 'The Future of Airborne Electronic Warfare,' *Sea Power*, March 2000.

³⁹ 'Lessons From Kosovo: Military Operational Capabilities,' in *The Military Balance 1999–2000* (London: The International Institute for Strategic Studies, 1999), p. 289.

⁴⁰ Ministère de la Défense, *Les Enseignements du Kosovo* (Paris: Délégation à l'Information et à la Communication de la Défense, November 1999), p. 19.

⁴¹ David L. Rockwell, 'Kosovo Signals EW Weakness,' *Aviation Week and Space Technology*, 17 January 2000, p. 189.

⁴² Ministère de la Défense, *Premiers Enseignements des Opérations au Kosovo* (Paris: Délégation à l'Information et à la Communication de la Défense, June 1999), p. 7; emphasis added.

⁴³ The shortfalls in US and European electronic attack capabilities probably have multiple causes, but mistaken risk and technology assessments may have played a role. After the dissolution of the Warsaw Pact and the collapse of the Soviet Union, some US planners may have judged that America no longer needed extensive offensive electronic

warfare capabilities for the suppression of enemy air defences – despite continuing exports of sophisticated air defences by Russian and other suppliers. The French may have made similar mistakes in assessing risks and requirements when they abandoned their only anti-radiation missile (the *Martel*).

⁴⁴ See, among other discussions, Daniel Gouré, 'The Resource Gap,' *Armed Forces Journal International*, May 2000; and Elaine M. Grossman, 'DoD Finds Readiness Risks in 'One-And-A-Half' Overlapping Wars,' *Inside the Pentagon*, 25 May 2000, p. 2.

⁴⁵ Greg Seigle, 'Radar-Jamming Prowlers Played Big Role in the Balkans,' *Jane's Defence Weekly*, 7 July 1999.

⁴⁶ Loren B. Thompson, 'The Future of Airborne Electronic Warfare,' *Sea Power*, March 2000.

⁴⁷ Secretary of Defense William S. Cohen and General Henry H. Shelton, Chairman of the Joint Chiefs of Staff, Joint Statement on the Kosovo After Action Review before the Senate Armed Services Committee, 14 October 1999, pp. 7–8.

⁴⁸ Ministère de la Défense, *Les Enseignements du Kosovo* (Paris: Délégation à l'Information et à la Communication de la Défense, November 1999), p. 21.

⁴⁹ Author's interview in London, 28 June 2000.

⁵⁰ Author's interviews in London, Paris and Brussels, April, June, and July 2000.

⁵¹ Author's interview in Paris, 21 April 2000.

⁵² Secretary of State for Defence, *Kosovo: Lessons from the Crisis*, Cm 4724 (London: The Stationery Office, June 2000), p. 41, par. 7.35.

⁵³ Alain Richard, interview in *Jane's Defence Weekly*, 26 April 2000.

⁵⁴ See David C. Gompert, Richard L. Kugler, and Martin C. Libicki, *Mind the Gap: Promoting a Transatlantic Revolution*

in *Military Affairs* (Washington DC: National Defense University Press, 1999).

⁵⁵ General Michael Short quoted in Michael Evans, 'General Wanted US to Call the Shots in Kosovo,' *The Times* (London), 27 January 2000.

⁵⁶ North Atlantic Council in Defence Ministers Session, Final Communiqué, June 12, 1997, par. 7.

⁵⁷ Washington Summit Communiqué Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Washington DC, 24 April 1999, paragraph 10.

⁵⁸ Western European Union, Council of Ministers, Bonn, 19 June 1992, 'Petersberg Declaration,' par. 4 of Part II, 'On Strengthening WEU's Operational Role.'

⁵⁹ Alain Richard, 'European Defence and the Transatlantic Link,' speech at Georgetown University, Washington DC, 23 February 2000, pp. 5–6 of text furnished by the French Ministry of Defence. SHAPE is the Supreme Headquarters Allied Powers Europe (NATO). SACEUR is the Supreme Allied Commander Europe (NATO).

⁶⁰ Author's interviews in London, Paris, Brussels and Naples, June–July 2000.

⁶¹ Lionel Jospin, speech at the Institut des Hautes Études de Défense Nationale, 22 September 2000.

⁶² François Heisbourg, 'European Defence Takes a Leap Forward,' *NATO Review*, vol. 48 (Spring/Summer 2000), pp. 8–11.

⁶³ Cohen quoted in Jim Garamone, 'US Proposes "More Positive" Vision of NATO–EU Partnership,' *American Forces Press Service*, 10 October 2000.

⁶⁴ Secretary of State for Defence, *Kosovo: Lessons from the Crisis*, Cm 4724 (London: The Stationery Office, June 2000), pp. 41–42, par. 7.42.

⁶⁵ European Union Presidency Conclusions, Helsinki, 10–11 December

1999.

⁶⁶ François Heisbourg, with contributions by Nicole Gnesotto, Charles Grant, Karl Kaiser, Andrzej Karkoszka, Tomas Ries, Maartje Rutten, Stefano Silvestri, Alvaro Vasconcelos and Rob de Wijk, *European Defence: Making It Work*, Chaillot Paper no. 42 (Paris: Institute for Security Studies, Western European Union, September 2000), p. 80; emphasis in the original.

⁶⁷ Ministère de la Défense, *Les Enseignements du Kosovo* (Paris: Délégation à l'Information et à la Communication de la Défense, November 1999), p. 21.

⁶⁸ Lord Robertson of Port Ellen, Secretary of State for Defence, *Kosovo: An Account of the Crisis* (London: Ministry of Defence, October 1999), p. 23.

⁶⁹ Ministère de la Défense, *Les Enseignements du Kosovo* (Paris: Délégation à l'Information et à la Communication de la Défense, November 1999), p. 21.

⁷⁰ See country entries of contributing states in the NATO and Non-NATO Section, in IISS, *The Military Balance 2000/2001*, (Oxford: Oxford University Press for the IISS, 2000).

⁷¹ Dr. Guenter Burghardt, Head of the European Commission Delegation in Washington DC, declared in his presentation at the Friedrich Ebert Stiftung on 15 March 2000 that 'a rapid reaction force of 60,000 ... will actually require a force of 180,000.'

⁷² Jacques Chirac, television interview on 22 February 1996, text furnished by the French Foreign Ministry, p. 2.

⁷³ François Heisbourg, 'Emerging European Power Projection Capabilities,' paper presented at the Joint RAND and GCSP Workshop, 'NATO's New Strategic Concept and Peripheral Contingencies: The Middle East,' Geneva, 15–16 July 1999, available at www.gcsp.ch.

⁷⁴ Jacques Isnard, 'L'Europe de la

défense se met progressivement en place,' *Le Monde*, 22 September 2000, p. 2.

⁷⁵ *Enhancing the European Union as an International Security Actor: A Strategy for Action by the Venusberg Group* (Gütersloh, Germany: Bertelsmann Foundation Publishers, June 2000), p. 5.

⁷⁶ North Atlantic Council, Washington Summit Communiqué, 24 April 1999, par. 11.

⁷⁷ Lord Robertson, speech at the 5th Forum Europe Defence Industries conference, Brussels, 23 May 2000, available at www.nato.int.

⁷⁸ Secretary of Defense William S. Cohen, 'European Security and Defence Identity,' Munich, Germany, 5 February 2000, remarks as prepared, available at <http://www.defenselink.mil/>.

⁷⁹ Department of Defense, Report to the Congress on NATO Defense Capabilities Initiative, submitted 7 March 2000, p. 6.

⁸⁰ Frank Kramer, Assistant Secretary of Defense for International Security Affairs, prepared statement before the Senate Foreign Relations Committee, 9 March 2000, quoted in 'DoD Reports on Progress of NATO's "Defence Capabilities Initiative,"' *Inside the Pentagon*, 16 March 2000.

⁸¹ Frank Kramer, Assistant Secretary of Defense for International Security Affairs, prepared statement before the Senate Foreign Relations Committee, 9 March 2000, quoted in 'DoD Reports on Progress of NATO's "Defence Capabilities Initiative,"' *Inside the Pentagon*, 16 March 2000.

⁸² Diego Ruiz Palmer quoted in Melanie Bright, 'A Bridge Too Far?' *Jane's Defence Weekly*, 14 June 2000, p. 63.

⁸³ James P. Thomas, *The Military Challenges of Transatlantic Coalitions*, Adelphi Paper 333 (London: Oxford University Press for the International Institute for Strategic Studies, 2000), p. 69.

⁸⁴ Author's interview with a French observer in Brussels, 20 April 2000.

⁸⁵ Paul Hazell, 'Beyond 2015: The NATO Way Forward,' *Jane's Navy International*, vol. 104 (December 1999), p. 13.

⁸⁶ Claude Lachaux, 'Alliance atlantique et Europe de la défense: les faits sont têtus,' *Défense Nationale*, August–September 1999, p. 82.

⁸⁷ Anne Swardson, 'A Pension Crisis Looms in Europe,' *Washington Post National Weekly Edition*, 1 May 2000, p. 17. Such projections are, to be sure, subject to change. Pension plans and laws on eligibility for retirement will, for example, probably be revised. The projections nonetheless identify, in a *grosso modo* fashion, genuine constraints on the spending latitude of alliance governments.

⁸⁸ Claude Lachaux, 'Alliance atlantique et Europe de la défense: les faits sont têtus,' *Défense Nationale*, August–September 1999, pp. 82–84.

⁸⁹ Claude Lachaux, 'Alliance atlantique et Europe de la défense: les faits sont têtus,' *Défense Nationale*, August–September 1999, p. 86.

⁹⁰ 'The NATO Capability Gap,' in *Strategic Survey 1999/2000* (London: The International Institute for Strategic Studies, May 2000), p. 19.

⁹¹ *The Military Balance 1999/2000* (London: The International Institute for Strategic Studies, 1999), p. 15.

⁹² 'The US: Economic Power at Home, Restraint Abroad,' in *Strategic Survey 1999/2000* (London: The International Institute for Strategic Studies, May 2000), p. 76.

⁹³ These three allies (all permanent members of the UN Security Council) have invested the most in preparing for interventionary and expeditionary operations.

⁹⁴ The industrial, technology-transfer, and intellectual property issues associated with some advanced military capabilities will present significant challenges for trans-Atlantic cooperation.