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**NATO's FORCE PROJECTION:  
WHERE'S THE LIFT?**

**BY**

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**NATO's Force Projection:  
Where's the Lift?**

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## ABSTRACT

The study examines force projection, a capability central to current and projected NATO and US concepts. For selected countries, the paper looks at positions and motivations concerning the alliance and assesses the impact on current and future force projection capabilities. The countries are Poland, Hungary, the Czech Republic, the UK, France, Germany, Italy, and the US. Factors considered include trends in each state's military, with a focus on aspects intended or likely to enhance force projection. Specific attention is paid to strategic lift. The economic strength, reflected in GDP, is used, as an indicator of each nation's potential for making improvements to its military. Each nation's defense budget, including trends and projections, are used to show specific intent and the importance of the military to the government and the public. Public support for the military, NATO and international involvement are reviewed to give some understanding of constraints placed upon governments. A limited look at past involvement by each state's military in international efforts is made to provide insight into force projection prospects. The paper has an extensive bibliography of Internet sites, governmental materials, and interviewees. The paper concludes that a mismatch between current strategic policy, both US and NATO, and force projection capabilities has resulted in a shortfall in NATO's strategic lift and provides recommendations.



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## Introduction

As the North Atlantic Treaty Organization (NATO) reassesses and redefines itself in terms of its membership, its geographic reach and its functional role, it is incumbent upon the United States (US) to reassess the implications of US involvement in the alliance today and in the future. Opinions vary greatly as to whether this was sufficiently vetted as a part of the NATO Enlargement debate.<sup>1</sup> In that light, this paper will look at one key element of the alliance's, as well as the US military's, stated concepts, namely force projection, which has received limited attention within NATO.

Force projection is acknowledged as central to current and projected NATO and US concepts.<sup>2</sup> In some respects, this idea is not new; however, it has taken on added importance. While not referred to in such terms during the Cold War, the rapid deployment of US forces to Europe has always been a key element of the alliance's war plans. In the past, it was the US that was primarily forced to look at the issue. It was twenty years ago that a US command post exercise named Nifty Nugget identified significant flaws in US force's abilities to deploy, which started a process that eventually led to significant revision of U.S. plans and concepts and analysis of and upgrades to our deployment capabilities. One major step in this process was the formation of US Transportation Command (USTRANSCOM).<sup>3</sup> The command played a principal role in US deployment efforts during Operations Desert Shield/Desert Storm (ODS/DS), which are often cited as exceeding so many previous efforts in scope and responsiveness and generally hailed as a resounding success story.<sup>4</sup> Yet subsequent to ODS/DS, the Department of Defense's (DOD's) own Mobility Requirements Study (MRS) revealed significant and still continuing deployment capability shortfalls.<sup>5</sup> The dramatic draw

down in the size of US forces, the general “pull back” of remaining forces to bases within the US and the overall change in the conceptual approach to how, when, and where to employ US forces have only placed heightened demands upon force projection capabilities. At the same time, these demands cannot be viewed in isolation from events in Europe, given the US’s historical, cultural, economic and military ties to the continent.

The cornerstone of US foreign and military policies for the last half-century has been the stability and security of Europe. Since the collapse of the Berlin Wall, the US and its NATO allies have sought to fill the void created by the demise of the Soviet Union and the disappearance of the Warsaw Pact. In doing so, they are, at least in part, responding to a unanimous desire among former East Bloc countries to be reintegrated into the West economically and societally, and to assure their security collectively with the West.<sup>6</sup> Even former neutral states, such as Austria, have sought closer ties.<sup>7</sup> The US’s principal response to these desires has been NATO Enlargement, a European manifestation of its worldwide policy of engagement.

The process has evolved through the Partnership for Peace program to an actual invitation for three states, Poland, the Czech Republic and Hungary to join NATO. Additionally, the stated policy of the US and NATO is that the door remains open for further enlargement.<sup>8</sup> However, while the need to operate in a full spectrum of force projection scenarios is often referred to in both NATO and the US, alliance members individually have only begun to address the crosswalk between policy and the alliance’s force projection structure. While this paper explores the force projection implications for NATO and the US military, it does not argue for or against enlargement. The assumption is that enlargement will take place. While a host of very cogent reasons for enlargement

have been advanced, the attention given to the military implications of such an expansion has failed to look in sufficient detail at the importance of force projection.

This paper demonstrates that while NATO and US policy evolved and remained pertinent after the fall of the Berlin Wall, it is only within the last few years (except for the US) that correspondingly broad reviews of military capabilities and structures were conducted that encompassed Post Cold War policies. Some of these reviews are still underway. All reviews have recognized the centrality of force projection in today's world and included plans for military restructuring with an emphasis on force projection. However, in most reviews only limited attention is given to the means of deploying forces. Lack of a collective NATO review of force deployment may be a by-product of the Cold War, "it's a national responsibility", approach to logistics.

Attainment of a viable deployment capability is more than cataloging existent military lift, outlining contracted commercial assets or enumerating other readily available commercial assets, although all of these will have to be fully accomplished to realize success. The establishment of a viable capability requires both the resources and the will to commit them. This paper demonstrates, using a number of indicators, most states, lack in one, the other, or both. These indicators are intended to enable you to see force projection in the context in which it must compete for recognition and resources. It is hoped such an appreciation will lead to a comprehensive collective review of lift.

To that end the paper summarizes pertinent recent events concerning NATO, the US and the ramifications for strategic concepts. For selected countries, the paper looks at their positions and motivations concerning the alliance and assesses the impact on their current and likely future force projection capabilities. The countries selected include the

states newly nominated to NATO, some major European NATO allies, and the US. The intent is not to compare the newest members with the most capable. The intent is to show that for force projection missions, particularly out of area, the new members increase NATO's lift shortfall and that collectively the most capable current allies do as well.

Specific factors considered include trends in each state's military force size, structure, organization and equipment, with a focus on aspects intended or likely to enhance force projection. Specific attention is paid to strategic lift.<sup>9</sup> The economic strength, reflected in gross domestic product (GDP), is used as an indicator of each nation's potential or means to make improvements to its military. Each nation's defense budget, including trends and projections, is used to show specific intent and, to some degree, the importance assigned to the military by both the government and the public. Public support for the military, NATO, and international involvement and associated responsibilities is reviewed to give some understanding of constraints placed upon governments. A very limited look at past involvement by each state's military in international efforts is made to provide insight into force projection prospects.

The focus of the paper is, therefore, the mismatch between attention paid to current strategic policy, both US and NATO, and force projection capabilities, present and future. This review shows there is currently a collective strategic lift shortfall and that, while all the states reviewed have recognized the need for force projection and have made efforts to enhance their own country's capabilities, insufficient strategic lift capacity is being developed for likely challenges that lie ahead for the alliance.

## The Backdrop of Recent Events

Current NATO policy, quite understandably, differs significantly from that which existed prior to November 1989. There has been a plethora of writing about the impact of the fall of the Berlin Wall, the collapse of the Soviet Union, a surge in democratic states around the world and the evolution of a new, multipolar world. The importance of all that for this paper is that NATO and US are no longer fixated on a single, super-power threat in the heart of Central Europe. In recognition of this, NATO promulgated a new Strategic Concept in November 1991 and further modified that in the Military Committee's Directive for Military Implementation of the Alliance's Strategic Concept (MC 400/1) in June 1996. It has pledged to put forth still another version by the 50<sup>th</sup> anniversary of the alliance in April 1999.<sup>10</sup>

A key and principal element of all revisions is, and is anticipated to remain, that on a selective basis, NATO is prepared to take on missions outside the geographic borders of NATO states. The NATO mission in Bosnia is the first manifestation of this new concept.<sup>11</sup> Another dimension of this specific mission and an anticipated element in possible future missions is the inclusion of non-NATO forces in the effort.<sup>12</sup> Both of these factors have potentially significant implications for strategic lift and multinational logistics and, therefore, the force projection plans of the US and its NATO allies.

Driven in large measure by the reduction in the threat from what is now Russia and, in an ever-increasing degree, by pressure from the domestic front to reap a "peace dividend", the US and its NATO allies have undertaken large reductions in the size of their militaries. They still have further reductions programmed, and have concurrently reduced their defense budgets, as a percentage of the gross domestic product (GDP), to

historically low levels for the post World War II era.<sup>13</sup> The budget outlook for the future appears to be much the same. At the same time, the “professionalization” of NATO forces is undergoing dramatic changes. The latter is driven in part by the aforementioned changes in NATO’s Strategic Concept. To provide forces capable of operating effectively outside the borders of NATO member states, most countries have concluded that more, long-term, highly specialized and proficient soldiers than those obtained through conscription will be required. While smaller militaries would appear, to those unfamiliar with the subject, to imply less problems with deployment, what is generally overlooked is that, under past concepts, generally only the US and Canada were faced with significant deployments.<sup>14</sup> Other members generally just had to relocate forces within Europe and had very limited, highly mobile elements identified for deployment, particularly on the northern and southern flanks of NATO. However, all deployed to friendly locations and over limited distances. These were very finite and limited forces for very specific purposes. Today several members have or are in the process of identifying forces in the tens of thousands for, as yet, undefined deployment missions.<sup>15</sup>

As for the US military, while its size has been reduced by a third, from 2.2 to 1.45 million,<sup>16</sup> the number and scope of missions it has been called upon to perform have dramatically increased. The Army alone has seen the number of missions it has been deployed on increase by a factor of 16.<sup>17</sup> While US forces are actively engaged worldwide, on a daily basis, they must be prepared to conduct two, nearly simultaneous Major Theater Wars (MTW’s) in accordance with the US national military strategy.

All of the aforementioned is a backdrop to where NATO is today, as it contemplates enlargement. It has implications for current members, the three states

nominated for membership and others hopeful of membership in the future. However, with varying degrees, all of these players favor enlargement.

The current members reflected their support of enlargement at the NATO Heads of Government Conference held in Madrid, July 8-9, 1997. At this session they extended an invitation to Poland, the Czech Republic and Hungary to join NATO. At the same time they specifically stated the door remained open for further expansion and anticipated extending offers to others in the future. They noted further expansion would be reviewed in their April 1999 session concurrent with the formal incorporation of Poland, the Czech Republic, and Hungary. They made it a point to specifically identify Slovenia, Romania and the Baltic States for praise on their progress to date and provide encouragement for future inclusion.<sup>18</sup> The underlying argument for such enlargement was that the security and stability of all of Europe, but especially the newly formed democracies of Central and Eastern Europe could best be assured by inclusion within NATO.

Each of the current member states was required to formally ratify the proposed enlargement. In most states, there is a parliamentary system and little, if any, problems were anticipated with approval. The US was seen as a potential site of heated debate, but none, of any significance, materialized.<sup>19</sup> Additionally, polls within current NATO member states showed generally popular, though uninformed, support for enlargement, as long as there was no significant cost associated with it.<sup>20</sup>

The governments of the nominated states and the hopefuls all favor membership. Numerous polls, with varying degrees of support and some caveats, show the populace of these countries also favor membership in NATO. Given this level of support and the

earlier summary of where NATO finds itself at this point in its history, what are the implications and prospects for force projection in an enlarged NATO?

### Nominated States

While the citizens of the three nominated states generally support NATO, that support is significantly diminished when it entails increases in defense spending. The divergence is even greater if such an increase is at the expense of social spending.<sup>21</sup> Therefore, in spite of uniform East and Central European government support for enlargement, the degree to which they will be able to demonstrate their commitment to NATO with modern, adequate-sized forces must reflect the political realities of public support for their own militaries, as well as NATO. The depth of this support is important, because all assessment of costs, even the recently released NATO assessment, places a disproportionate share of that cost on the new members, as seen in Table 1.

<u>Cost Studies Comparison</u>				
STUDY	US	NATO ALLIES	NEW MEMBERS	TOTAL
CBO	4.8	13.8	42.0	60.6*
RAND	6.0	23.0^	13.0^	42.0*
DOD	1.5-2.0	12.5-15.5**	13.0-17.5**	27.0-35.0**
NATO/US	.4	1.1	[3.5]^^	1.5^^

\* Both CBO and RAND Studies cited a range of costs, 60.6 to 124.7B and 10 to 110B, respectively.  
 \*\* Includes New Member Military Restructuring, Current Member's Regional Reinforcement Enhancements, and Direct Enlargement Cost.  
 ^ The \$23B for NATO allies is spread over 15 members, whereas, the \$13B is spread over only 3 states.  
 ^^ NATO's publicly touted cost for enlargement is \$1.5B. This is for NATO common expenses, but omits NATO's estimate of costs to be borne solely by nominated states, which is reflected in [ ].

**Table 1<sup>22</sup>**

By any measure, of the three nominated states, Poland compares most favorably with current NATO allies in terms of current and projected military capability and funds budgeted to improve that capability (see Table 2). Yet its GDP is only 42% that of Spain, the country closest to it in size of population and military. Note, it has taken Spain 16 years of NATO membership and post-Franco interaction with Europe to attain its current

status. Even with Poland's more robust economic growth and the highest percentage of GDP expended on the military of the three nominated states, its means for military modernization will continue to be limited.<sup>23</sup>

By a significant margin over their Hungarian and Czech counterparts, Poles consistently support all aspects of NATO membership, to include the stationing, if need

<b><u>A Comparison of Nominated States and NATO Members:</u></b>							
	<b><u>Nominated States</u></b>			<b><u>GDP</u></b>	<b><u>% GDP</u></b>	<b><u>Defense</u></b>	
	<b><u>Population</u></b>	<b><u>Size</u></b> <b><u>(Sq. Kin)</u></b>	<b><u>Forces</u></b> <b><u>(Active)</u></b>	<b><u>1996</u></b> <b><u>(\$B)</u></b>	<b><u>Growth</u></b> <b><u>1996</u></b>	<b><u>Budget</u></b> <b><u>1995 (\$B)</u></b>	<b><u>% GDP</u></b> <b><u>Defense</u></b>
Poland	38,615,000	312,680	248,500	246.3	6.0	2.11**	2.3
Czech Rep.	10,298,000	78,703	70,000	114.3	5.0	1.22	2.2
Hungary	10,232,000	93,030	64,300	74.7	0.5	0.55^	1.5
	<b><u>Current European NATO Members</u></b>			<b><u>GDP</u></b>	<b><u>% GDP</u></b>	<b><u>Defense</u></b>	
	<b><u>Population</u></b>	<b><u>Size</u></b> <b><u>(Sq. Km)</u></b>	<b><u>Forces</u></b> <b><u>(Active)</u></b>	<b><u>1996</u></b> <b><u>(\$B)</u></b>	<b><u>Growth</u></b> <b><u>1996</u></b>	<b><u>Budget</u></b> <b><u>1995 (\$B)</u></b>	<b><u>% GDP</u></b> <b><u>Defense</u></b>
France	58,609,000	547,030	398,900	1,220	1.3	47.7	2.5
Germany	82,072,000	356,910	358,400	1,700	1.4	42.8	1.5
Italy	56,831,000	301,230	325,150	1,020	0.8	20.4	1.9
U.K.	57,592,000	244,820	226,000	1,190	2.4	35.1	3.1
Spain	39,108,000	504,750	206,800	593	2.4	6.3	1.4
Turkey	63,528,000	780,580	639,000	379.1	7.0	5.38	3.5
Belgium	10,165,000	30,510	46,300	204.8	1.4	4.6	1.7
Denmark	5,305,000	43,094	32,900	118.2	2.0	2.9**	1.6**
Greece	10,616,000	131,940	168,300	106.9	2.2	4.9	4.6
Luxembourg	420,000	2,586	800	10	3.7*	0.142	0.8
Netherlands	15,650,000	37,330	63,100	317.8	2.7	8.2	2.1
Norway	4,400,000	324,220	30,000	114.1	4.8	3.7	2.9
Portugal	9,931,000	92,391	54,200	122.1	2.5	2.07	1.9
*1995	^1996	**1997 estimate					

**Table 2<sup>24</sup>**

be, of NATO troops in Poland and increases in defense spending (see public opinion poll results in Table 3).<sup>25</sup> Their government has already made significant changes to their

military, such as a 46% reduction in manpower, which provides some economies over the Cold War structure.<sup>26</sup> Additionally, they have implemented a 15-year modernization plan to address many of their military's shortcomings with respect to NATO standards. However, even the Ministry of Defence acknowledges that this "does not mean that the 15-year plan is expected to completely satisfy all the equipment requirements of our Armed Forces. Our (Poland's) economy is not strong enough yet."<sup>27</sup> Furthermore,

### Public Support For NATO, the EU & the US

	<u>Poland</u>	<u>Czech Republic</u>	<u>Hungary</u>	<u>Italy</u>	<u>Germany</u>	<u>France</u>	<u>UK</u>	<u>US</u>
<b>CORE NATO QUESTIONS:</b>								
(1) Support PKO in conflict between NATO members.				84	65	81	79	56
(2) Support PKO in states bordering NATO members.				82	60	75	79	54
(3) Support strengthening security in a region, such as the Mediterranean.				77	51	70	72	
(4) NATO coordinate arms control efforts among members.				75	60	70	75	
(5) Support NATO defending Western interests outside Europe, i.e. Persian Gulf.				61	32	49	64	49
(6) NATO combat international terrorism.				84	72	86	84	51
(7) NATO combat international drug trafficking.				83	69	83	79	51
8. NATO is still necessary.				71	62	67	79	61
9. Confidence in NATO.	60	50	58	66	54	62	67	
10. Support PKO in Bosnia.	72	60	59	74	57	73	76	48
11. Support increased financial contribution for enlargement.	56	29	36	38	11	27	30	
12. Support for Enlargement.				63	49	54	55	63
<b>OTHER QUESTIONS—NATO/EU/US:</b>								
13. Support NATO membership.	83	59	64					
14. Support sending troops to defend NATO state.	72	55	40					
15. Support sending troops for NATO PKO's.	78	61	52					
16. Favorable opinion of the US.	≥80	≥80	≥80	73	70	59	72	
17. Informed on Enlargement.	45	46	47	26	40	30	18	22
18. Support future Enlargement.	76	67	63	54	29	43	30	
19. Support strong leadership from US in world affairs.	75	58	60	53	47	44	72	
20. Confidence in EU.	56	54	66	79	43	70	47	
21. Support for EU membership.	81	70	75	86	58	73	49	
( ) Denotes "new missions for NATO" questions.								

TABLE 3<sup>28</sup>

transport capabilities are only tangentially referred to in the various “programmes” that have been identified. During an interview with the Deputy Minister of National Defence for Weapons Systems and Military Infrastructure, one of the last comments made about procurements was, “we are also considering a transport aircraft programme.”<sup>29</sup> The Commander-in-Chief of the Polish Air and Air Defence Forces provided a little more optimistic version, saying, “plans have been announced for the block renewal of the transport fleet.”<sup>30</sup> Hopefully the latter is true, because many of Poland’s limited lift systems have reached the end of their service life (see footnotes in Table 4).<sup>31</sup>

**A Comparison of Nominated States’ and Select European Members’  
Lift Aircraft**

	<i>SMALL Mixed Purpose: Tpt, VIP, Exec (Limited Capacity &amp; Short Range)</i>	<i>MEDIUM++ Tactical (C130, C160, AN12, TU154, FLA)</i>	<i>HEAVY Strategic (C5, C17, C141, AN225)</i>	<i>TANKERS Strategic (B707, VC10, KC10, KC135/FR, C160NG)</i>	<i>Mil Owned CIVILIAN AIRLINERS (A310, DC9, TU154, B707)</i>
Poland	73 <sup>^</sup>				2
Czech Republic	23	1			1*
Hungary	17				
Italy	45	30+		3	2
Germany	11	84			9*
France	54	67 <sup>^^</sup>		25	2
UK	30	56		31 <sup>**</sup>	3
Spain	55	7		8	
Turkey	30	32		2	
Belgium	17	11			
Denmark	2	3			
Greece	29	17			
Netherlands	4	2		2	
Norway	6	6			
Portugal	16	6			

<sup>^</sup> Includes 48 AN-2’s, last of which went into service in the mid-1960’s, & 10 AN-26’s that Poland says are at the end of service life.  
<sup>^^</sup> While no country has made a definite commitment to purchase any FLA’s, France has budgeted for 52 (not included in this figure).  
<sup>\*</sup>TU154’s have the capability to be configured & used in a Medium/Tactical manner, but all covered here are used for VIP service (e.g. Germany 2, Poland 2, and the Czech Republic 1).  
<sup>\*\*</sup> Includes the last 13 of 25 VC10’s being converted from transport (tpt) to tanker/transport (tkr/tpt) service.  
<sup>+</sup> Includes 18 C130J’s Italy has contracted for & is due to receive within 3 years.  
<sup>++</sup> Minimum capabilities/capacities to make this category are: 1) carry 90 or more troops, 2) max payload ≥ 35,000 lbs., and 3) max range ≥ 2,400 mi. While not all, many are in-flight refuelable, as well. By comparison, the smallest strategic max payload is 70,000 lbs. (C141).

**Table 4<sup>32</sup>**

Poland has significant forces, both in number and type, which could be available for force projection. These include Airborne, Airmobile, and Mountain Infantry forces.<sup>33</sup> Additionally, Poland has demonstrated repeatedly over the past 45 years and most recently with regard to potential military action in the Persian Gulf, that it is prepared to deploy its forces in support of the United Nations (UN) and NATO, as well as, bilateral or coalition obligations.<sup>34</sup>

Poland has used a combination of means, both military and commercial, to deploy its forces in the past. Deployments of small contingents to UN peacekeeping operations (PKO's) in Syria and Haiti were accomplished using the limited military means available. However, the military means, as noted earlier, are of limited capability and most of it is old. It would be of little use in the deployment of a large force over a long distance.<sup>35</sup> For many deployments Poland has used commercial means. However, in each of these cases there were favorable factors that might not apply in future deployments. Bosnia was accomplished using rail for both personnel and equipment.<sup>36</sup> This would not be viable for a deployment to some locations within and for all outside of Europe. While civilian aircraft could be expected to meet most of the demands for movement of personnel, very limited capabilities to move "outsized" equipment by air exist. Commercial sealift would most likely be used for sizeable deployments, but the timeliness, both in terms of availability and transit, of these assets is always a factor, particularly if not planned for or contracted for on a contingency basis. There is no indication such steps have been taken.

Given the increasingly competitive global economy, nations like Poland may find it increasingly harder to obtain lift assets from the commercial sector in a timely fashion.

At least one recent effort by the US Army's Training and Doctrine Command (TRADOC) noted "that technology and cost pressures will likely drive 'slack' or excess capacity from all sectors of the global economy. Consequently, the opportunity or capability to surge manufacturing or strategic movement may be limited unless prior planning accommodates the requirements."<sup>37</sup> So what does all this mean for Poland, NATO and the US?

Poland has a solid military that has made significant progress already. It has a plan to achieve further improvements. Both the public and multiple governments have continued to support the military. Poland's restructuring of forces and plans for equipping the military will make elements of it very capable, but Poland's ability to deploy those forces, particularly outside of Europe, is becoming more reliant on the commercial sector which is anticipated to have less and less slack in it. If this is the situation that faces Poland and, as will be made clearer in subsequent sections of this paper, it compares favorably in many ways with current NATO allies, how does Poland's current situation compare with that of its two sister nominees for NATO membership?

Hungary probably had the most Western-oriented economy of the former Warsaw Pact nations and fared well in the initial transition to the market system. However, sustainment of this was very erratic between 1993 and 1996. Prospects for future GDP growth of 3% or better a year are good.<sup>38</sup> The Hungarian government speaks in terms of around 5% growth.<sup>39</sup> However, in comparison with the three current NATO members with similar size population Hungary's economy comes up short. It comes closest to matching the GDP of Greece, but is still 30% shy of that level. Comparing actual US dollar equivalent expenditures on defense, the most favorable comparison that Hungary

attains is 40% of Portugal's. Of all current (excluding Luxembourg and Iceland) and nominated states, it is the lowest by a significant margin in terms of funds made available for defense and only Spain spends less as a percentage of GDP on defense (see Table 2).<sup>40</sup>

Such budgetary outlays for defense are reflective of Hungarians focus on getting their economic house in order. The downsizing of the military began in 1991 due in large measure to save money. With the economic problems of the 1990's there was an increasingly popular perception of no need to spend funds on defense.<sup>41</sup> Another indicator of Hungarians focus on the economic aspects of reintegration into Western Europe is the level of confidence they have in the European Union (EU), which, at 66%, is higher than either Poland or the Czech Republic. Three fourths of Hungarians favor joining the EU (see Table 3).<sup>42</sup>

Economies in defense are reflected in a military force structure in 1998 of 53,000<sup>43</sup>, which is down from a peak of 150,000<sup>44</sup> during the Cold War period, a 65% reduction. Even with the increases projected by the Hungarian government, the yearly percentage of GDP expended on defense by 2002 will only be 1.8% (including funds programmed for the border guards, which are only part of the military during time of war).<sup>45</sup> This will still only be 64% of the current average of 2.8% of GDP spent on defense by NATO members.<sup>46</sup>

Funding considerations aside, Hungary has restructured its forces to align itself with NATO. Opinion polls show nearly two thirds of Hungarians favor NATO membership.<sup>47</sup> A 16 November 1997 referendum, asking whether Hungary should join NATO, received an 85% favorable vote.<sup>48</sup> Even discounting the results for the degree of

government backing,<sup>49</sup> that is a significant vote of confidence. Additionally, there have been no political forces elected to Parliament, since 1990, which have failed to back NATO membership – whether in government or in opposition.<sup>50</sup> Colonel Toth, the Hungarian Defense Attaché to the US, observed that in spite of any changes in public opinion polls, “Hungary will act responsibly, like other NATO members” when it comes to meeting its obligations.

In part to meet those obligations, Hungary has pledged to NATO three Army Battalion Combat Groups, one Rapid Reaction Battalion, 1-2 Fighter Squadrons, a Combat Helicopter Squadron and a Transport Helicopter Squadron for Immediate and Rapid Reaction Forces.<sup>51</sup> Presently these forces compare favorably with other Central and East European nations due in large measure to equipment modernization upgrades achieved since 1989. Russia has been able to reduce part of its Soviet-era debt via transfers of more modern equipment to Hungary. Such equipment for debt swap outs provided a substantial extra-budgetary source of procurement funds and, when factored into the percent of GDP for defense funding equation, the total budget then probably results in a 2% of GDP equivalent.<sup>52</sup>

Such equipment for debt swaps is not a long-term solution to Hungary’s modernization needs, particularly given the need to attain and maintain NATO interoperability. Therefore, in spite of good intentions, it would not be realistic to expect Hungary will expend limited defense budget funds on lift capability for its forces. According to Colonel Toth, it has yet to exercise an option made in 1992 to purchase C-130’s from the US.<sup>53</sup> To date deployments have not been a significant issue for Hungary.

Traditionally Hungary has not had a great external military presence, but since 1995, it has dramatically increased the size of its contributions to international peacekeeping efforts.<sup>54</sup> Deployments to date have relied on a mix of means. Hungarian forces deployed to Bosnia using civilian and military assets via international roads and commercial rail. While Table 4 clearly shows that military airlift is nearly non-existent, the Hungarian airline, Malev, has been used on occasion. Furthermore, although it was civilianized two years ago, the government still holds 51% ownership and, therefore, has strong leverage, if it needed to use it. However, Colonel Toth knew of no set contingency arrangements for its use. He went on to observe that realistically, in some cases, Hungary would rely on others for some lift support.

So, as with Poland, Hungary has made large changes in its military structure. It acknowledges significant improvements remain to be made in training and equipping the force. It has identified selected elements of its force to fulfill UN or NATO led "out of area" operations, but basically remains dependent upon commercial and allied means to deploy outside of Europe. Hungary and Poland face many of the same challenges when it comes to force deployment, but each face some unique challenges, too. The latter faces a more significant challenge in the potential size of the force to be deployed; the former is faced with disproportionately fewer means to deploy a more modest force. How does this compare with the Czech Republic's situation?

The Czech Republic's political and economic stability is viewed favorably in the West. It has basically the same size population as Hungary, but its GDP is 153% of Hungary's. The Czech Republic's GDP also exceeds that of Greece, is 94% of Portugal's, but is only 56% of Belgium's. However, the Czech Republic's robust GDP

growth rate that was twice that of any of these four in 1996 (see Table 2)<sup>55</sup> was slowed dramatically in 1997. Solid growth has been reestablished since May 1997 and the outlook is positive, but not at the level of any of these four.<sup>56</sup> While the Czech Republic's economic strength should bode well for military modernization; other factors may forestall that being realized.

Of the three nominated states, public support for NATO and increased defense spending in support of enlargement is the lowest in the Czech Republic.<sup>57</sup> Some of this lack of support may stem from the public's perception of the job the Czech government did in keeping them informed on the NATO issue; 69% stated the government had done a poor job explaining the benefits and cost of NATO membership (see Table 3).<sup>58</sup> The central issue appears to be the Czech military's relationship with society; even by its own admission, it has not enjoyed a very high approval rating in the past. And, while the military might argue that changes effected in the military since 1989 have caused the public to view them differently and more approvingly,<sup>59</sup> there still exists a strong anti-military outlook in the country.<sup>60</sup> This is in spite of significant changes in the Czech military, changes at least as dramatic as those in Hungary or Poland.

The Czech military reduced in size from about 100,000 in 1990 to 65,000 by 1997 and is projected to reach 55,000 by 2005.<sup>61</sup> However, while the Czech Republic has had a consistently higher percentage of GDP expended on defense than Hungary since the end of the Warsaw Pact that percentage continues to slip. In 1994 the Czech Republic spent 2.6% of its GDP on defense; in 1995 it was 2.2%. Planned annual increases in defense spending of 0.1% of GDP until 2005 is not likely to keep pace with the anticipated growth of the economy and, therefore, will have a hard time maintaining the

government's projected level of 2% of GDP for defense.<sup>62</sup> These factors are of particular concern when viewed in the context of open source materials citing NATO assessments that there are significant shortcomings in the Czech military which bring into question its ability to upgrade "sufficiently or quickly enough to attain any meaningful interoperability with NATO in the near term."<sup>63</sup> Therefore, it appears the Czech Republic will be hard pressed to achieve all the needed modernization.

In spite of possessing more modern equipment than Hungary at the end of the Cold War<sup>64</sup> and higher percentages of GDP expended on defense than Hungary, significant upgrades remain to be accomplished. The Czech Republic has not benefited from equipment for debt swaps, as Hungary has. As first priority for modernization, the Czech Republic has identified the Air Force and plans to acquire 72 fighters; 16 to 24 aircraft are to be purchased in the West (F-16's, Tornado's, etc) with the remainder to be a domestically produced light, ground-attack/trainer jet, the L159. Command, control, communications and intelligence (C3I) is the next priority and the Czech's have grouped anti-aircraft (AA) upgrades with C3I. Upgrades to tanks, helicopters and trucks are all planned. However, even by government estimates, all of these upgrades may be stretched out until 2010.<sup>65</sup>

At present, the Czech Republic keeps one Rapid Reaction Brigade at a high level of readiness and identified for UN or NATO missions. The battalion-sized elements deployed to Bosnia have come from this Brigade.<sup>66</sup> According to some assessments, a squadron of combat helicopters (MI-24's) could also be made available.<sup>67</sup>

Those elements of Czech forces provided for international efforts to date have been, as with Poland and Hungary, deployed via multiple means. The units deployed to

Bosnia have followed patterns similar to other participants' forces, sending some equipment by commercial rail and taking the remainder over the highways. Personnel went by aircraft. CSA, the Czech national airline, was used. The government has arrangements with the airline for "emergency" use. The Czech military has some very limited and aging tactical transport aircraft, both fixed and rotary wing. The number and type fixed wing assets can be seen in Table 4. While four MI-17's are in use in Bosnia,<sup>68</sup> the Czech Republic, like Poland and Hungary, is primarily, if not exclusively, tied to commercial or allied lift support to move any military contingent of any size any significant distance. Like the others, the Czech Republic faces the same dilemmas of limited quantities, availability and timeliness of such lift. To date there is no indication that the Czech Republic has a plan that would address these shortfalls.

The Czech Republic confronts a similar challenge, sufficient funds, to modernize its force that its fellow nominees do, but for slightly different reasons. The purchasing power (per capita basis of GDP) for a Czech is 173% that of a Pole and 148% that of a Hungarian,<sup>69</sup> yet the projected percentage of GDP for defense is anticipated to increase slightly in the latter two, while it is anticipated to drop in the Czech Republic. The ability of the Czech Republic to modernize appears to lie more in the realm of public support than in national means. While, to date, the national leadership has recognized the benefits of NATO and the need to maintain the nation's security they must deal with a resistant public. President Havel rightly observed that, "even the costliest preventive security is cheaper than the cheapest war."<sup>70</sup> However, even his influence with the Czech citizens appears to have diminished in the last couple of years.<sup>71</sup>

All three of the new states chosen to join NATO, have already embarked on military reorganization and downsizing, joined in the NATO-led effort in Bosnia, and have committed themselves to further improvements in their military capabilities. Their membership, even after additional projected military personnel cuts, will provide NATO with tens of thousands of additional forces from them alone for out of area alliance missions, if needed. However, their force projection capabilities include little, if any, lift capability of their own; none is currently being worked. Therefore, their force projection units are likely to be dependent upon commercial or alliance lift assets or most likely a combination of the two. What do current alliance members bring to the table in terms of force projection capabilities? Do they ameliorate the shortfall in nominated states' lift capability?

#### **Current Allied NATO Members**

Rather than review the capabilities of all current members of NATO, I have chosen to look at the European allies that provide the greatest capabilities to the alliance (see Table 2).<sup>72</sup> Additionally, these four have the largest economies in Europe, each a trillion dollar plus. With those parameters in mind, I will look at Italy, Germany, France and the United Kingdom.

In terms of recent NATO efforts in the Balkans, Italy has played a major role. Its geographic location plays significantly in this, but so have its historic ties and national interests in events in the region. Such involvement in international efforts is not new for Italy; Italy has been involved in peacekeeping, humanitarian assistance, and state transition support in numerous locations throughout Africa, the Middle East, Southeast Asia and Latin America since 1950.<sup>73</sup> However, Italy's current overall approach to

defense is different from the one it pursued during the Cold War. According to Colonel Ubaldo Servino, the Italian Assistant Defense and Air Attaché to the US, Italy was a little late recognizing the full ramifications of recent changes within Europe, but is moving fast now to adapt. In a dramatic shift with the past, the Italian military, one that was almost exclusively focused upon the defense of Italian borders, has completely reconfigured itself to meet the a new environment.

The need to fulfill Italy's obligations, on both the national and international level, requires us to have armed forces that are technologically comparable to those of the friends and allies with whom we are called to cooperate. Italy needs armed forces that are deployable and credible from the operational viewpoint, therefore lean and capable of being easily inserted into international and multinational operational contexts.<sup>74</sup>

The changes start at the top and will be felt throughout the military structure. In layman's terms, the Italian government just instituted many of the changes the US government made in 1947 when it formed the Department of Defense and in 1986 when it strengthened the role of the Chairman of the Joint Chiefs. In the past, the Italian Minister of Defense had all general directorates, central offices, agencies of defense ministry, the chiefs of staffs of each service and Carabinieri,<sup>75</sup> and the National Armaments Director reporting directly to him. As of January 1, 1998, the Defense Chief of Staff now has the operational control of the Armed Forces, which he exercises through the individual service chiefs, the National Armaments Director, the Commander in Chief of the Carabinieri, and through his own Joint Operational Command, Comando Operativo Interforze (COI). As with the current US model, the service chiefs remain responsible for readiness, training and logistics within their respective services. However, whereas in the past the individual services "approved" buys of equipment, the Defense

Chief of Staff does so now with recommendations from the services.<sup>76</sup> However, the ability to make such buys may still be affected by forces similar to those at play in other countries.

Expenditures on defense are on a downward trend. The percentage of GDP spent on defense in 1996 was 1.67, in 1997 it was 1.59 and in 1998 it is to be 1.53. All of these figures are exclusive of the Carabinieri, which is often included in figures on Italian defense expenditures, such as in Table 2. Nevertheless, the trend is downward.<sup>77</sup> A factor in this has most likely been the problem of meeting the Maastricht criteria for inclusion in the European Economic and Monetary Union (EMU). In September 1992 Italy dropped out of the EMU. In 1992, it also adopted fairly stringent budgets, cutting back on welfare, pension and health care programs. In November 1996 it rejoined the EMU, but Italy still faces economic restructuring to enable it to adjust to new EU and global competitive forces.<sup>78</sup> Therefore, the Italian government is faced with budgetary constraints in spite of extremely strong public support for NATO.

Of the four countries considered in this portion of the paper, Italy, at 71%, has the largest number of citizens that feel NATO is still necessary. In response to whether they would support NATO involvement, including the use of their military, in several "new missions" in the Post Cold War world, Italians provided the highest support for five of the missions and second highest on the other two. One of only two NATO allies considered in the paper to have a majority, 61%, support defense of "Western Interests outside Europe, such as the Persian Gulf." Additionally, with respect to the currently proposed incorporation of three new states to NATO or the eventual addition of other states, Italians again provided the strongest support, 63% and 54%, respectively.

However, 86% favor membership in the EU and there are, therefore, budgetary realities that Italy must deal with and which constrain the amount of funds available to modernize and restructure the Italian military (see public poll results in Table 3).<sup>79</sup>

In recognition of the changes of the Post Cold War environment, its economic goals of EMU membership, and its concepts of defense goals met through a collective approach with its NATO allies, Italy is drawing its forces down from 320,000 to 278,000 by 2000. With that draw down and some efforts at infrastructure reduction and realignment, it is hoped there will be some economies of scale. Italy's goal is to apportion 25% of the reduced defense budget for investment in force upgrades. The priority for these limited funds goes to the force projection forces.<sup>80</sup>

It is Italy's intent to eventually provide a power projection force that consists of 5-7 Army brigades, a Naval Amphibious Force with a component of Marines, and three air squadrons (fighter/bombers). To accomplish this, Italy wants to increase the number of volunteers in the force and reduce the percentage of short-term draftees (10 months of service). Italy intends to man the power projection forces exclusively with volunteers.<sup>81</sup>

Efforts are being made to provide some lift capability for these forces. Currently planned upgrades include the acquisition of 18 new C130J's from the US.<sup>82</sup> The contract has already been signed and the aircraft are to be delivered in two to three years.

However, the Italian military assumes future deployments will still be achieved through a mix of approaches employed in the past which include a combination of military and civilian air and sealift supplemented with allied support. This was the approach used in Somalia. However, US C-5 aircraft requested by Italy for this operation, were not available. Still, the Italian military fully expects to rely upon allied assistance to meet

some of its lift requirements during any major contingency in the future. The new C-130J's are not intended to answer all of their force lift requirements. However, Italians believe the C-130J's will improve their current capabilities and will enable them to realize their overall goal to be able to act as a member in coalition efforts that requires the projection of power, one in which they might expect assistance from other members of the coalition.<sup>83</sup>

Italy has taken significant steps to reduce and restructure its military. While force reductions closer to those conducted or underway within the other three NATO members considered here could free up additional funds for modernization, Italy is moving swiftly with reductions it has planned. It has strong public support for conducting international efforts in conjunction with its NATO allies. It is attempting to modernize its military to enable it to play such a role. However, overall defense expenditures have been reduced, driven in part by the desire to meet EMU membership criteria and remain competitive in the global economy. The military modernization that is planned has a significant force projection force with some planned lift capabilities, but not enough to allow it to act outside of a coalition effort. Consequently, Italian force projection assets, as with the nominated states, are also likely to be dependent upon commercial or alliance lift assets or most likely a combination of the two. What of Italy's NATO ally to the north, Germany? Germany played such a central and crucial role in the alliance during the Cold War. What does it bring to the collective effort in a force projection environment?

The factor that is constantly at the forefront when Germany is discussed is its economic strength. Its strong economy clearly has been a critical element in maintaining a strong defense. However, while Germany is still the third largest economy in the world

and its GDP is 139% of its closest economic rival in Europe, a combination of factors has had a dampening impact upon its economy in recent years. The Maastricht criteria for EMU entry, including no more than a 3% budget deficit, have caused the government to implement austerity measures. However, still further cuts will likely be required. Such action will be difficult with national unemployment of 11% and even worse at 16% in the eastern portion of the country. Things are exacerbated by the trend of German firms locating new manufacturing abroad, thus avoiding Germany's high taxes and labor costs. Also, there is the likely continuance into the next century of a \$100 billion dollar subsidy of the eastern portion of the country.<sup>84</sup> These factors, in combination with the changed European security environment, precipitated significant reductions in the German military and continue to constrain military modernization.

Since 1990, the overall strength of the Bundeswehr (the Federal Armed Forces) has been reduced from around 600,000 to an interim size of approximately 370,000 and will be further reduced to an eventual end strength of 340,000.<sup>85</sup> Along with the reductions has come significant restructuring. Each of the services (Army, Air Force and Navy) now has three principal commands: a service office or command, a "forces" or operational command and a support command; the latter two did not exist before. These efforts provide much more centralized control of operational and logistical forces than under the previous command structure.<sup>86</sup> While these are significant changes other changes, more directly tied to force projection, are needed. Some of these changes are in motion. For NATO or the Western European Union (WEU)<sup>87</sup> contingencies or select UN-led missions, the Germans plan to have a 50,000 strong "Reaction Force". The Army will contribute the bulk of this force, over 36,000. While Germany plans to

continue to have a significant conscript force of 140,000, it intends to man the Reaction Force with volunteers. When the force achieves full capability in 1999, it will be able to provide up to a division (up to 20,000) with appropriate support forces and associated air assets.<sup>88</sup> However, Germany did not wait until these forces were on line to take on new and expanded UN and NATO roles.

With the collapse of the Berlin Wall, German forces began to operate outside German national territory for the first time since WWII. Most efforts involved small numbers of personnel. Many ironically consisted of airlift support of one to three C-160 Transall.<sup>89</sup> However, both Somalia, with a total of 3,100 in two contingents, and Bosnia, with a total of 12,500 in five contingents, have involved sizable contributions.<sup>90</sup>

While these contributions are significant for many reasons, they were also accomplished over extended periods of time and deployments were under relatively benign conditions.

Such conditions allowed the deployment of these contingents using a combination of military and civilian assets. In one case, assets were shipped in combination with other nations' assets on one ship. The German Military and Assistant Defense Attaché to the US suggested this approach needs to be employed more in the future. In another case, for some assets deployed to the Persian Gulf, a Russian wide-body was contracted.<sup>91</sup> However, much like in the US, while missions were expanding and force structure was being reduced, funding was being slashed.

The defense budget was cut from 53.6 billion Deutsche Mark (DM) in 1991 to 47.2 billion DM in 1994 or 12%. Expressed as a percentage of the GDP, it dropped from 2.77 to 1.61 during the same period;<sup>92</sup> in 1995 it was 1.5% of the GDP. This is clearly a continued downward trend. Even with a sluggish economy (growth of 1.4% in 1996), if

the amount spent on defense is held constant, the defense budget will be reduced (as a percent of the GDP).<sup>93</sup>

Given this budgetary environment, modernization has been constrained. A 1994 Ministry of Defense (MoD) White Paper observed that Germany's "main forces have modern major equipment... (and) only after the year 2000 will there be further... modernization of their equipment." The paper went on to note that, even though Reaction Forces had priority, deficiencies remained, but that remedies were underway.<sup>94</sup> Unfortunately, the process is still underway to ensure these Reaction Forces have the equipment they need. The budgetary constraints are a challenge even for this effort. However, Reaction Forces have consistently and will continue to receive upgrades first. In some cases, they will be the only forces outfitted with some equipment.<sup>95</sup> However, when it comes to deploying these Reaction Forces, all indications are that the Germans are satisfied using a combination of commercial means and the three air transport wings, with the bulk of the lift provided by the 84 Transall (C-160) aircraft currently in the force.<sup>96</sup>

In its 1994 White Paper, the German MoD acknowledged the Bundeswehr "must have the capability to deploy force contingents and their equipment over long distances. For this purpose, appropriate land, air and sea transport capabilities are needed. While the Bundeswehr generally relies on ships for long haul, it also needs wide-body aircraft to rapidly deploy elements of its reaction forces." Additionally, later in the White Paper, MoD notes that "it must be possible to airlift battalion-strength units and their support elements rapidly and over long distances. Therefore, all the medium-range (aircraft)... will be maintained and improved." As for "how requirements for wide-body

aircraft can be satisfied,” that subject was being “studied”. Furthermore, while the paper called for the four Boeing 707 on hand “to be retained for long-range transport purposes and converted to perform a secondary function as aerial tankers”,<sup>97</sup> more recent information indicates that this recommendation has not been carried out.<sup>98</sup>

The underlying explanation for the failure to act is most likely domestically driven budget constraints. While support for NATO has traditionally been very strong in Germany,<sup>99</sup> internal issues and the lack of a clearly perceived threat by the public have significantly eroded this support. A United States Information Agency (USIA) commissioned poll, which posed a series of questions concerning NATO, was conducted in each of the four European NATO members looked at in this paper. It revealed that German support was consistently the lowest in the core questions on NATO (see questions 1-12 in Table 3). Of particular note was the question of whether to increase funding to support NATO enlargement, it was the least popular question in every country, but German support was significantly less than any other, only 11%. The average difference between the German response to these twelve questions was 12 % below the closest other respondent to each question. While a majority of Germans supported nine of these twelve questions,<sup>100</sup> they still appear to have turned much more inward or apparently believe others will handle their security responsibilities or possibly both. In any case, the low public support for security issues strongly suggests the prospects for an increase in the percent of GDP expended for defense is highly unlikely.

One impact of this is that lift capabilities are likely to remain, as they are now, tied to commercial and allied means. A line from the 1994 White Paper that states, “together with partners, the Bundeswehr must be able to deploy, employ, exercise

command and control over and provide support to a limited number of contingents in a short period of time, under extreme...conditions and over large distances.” The “together with partners” may be more telling than it first appears. While not referring quite as specifically to deployment, elsewhere in the paper reference is made to the necessity of being able to obtain support from other than German sources.<sup>101</sup> While all of this is in consonance with evolving NATO thought on multinational logistics, it also appears to be further indication that our German allies may be assuming or counting on US strategic lift, specifically air.

The reach of German force projection assets may be limited by more than just the lack of physical ability. Multiple sources indicate that Germany is looking to act only within the context of a coalition and then only within Europe and neighboring regions.<sup>102</sup> This is vague enough to allow some maneuver room and clearly some forces, as noted earlier, have been deployed much farther afield, on humanitarian missions. However, it still brings in to question whether and under what extreme circumstances German force projection forces could be relied upon.

Germany still remains the dominant economic force in Europe. While, like many of its allies, it has significantly reduced its military, it retains a large, modernized force. It has made major changes in the organization of its forces and identified large, professional, well-equipped, highly capable portions of those forces for force projection. It has no definitive plans to upgrade or replace its own military lift capability, instead it contemplates the use of commercial means as the principal source to deploy forces and at least implies that it anticipates allied support (at least for unanswered wide-body requirements). All of this is couched in the context of a coalition effort only. So rather

than alleviating any lift shortfall in a major deployment, Germany would likely add to the requirement. Given the public's positions noted earlier and the prospects of a Social Democratic-Greens coalition coming to power with a pledge to turn around an economy in the doldrums,<sup>103</sup> it is not likely that there will be an increase in defense spending in Germany that could positively affect these factors. What of the two major European nations with past colonial empires that still maintain significant world ties and responsibilities, France and the United Kingdom?

France's worldwide territorial holdings and its ties to and continuing involvement with a number of countries around the world, particularly in Africa, are no secret.<sup>104</sup> And France has acted on its own, sometimes with assistance, and in coalition with others on a number of occasions to assist various nations with differing problems. The question here is what changes has France undertaken or planned that would change its force projection capabilities and what is anticipated to be the "end game" in terms of such capabilities.

First of all, France is one of the few nations in the world that possesses the full range of military options to include its own nuclear capability. While nuclear deterrence remains at the heart of France's defense strategy, prevention and projection (if prevention fails) enjoy a higher priority in its strategy today given its assessment of the new strategic environment.<sup>105</sup>

France's assessment and the associated force structure derived from it<sup>106</sup> remains consistent with France's maintenance of an independent stance when it comes to its vital interests. While it ascribes to a policy of building up Europe and ensuring world stability, this is secondary to its prerogative to decide its own future and have the wherewithal to protect its vital interests alone, if necessary.<sup>107</sup>

French public opinion seems to buttress this desire for an independent stance, while maintaining strong ties, particularly within Europe. When asked how desirable it would be for France to have the US exert a leadership role in the world, only 44% of the French respondents said it was desirable, the lowest of the four NATO allies being considered in this paper. However, on the series of twelve core NATO questions (see questions 1-12 in Table 3), the French were never the least supportive; they failed to achieve a majority for current or additional missions or responsibilities for only two issues; and interestingly, they gave the strongest support for two initiatives.<sup>108</sup> The French public's support for a strong independent military capability over the years is reflected in the consistency with which the populace and numerous governments, from both the left and the right, have supported the expenditure of funds for the military.

According to French government figures, between 1988 and 1997, France's defense spending (as a percent of GDP) dropped by approximately 20%, while the UK, the US and NATO as an aggregate dropped by 30%, 42% and 47%, respectively.<sup>109</sup> A more dramatic comparison is that German spending (as a percent of GDP) fell by 46% in just half that time (1991 to 1995).<sup>110</sup> While France's GDP is 72% of Germany's, 103% of the UK's and 109% of Italy's, its defense budget is 111% of Germany's, 135% of the UK's and 234% of Italy's.<sup>111</sup> Clearly the French are willing to apply resources to their military. And, while even French government figures show a slightly decreasing trend in the percent of GDP to be apportioned to defense,<sup>112</sup> it would appear that France will remain well above the NATO average, particularly vis-a-vis those states with comparable means.

While French funding of the military remains more constant than its peers, the changes in the size, organization, manning and mission-focus of the military is changing dramatically, in some ways, more so than its peers. The effort is divided into three “programming” acts or phases. The most dramatic changes will happen in the first phase, 1997-2002. The number of uniformed personnel will drop from a little over 500,000 to just over 350,000 or a 30% drop. This figure includes Gendarmerie, which is actually increasing in number slightly. It does not include civilian figures that are also increasing slightly. Numerous organizations will be eliminated or will be significantly changed (e.g. the Army will go from nine Divisions to four “Groups” of about 15,000 each). The entire force is to be all volunteers or “professionalized” by 2002; in 1996 there were over 250,000 conscripts. The Army, with over 50% of the draftees, will be the most dramatically affected. The end result is that while the Army’s total force drops just over 35%, the uniformed portion drops well over 40% to less than 140,000 in uniform. The second (2002-2008) and third phases (2008-2015) are devoted to fielding “major” and “future” equipment, the latter within an Euro-Atlantic framework. The restructuring emphasizes adapting forces to be able to project and sustain power.<sup>113</sup>

The specific forces identified for force projection are sizeable, diversified and constitute a significant capability. The Army is to have an expeditionary capability of 50,000 available for NATO. However, the primary mission for the Army is to be force projection and is defined as being able to project a 30,000 man force which can be proportionally relieved, and simultaneously sustain another force of 5,000 in a separate action which can also be relieved. A portion of that relief could conceivably come from a core “operational” reserve of 50,000 (Army, Navy and Air Force combined). For the

force projection mission, the Navy will provide one carrier group and a submarine force, while the Air Force component will be 100 combat aircraft and 2 deployable airbases. Additionally, the Air Force will continue to provide a lift capability.<sup>114</sup>

There is conflicting information about the amount of current and future French airlift. France has officially stated its capability will be maintained at current levels. However, figures provided by the French Embassy show a drop of approximately 30% by 2015. Indications are the KC-135 tankers will be retained for an air refueling capability. In addition to the military capabilities, the French government owns Air France, has arrangements for sealift that have been validated in tests to be available within 8 days, and has an interest in US efforts to develop a new commercial Fast Sealift Ship.<sup>115</sup>

This mix of assets has been employed in many ways on numerous deployments of French forces worldwide for the past 50 years. France contributed to one of the UN's first missions, the UN Truce Supervision Organization (UNTSO), in the Middle East in June 1948, and continues to play a leading role to this day in such efforts.<sup>116</sup> To accomplish those efforts it has used not only the mix of lift options listed above, but also US and Soviet, wide-body aircraft and would anticipate being able to use US lift in the future.<sup>117</sup>

France has made a commitment to maintain and in many ways enhance its force projection capability. It has conducted a strategic assessment, defined the forces required to meet the resultant security needs of the country, and taken into account lift needs, both military and commercial. However, there is still the anticipation that additional lift will be required at times. Therefore, while France may actually be able to provide improved

force projection, it does not appear it will be able to increase its lift assistance to an alliance effort. At best, it will not add to NATO's lift shortfall.

France's ally across the English Channel, the United Kingdom (UK), has been the US's most steadfast and consistent ally in the Post WWII era. This stems not so much from a common heritage as from a common view of the world. The UK, like France, has worldwide interests. However, it appears to be reigning in its scope more than it has in the past.<sup>118</sup> Nevertheless, an ongoing Strategic Defence Review (SDR) due out this summer, is expected to call for an expanded force projection capability. This will be accomplished with a smaller military than existed just a few years ago.

There already have been significant force reductions since the end of the Cold War; the Army has gone from 150,000 to 120,000,<sup>119</sup> the Air Force reduced from 93,500 to 65,000 personnel and from 553 to 512 combat aircraft,<sup>120</sup> and the Navy went from 50+ Destroyer and Frigates to 35.<sup>121</sup> The total number in uniform is down nearly 30%.<sup>122</sup> However, the UK, like France, still maintains the full spectrum of military options, including nuclear weapons. While the specifics of the SDR have not been announced, there are indications that there may be some cuts in RAF fixed wing assets and the Navy's nuclear forces to pay for power projection capabilities.<sup>123</sup> However, there appears a commitment to retain "an effective minimum nuclear deterrent."<sup>124</sup> The focus of the SDR is to define the force structure needed to support the UK's foreign policy. The ability to deploy forces is cited by the UK's Secretary of State for Defence, Mr. George Robertson, as the number one priority shortfall to be addressed. The second and third priorities, sustainment of such forces and greater tri-service integration, will require some reallocation of resources and reorganization as well.<sup>125</sup>

Addressment of the latter issue is well underway with the establishment of the Permanent Joint Headquarters (PJHQ) and the Joint Rapid Deployment Force (JRDF), but further refinement of the issue will still be sought.<sup>126</sup> The JRDF will provide a brigade-sized force, with integral combat service support, for rapid deployment overseas. It will be formed from five Airborne brigades for an airlanded or airborne operation, or from three Commando brigades for amphibious operations. Additionally, some of the UK forces currently stationed in Germany (now 25,000, down from 55,000) are likely to be moved to “deployment centres (to be created) at major military ports and airfields” in the UK.<sup>127</sup> The means to deploy these forces today comes from a mix of sources.

The RAF has a total of nine squadrons that provide either air transport or air refueling. While some personnel transport can be accomplished with tanker assets, 50 C-130's provide the only air transport for equipment.<sup>128</sup> It's anticipated that there will be a commitment to buy “outsized cargo” airlift from the European Future Large Aircraft (FLA) consortium. The current lease of one Roll-On, Roll-Off (RORO) ship is soon to be increased to two. All of this has been augmented during numerous deployments over the years by chartering commercial assets and the use of allied assets; US C-5's, C-141's, C-17's and Ready Reserve Force RORO's have all been used.<sup>129</sup> In the course of the SDR process, one of the themes has been that “Europeans nations were unlikely to be willing to pay for ... strategic lift assets and ... implicitly, therefore, ... would continue to rely on the US....” Generally, this is couched in the context of a coalition effort and sometimes in terms of a “pooling of common assets” or “lead nation” responsibilities.<sup>130</sup>

This reliance upon or confidence in the US by the UK is founded upon popular support and not limited to the political elite. An extremely high percentage of the average

citizens of the UK have a favorable opinion of the US and have confidence in its commitment to help defend their country, if it were threatened, more so than any of the other three nations addressed in this paper. A similar percentage supports the US exerting strong world leadership. Conversely, the UK was the only one of the four NATO countries addressed that failed to achieve a majority response in favor of EU membership. In spite of this sense of separateness, based upon the response to the same twelve core NATO questions asked in the other countries, the British are true believers in NATO. They gave the highest support in four responses, second highest in five and never gave the lowest response (see Table 3).<sup>131</sup>

This sense of being actively engaged in world affairs, while maintaining a sense of independence of action has been reflected in its lengthy history of responding in locations far from home when a need for action was seen. Responses have been accomplished both in coalition with other nations and alone. Recent history is replete with examples: the Falklands, Bosnia, Angola, Rwanda, Zimbabwe, Namibia, Belize, Oman, the Persian Gulf, etc. The SDR is intended to enable the UK to continue to do so at a lower cost of personnel and material. Support for such action is founded upon things like, public support of NATO and the US both noted above, historical ties and among other things strong public support for the British military itself.<sup>132</sup> It is “highly respected and consistently come(s) in (as one of) the top three most respected national institutions.”<sup>133</sup> Such support has been reflected in the funding for defense.

While the figures appear to vary, depending upon the source, by any of them the UK has consistently been in the top tier of NATO members regarding the percent of GDP expended on defense. Using Central Intelligence Agency (CIA) figures for the UK, it

was at 110% of the NATO average in 1995 (the latest figures available). But even Ministry of Defence (MoD) UK figures reflect some slippage next year. Whether its position on the UN Security Council or its command position of the Allied Rapid Reaction Corps (ARRC) would be jeopardized by further reductions has been a consideration during the SDR.<sup>134</sup>

The responsibilities of maintaining itself as a viable security partner in today's world has played a significant role in the UK's assessment that greater deployment capability is needed. This conclusion is anticipated to result in a "commitment to buy outsize (cargo) airlift (from the European Large Aircraft consortium), enhance... (the British) C130J fleet, and get more shipping."<sup>135</sup> So, while there is reason to believe that the UK will make a substantial enhancement to its own lift capability, nothing conclusive has been determined. Furthermore, even if the most optimistic outcome is achieved with regards to increased domestic military lift, there has been no indication that it would, in any circumstance, exceed the UK's needs. Mr. Robertson's comments imply quite the contrary.<sup>136</sup> Therefore, as with France, the best that can be hoped for is that the UK would avoid adding to NATO's collective lift shortfall. Given this overview of the force projection capabilities of the newly nominated states and the four principal European members of NATO, how does US force projection capability fit into the NATO equation?

### **The United States**

As noted earlier, the US has made a significant effort in the last 20 years to enhance its force projection capabilities. That effort continues today (see Table 5). Current force projection lift requirements were identified by the post Gulf War Mobility Requirements Study (MRS) and later validated by the Mobility Requirements Study

<b>US STRATEGIC LIFT</b>					
<u>AIR</u> <sup>^</sup>			<u>SEA</u> <sup>*</sup>		
ASSET	NOW	PROJECTED	ASSET	NOW	PROJECTED
C-5	126	118**	RORO	31	31
C-17	27	120	BREAKBULK	34}	44
C-141	217	0	OTHER	23}	
KC-135	549	495**	LMSR	0	11
KC-10	59	59	FSS	8	8
WBE^^	225	225			

\* 96 Sealift Vessels ((Ready Reserve Fleet (RRF) & Fast Sealift Ships (FSS)) are currently identified for Surge Lift. However, 5 other RRF vessels used for prepositioned stocks in the Indian Ocean. Total Sealift Mobility Assets, including these 5, are currently 127.

\*\* There has been some discussion of future replacement of these aircraft with C17 variants. It is unlikely these would be a 1 for 1 swap, particularly for the tankers.

<sup>^</sup> These figures do not include the 501 C130 tactical aircraft available to the US.

<sup>^^</sup> Wide Body Civilian aircraft made available under Civil Reserve Air Fleet (CRAF) mobilizations (done in stages): I=30, II=75 & III=120.

**Table 5<sup>137</sup>**

Bottom Up Review Update (MRS BURU). Attainment of those requirements will vastly improve US capabilities in the aggregate. However, while there have been four force structure reviews conducted by the US since the Gulf War and each has proposed incremental reductions in the total force, the basic concepts and requirements of force projection have remained the same.<sup>138</sup> According to *Joint Vision 2010*, power projection will remain the strategic concept for the future.<sup>139</sup> The National Defense Panel hypothesized that demands for power projection will increase.<sup>140</sup> However, a key element of each review, to date, has been that US strategic lift assets (including significant US commercial lift) are dedicated to move US assets only. Yet even in his National Security Strategy, President Clinton noted that while the US is a nation with global interests and must be prepared to act alone, it cannot always accomplish its foreign policy goals unilaterally.<sup>141</sup> The latter is driven by multiple considerations, such as, political necessity, access to operating bases, requirement for physical support, etc. These considerations must be kept in mind even though, in the opinion of most, the US is still the preeminent military in the world today in spite of significant cuts.

As noted earlier, the US military has been cut from 2.2 to 1.45 million or 34% since 1985. It still looks to be able to deploy Army divisions, US Navy carrier battle groups, associated USAF fighter wings and Marine Expeditionary Forces to two separate contingencies nearly simultaneously. But the “nearly simultaneously” allows the planning to be accomplished with a “single war” mobility force. Table 6 depicts the lift requirement in transportation measurement terms. It is not necessary to understand the

### **US Contingency Lift Requirements**

	<i>PAX</i>	<i>STons</i>	<i>SQ FEET</i>	<i>MTons</i>
ODS/DS	500,720	516,548	32,700,000	1,368,054
West MTW	585,904	189,378	20,794,096	2,621,265
East MTW	487,909	234,455	20,816,718	2,224,797
Dual MTW	1,024,866	380,218	37,342,196	5,294,845

**Table 6<sup>142</sup>**

details. The point to carry away from the table is that, although there are differences between each individual contingency (East & West) and ODS/DS, in general terms today’s lift requirements for each would be roughly equivalent to doing Desert Shield/Desert Storm again. A dual MTW would require approximately twice the capability. The lift capability identified to meet this requirement for one MTW has been quantified as 49.7million ton miles (MTM) for airlift and 14.3 million (M) square feet of sealift (10M in surge sealift and 4.3M in prepositioned afloat). Currently all military strategic lift, active, reserve, and National Guard, and all prearranged civilian lift assets come up shy of this requirement.<sup>143</sup> Plans are underway to achieve or come near those capabilities early in the next decade, but there are still concerns.

While not addressing all such concerns, some have applicability to NATO’s collective force projection capabilities. These include access to bases within the region forces are deploying to, the timeliness of the required force’s arrival within the region, and reduction of the number of airframes (136 less) and pallet spaces (1163 less) after the

swapout of C-17's for C-141's.<sup>144</sup> While the swap out of C-17's for C-141's will give the US roughly the same MTM capability and many other capability improvements over the C-141, the reduction in the number of systems and floor space could have some negative ramifications. Lift assets generally cube out, fill up by volume, before they weigh out; MTM is a distance and weight measurement, not a square footage or volume measurement. Also, in the context of a NATO coalition, fewer platforms could possibly hamper supporting several additional allied locations. Concerning the issue of basing rights, each NATO ally has significant bases and ports as well as their own international ties and could assist in obtaining such rights elsewhere, if they are involved. Furthermore, as for timeliness, many are calling for force closure times for any contingent similar to those achieved during the February 1998 response to Iraq. While the desire to achieve closure within 96 hours is understandable, that was possible in this case only because the bulk of the equipment for the force deployed was prepositioned.<sup>145</sup> There is not equipment prepositioned everywhere the US or NATO may decide vital interests are in question.

With today's systems approximately 90% of equipment will always go by sea in any large contingency and even the modern ships the US is acquiring cruise at less than 40 knots and, therefore, require several days sailing time to most trouble spots forces may need to deploy to.<sup>146</sup> The NDP called for investing in the revolutionary technology and concepts of the Army After Next (AAN) as the principal means to overcome today's projection constraints of massive quantities of heavy equipment that require large logistical tails. The NDP also encouraged the exploration of new air and sealift innovations within the commercial world. However, even the NDP acknowledged the

possibility of future major combat operations that may require the use of today's legacy systems. None of the suggestions within the NDP or any other study disputes the need for force projection, quite the opposite. The challenge was how to enhance force projection through the development and introduction of smaller, speedier and more lethal combat systems and faster, less infrastructure dependent lift and do so within the constraint of, at best, a flat US defense budget. The latter was a principal assumption and driver behind much of what the NDP recommended.<sup>147</sup> Current trends support this assumption.

In FY 1997 constant dollars the US Defense budget has dropped 38% over twelve years from \$400 billion in 1985 to \$250 billion in 1997. As a percent of GDP, defense has slipped from 6% in 1988 to 3.2% in 1997. Procurement dollars have dropped 63%, from approximately \$120 million to roughly \$45 million (in constant 1997 dollars). Therefore, relatively little money has been spent on new variants, upgrades or simple replacements for current systems for a number of years. Service life expectancy of legacy systems will require some action, service life extension programs (SLEP), rebuilds, replacements, etc, before advanced systems (e.g. AAN type) could likely be brought on board. Additionally, such expenditures will have to compete for defense dollars that will continue to remain constrained, if projected trends hold true. While the US GDP has grown moderately for the past several years and is expected to continue to do so, the defense budget is not projected to keep pace. The Clinton Administration's Future Years Defense Program for FY 1998-2002 shows that even though there are marginal increases projected, primarily to address procurement needs, that defense will slip to 2.8% of the GDP.<sup>148</sup> Polling data in the next paragraph may indicate the cuts in

US forces and defense spending outlined above fit the role the US public wants the US to play in the world, but it is not the role it has been charged with since the end of the Cold War.

When asked what kind of leadership role the US should play in the world, a large majority (73%) in one poll said the US should pursue a shared one, versus no leadership role (11%) or a single world leader role (12%). Those figures coincide with responses to other questions: 61% believe NATO remains necessary; 63% generally approve of expanding NATO to include Poland, the Czech Republic and Hungary; many Americans are generally supportive of broadening NATO's mission beyond its traditional role as guarantor of collective security. While this would seem to bolster President Clinton's foreign policy of engagement, the fact that when asked if "peace in Bosnia depended on the continued presence of U.S. troops" respondents were basically evenly divided. Even worse, only approximately 20% said they were following NATO enlargement closely and only 10% could name even one of the new countries nominated for membership. So while there is general or conceptual support for world engagement, when the scenario becomes more specific, support is much more tenuous (see Table 3).<sup>149</sup> This dichotomy has been sorely tested since the fall of Berlin Wall by the multitude of operations US forces have been deployed on around the globe; as noted earlier, there has been a sixteen-fold increase for the US Army alone.

Reluctant public or not, the US military is likely to remain engaged throughout the world in a host of operations. If the past is any indicator, in many of these likely operations key participants will include NATO allies. The US, while scaling back the size of its military has maintained a preeminent force projection capability. Efforts to

enhance its lift capabilities since the Gulf War will soon provide it sufficient assets to meet assessments made after that conflict. However, as it stands now, for any major contingency overseas, US lift would be totally engaged getting US forces to the region. Recent improvements would hopefully overcome shortfalls experienced during the Gulf War when, fortunately for the US, significant foreign lift was provided, gratis.<sup>150</sup>

### Conclusion

In sum, where does NATO stand on force projection? All the nations considered here have reviewed the need for a force projection capability in today's world and have made a conscious effort to revamp their forces to be better prepared to be employed in force projection operations. However, the case presented here clearly depicts a collective shortfall in current strategic lift and makes a convincing argument that insufficient strategic lift capacity is being developed. Therefore, it is recommended that NATO, using the lessons learned and tools developed by the US over the past two decades concerning strategic deployments, do the following:

- Conduct a detailed study of the collective requirements for strategic lift, to include computerized modeling to determine the true force structure and equipment required to make current policy viable.
- Ensure specific attention is given to outsized airlift requirements in the study.
- Attempt to specify NATO requirements for prearranged commercial lift and measures members must take to meet those requirements.

Simply put, failure to do the above could leave the alliance unprepared to meet likely challenges of vital interest to all members. It is understandable why the alliance finds itself in its present predicament. Force projection efforts have too often focused

upon the forces to be employed versus the means to get those forces to an area. The former often requires only the reconfiguration of the assets on hand. The latter is more difficult. It calls for nations to deal with aspects of power projection not dealt with by many nations in the past and generally, even in recent history, only in relatively small efforts over short distances. However, the alliance cannot afford to ignore conducting a comprehensive collective assessment any longer. The alliance, at a minimum, needs to know the full magnitude of the requirement and the resultant shortfall. At present the risk is undefined.

Today, more alliance nations than ever before are pledged to respond rapidly to avoid or control conflicts. If these pledges can be shown to be credible, the pledges themselves will act as a deterrent well beyond the geographic limits of NATO. At the moment only the US has significant means to back its pledges. Nonetheless, a readily available, collective force projection capability with viable lift will carry as great a credibility as the collective efforts of NATO during the Cold War and hopefully achieve the same level of success.

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<sup>1</sup> As US Senate consideration of the subject drew closer, a principle complaint of enlargement opponents was that the issue had not been properly and thoroughly debated. The opponents, while vocal, were always in the minority. Public support, while possibly uniformed, consistently favored enlargement as did the bulk of the "elite." However, the effort did not fail for lack of prominent "elite" opponents in political, academic, think tank or media circles. Those expressing opposition to or grave concern about the issue included: former Senators Howard Baker, Jr, and Sam Nunn, Senators John Warner, Arlan Specter, Patrick Leahy and Patrick Moynihan, former National Security Adviser, Brent Scowcroft, Professor Amos Perlmutter of American University, former Clinton Administration NSC staffer, member of the Council on Foreign Relations, and Adjunct Professor at Georgetown University Charles Kupchan, Professor James Kurth of Swarthmore College, Alton Frye, Senior Fellow of the Council on Foreign Relations, Ted Galen Carpenter and Ivan Eland of the CATO Institute (the latter also authored the March 1996 CBO Report on NATO enlargement costs), and prominent newspaper columnists and editorial writers David Broder and Jim Hoagland. Prominent Russian government officials such as the Russian Ambassador to the U.S., Yuri Voronilov, and Minister of Defense, Marshal Igor Sergeev, also expressed in the Western press Russia's official opposition to the endeavor. Many believe the subject was in the public forum long enough (at least since January 1994), but opposition arguments that enlargement might have an adverse affect on Russia or dilute or weaken NATO just did not resonate well with the public. Former U.S. Ambassador to NATO, Robert E. Hunter made this argument in a 23 March 1998 Washington Post editorial. Only the concern of cost seemed to draw any significant political interest and that was taken away by ever decreasing estimates of cost. The latter based more on what NATO members desire to or will spend as opposed to what would more objectively be merited. The latter argument did not outweigh the reasons for enlargement: support of democracy, stability and prosperity, the further unification of Europe, extension of collective security and refutation of the Cold War demarcation of Europe without overtly threatening Russia.

<sup>2</sup> United States. Department of Defense. *National Military Strategy: Shape, Respond, Prepare Now – A Military Strategy for a New Era*. Washington, D.C.: US Government Printing Office, 1997, p. 3; United States. Department of Defense. *Joint Vision 2010 – America's Military: Preparing for Tomorrow*. Washington, D.C.: US Government Printing Office, July 1996, p. 4; United States. National Defense Panel. *Transforming Defense: National Security in the 21<sup>st</sup> Century*. Washington, D.C.: US Government Printing Office, December 1997, p. 12-13; North Atlantic Treaty Organization. *MC 319/1: NATO Principles and Policies for Logistics*. Brussels, Belgium: NATO Office of Information and Press, 1997, p. 2.

<sup>3</sup> James K. Matthews and Cora J. Holt. *So Many, So Much, So Far, So Fast*. Washington, D.C.: US Government Printing Office, September 1996, 1-3.

<sup>4</sup> *Ibid.*, p. 12-13

<sup>5</sup> James K. Matthews. *United States Transportation Command, the National Defense Reserve Fleet, and the Ready Reserve Force*. 2d ed. Edited by Margaret J. Nigra and Cora J. Holt. Washington, D.C.: US Government Printing Office, December 1997, p.11.

<sup>6</sup> United States. United States Information Agency, Office of Research and Media Reaction. *The New European Security Architecture: Volume III – Public Attitudes Toward a Changing European Security Environment*, Washington, D.C., November 1997, p. 11 & 17.

<sup>7</sup> Interview with LTC (P) Mark Morgan, SACEUR Assistant POLAD, 3 Sep 97; General Wesley Clark, Supreme Allied Commander Europe and Commander in Chief, United States European Command. Speech and comments made via video-conferencing at a symposium titled, *Enlarging NATO: Striking the Right Balance* on 2 February 1998; James Morrison. "Why Not Bulgaria." *The Washington Times*, 5 December 1997, p. 19.

<sup>8</sup> NATO Office of Information and Press Release M-1 (97) 81 titled, *Madrid Declaration on Euro-Atlantic Security and Cooperation – Issued by the Heads of State and Government*, p. 2-3.

<sup>9</sup> Strategic lift includes both military and commercial means. It encompasses all mediums, air, land and sea. For the purposes of this paper, strategic airlift includes both the aircraft moving the people and material and the tankers which refuel them.

<sup>10</sup> North Atlantic Treaty Organization. *MC 319/1: NATO Principles and Policies For Logistics*. Brussels, Belgium: NATO Office of Information and Press, 1997, p.1; NATO Office of Information and Press

Release M-1 (97) 81 titled, *Madrid Declaration on Euro-Atlantic Security and Cooperation – Issued by the Heads of State and Government*, p. 4.

<sup>11</sup> Though NATO member countries participated in the Gulf War, they acted not as NATO members, but as US coalition partners with Kuwait against Iraq. NATO states have acted in coalitions before the Gulf War (i.e. Korean War), but not until Bosnia did they conduct a “NATO” alliance effort outside NATO borders.

<sup>12</sup> The only non-NATO participant in Bosnia with any significant force projection capability is Russia. Participation by other non-NATO forces in future efforts could likely require lift and, often, continuing support of their forces from sources other than their own. PKO lift and sustainment requirements are most often met from commercial sources, but all requirements for a hostile, military contingency might not be met by such sources. The role Russia will play in future efforts remains uncertain. NATO has attempted to alleviate some of Russia’s concerns about NATO enlargement through the NATO-Russia Founding Act of May 1997. The latter provides Russia a non-veto voice in NATO affairs.

<sup>13</sup> NATO Fact Sheet Nr. 22, titled, *The Transformation of NATO’s Defence Posture*, p. 2-3.

<sup>14</sup> For decades, the US conducted extensive exercises, both physical deployment of forces, such as the annual Return of Forces to Germany or REFORGER exercises, involving tens of thousands, and command post exercises like Nifty Nugget, conducted in 1978. The latter is noted in the paper as a catalyst for improvements in mobilization and force projection. Canada made arrangements with the US to be supported by the US’s Line of Communication (LOC) and provided Canadian officers for selected positions on US staffs to coordinate and plan combined efforts.

Richard Kugler and Tony Vanderbeek. “Where is NATO’s Defense Posture Headed?” *Strategic Forum* no. 133 (February 1998), p. 5; Interview with COL Gerhard Steltz, the German Military and Assistant Defense Attaché to the US, on 10 Mar 98; Interview with COL Ubaldo Serino, Italian Assistant Defense and Attaché to the US, on 11 Mar 98; Interview with COL Dominique Orsini, the French Assistant Army Attaché to the US, on 13 Mar 98.

“Summary of Quadrennial Defense Review.” *AUSA Background Brief* no. 74 (June 1997), p. 5.

<sup>17</sup> United States. Department of Defense, Department of the Army. *Army Vision 2010*. Washington, D.C.: US Government Printing Office, 1996, p. 5.

<sup>18</sup> NATO Office of Information and Press Release M-1 (97) 81 titled, *Madrid Declaration on Euro-Atlantic Security and Cooperation – Issued by the Heads of State and Government*, p. 2-4.

<sup>19</sup> *Ibid.*, p. #1.

<sup>20</sup> United States. United States Information Agency, Office of Research and Media Reaction. *The New European Security Architecture: Volume III – Public Attitudes Toward a Changing European Security Environment*, Washington, D.C., November 1997, p. 17 & 20

<sup>21</sup> *Ibid.*, p. 20

<sup>22</sup> Hungary. Foreign Ministry. *Hungary and NATO: A New Ally Emerging*. 1998, p. 5; Ronald D. Asmus, Richard L. Kugler and F. Stephen Larrabee. “What Will NATO Enlargement Cost?” *Survival* 38 (Autumn 1996), p. 25-26; United States. Congressional Budget Office. *CBO Papers – The Costs of Expanding the NATO Alliance*. Washington, D.C.: US Government Printing Office, March 1996, p. xiv; United States. Department of Defense. *Report to Congress on the Enlargement of NATO: Rationale, Benefits, Costs and Implications*. Washington, D.C.: US Government Printing Office, 1997, p. ii, 17 & 19; Jack Weible. “Senators Expected to OK Adding 3 Nations to NATO.” *Army Times*, 16 March 1998, p. 28.

<sup>23</sup> United States. Central Intelligence Agency. *The World Factbook – 1997* (<http://www.odci.gov/cia/publications/factbook/country-frame.html>), section on Poland.

<sup>24</sup> United States. Central Intelligence Agency. *The World Factbook – 1997* (<http://www.odci.gov/cia/publications/factbook/country-frame.html>); International Institute for Strategic Studies. *Military Balance 1996-1997*. London: Oxford University, 1996, p. 53, 57, 61, 63, 71, 85, 89 and 94.

<sup>25</sup> United States. United States Information Agency, Office of Research and Media Reaction. *The New European Security Architecture: Volume III – Public Attitudes Toward a Changing European Security Environment*, Washington, D.C., November 1997, p. 17-21

<sup>26</sup> Poland. Ministry of National Defence, Office of Press and Information. *Armed Forces of the Republic of Poland*. Warsaw, Poland, p. 12-14.

<sup>27</sup> Krzysztof Węgrzyn. “Eleven Paths to Renewed Polish Armed Forces,” *Military Technology* 21 (September 1997): 28.

<sup>28</sup> United States. United States Information Agency, Office of Research and Media Reaction. *The New European Security Architecture: Volume III – Public Attitudes Toward a Changing European Security Environment*, Washington, D.C., November 1997, p. 3, 5-7, 9, 13-15, 17, 20-21, 23-25 and 27-29.

<sup>29</sup> Krzysztof Wegrzyn. "Eleven Paths to Renewed Polish Armed Forces," *Military Technology* 21 (September 1997): 30.

<sup>30</sup> Kazimierz Dziok. "Poland's Air and Air Defence Forces." *Military Technology* 21 (September 1997): 42.

<sup>31</sup> Poland. Ministry of National Defence, Office of Press and Information. *The Air and Air Defence Forces -- Illustrated Guidebook*. Warsaw, Poland: November, 1997, p. 62; Kazimierz Dziok. "Poland's Air and Air Defence Forces." *Military Technology* 21 (September 1997): 42.

<sup>32</sup> International Institute for Strategic Studies. *Military Balance 1996-1997*. London: Oxford University Press, October 1996; David Mondey, ed. *The International Encyclopedia of Aviation*. New York: Crown Publishers, Inc., 1977; International Institute for Strategic Studies. *Jane's All the World's Aircraft, 1991-1992*. London: Butler and Tanner Limited, 1991. The only known upgrades to these countries' airlift have been addressed in the table. The projected acquisition of FLA by France was not incorporated into the numbers because there has not been a firm commitment to purchase by the French government. There are differences in the current number of transports available (see footnote number 115). The number used for the French here is from the *Military Balance 1996-1997*. Aircraft from the "Small" category may have been included in the numbers provided by the French Attaché. Although there are strong indications that the UK will enhance its airlift capability after the SDR, no definitive information was available to include in the figures shown.

<sup>33</sup> Poland. Ministry of National Defence, Office of Press and Information. *Armed Forces of the Republic of Poland*. Warsaw, Poland, p. 22-23; Poland. Ministry of National Defence, Office of Press and Information. *The Land Forces -- Illustrated Guidebook*. Warsaw, Poland: November, 1997, p. 17-18 & 37-38.

<sup>34</sup> Poland. Ministry of National Defence, Office of Press and Information. *Armed Forces of the Republic of Poland*. Warsaw, Poland, p. 89; United States. Secretary of State. Statement before the Senate Foreign Relations Committee. *NATO Enlargement*. Washington, D.C.: Department of State, Office of the Secretary of State's Spokesman, 24 February 1998, p. 3; Interview with COL Krzysztof Polkowski, Polish Assistant Defense, Military, Naval, and Air Attaché to the US, Mar 12, 1998.

<sup>35</sup> Poland. Ministry of National Defence, Office of Press and Information. *Armed Forces of the Republic of Poland*. Warsaw, Poland, p. 89; Thomas S. Szayna, RAND, International Studies Group. Email response to the author on 22 May 1998. Over the last 10 years the Poles have sent battalion-size forces to Namibia, the Middle East, Cambodia, Yugoslavia and Bosnia. While this is only a very small fraction of the forces they have for force projection and, therefore, is not indicative of being able to deploy large contingency forces, they were able to deploy these forces and sustain them at a distance for some length of time.

<sup>36</sup> Interview with COL Krzysztof Polkowski, Polish Assistant Defense, Military, Naval, and Air Attaché to the US, Mar 12, 1998.

<sup>37</sup> United States. Department of Defense, Department of the Army, Training and Doctrine Command. *Power Projection – The Impact of Technology on the Army After Next: Applying Technology to Achieve the Vision of the Army After Next*. Rough Draft of Land Power Essay Series Paper, Fort Monroe, VA, 2 December 1997, p. 12

<sup>38</sup> United States. Central Intelligence Agency. *The World Factbook –1997* (<http://www.odci.gov/cia/publications/factbook/country-frame.html>), section on Hungary; International Monetary Fund. *World Economic Outlook*. Washington, D.C.: International Monetary Fund Publication Services, May 1998, p. 34.

<sup>39</sup> Hungary. Foreign Ministry. *Hungary and NATO: A New Ally Emerging*. 1998, p. 3-4.

<sup>40</sup> United States. Central Intelligence Agency. *The World Factbook –1997* (<http://www.odci.gov/cia/publications/factbook/country-frame.html>).

<sup>41</sup> Interview with COL Tamas Toth, the Hungarian Defense and Military Attaché to the US, 10 Mar 98.

<sup>42</sup> United States. United States Information Agency, Office of Research and Media Reaction. *The New European Security Architecture: Volume III – Public Attitudes Toward a Changing European Security Environment*, Washington, D.C., November 1997, p. 11.

- <sup>43</sup> Hungary. Hungarian Defence Force, Deputy Directorate for Organization. Briefing Titled: *Structure and Personnel of the Defence Force*; Interview with COL Tamas Toth, the Hungarian Defense and Military Attaché to the US, 10 Mar 98.
- <sup>44</sup> Hungary. Ministry of Defence, Press Office. Pamphlet Titled: *National Defence and the Hungarian Defence Forces*.
- <sup>45</sup> Hungary. Ministry of Finance. Briefing Slide Titled: "Expected Defence Expenditures: 1997-2002," dated 26 September 1997; Interview with COL Tamas Toth, the Hungarian Defense and Military Attaché to the US, 10 Mar 98.
- <sup>46</sup> NATO Fact Sheet Nr. 22, titled, *The Transformation of NATO's Defence Posture*, p. 2; Thomas S. Szayna, RAND, International Studies Group. Email response to the author on 22 May 1998. Some would argue that a more reasonable comparison or benchmark for new members to strive for would exclude the US from the computation. With its worldwide obligations, it is to be expected that its defense budget would be larger. Using only European NATO allies (and excluding Luxembourg and Iceland) the mean percent of GDP expended on defense was 2.2 to 2.3 %. Even this approach shows a significant gap between current members average level of spending on defense vis-a-vis Hungary.
- <sup>47</sup> United States. United States Information Agency, Office of Research and Media Reaction. *The New European Security Architecture: Volume III – Public Attitudes Toward a Changing European Security Environment*, Washington, D.C., November 1997, p. 17.
- <sup>48</sup> Hungary. Foreign Ministry. *Hungary and NATO: A New Ally Emerging*. 1998, p. 7.
- <sup>49</sup> Michael Roddy. "Hungarian Voters Expected to Say Yes to NATO." *The Washington Times*, 14 November 1997, p. 17. The Hungarian government spent upwards of \$1 million, including bankrolling the appearance of a pro-NATO character in a television sitcom, to get out the vote.
- <sup>50</sup> *Ibid.*, p. 5.
- <sup>51</sup> Hungary. Hungarian Defence Force, Deputy Directorate for Operations. Briefing Titled: *The Hungarian Defence Policy and Structure of HHDF*.
- <sup>52</sup> Richard L. Kugler and Thomas Szayna. *Military Implications of NATO Enlargement: Assessing the Forces of Potential New Members*. RAND unpublished manuscript. Washington, DC: RAND, May 1997, p. 45 & 48; Thomas S. Szayna, RAND, International Studies Group. Email response to the author on 22 May 1998. These equipment swaps allowed the Hungarian to achieve equivalency in status of equipment with the Poles, Czechs and Slovaks.
- <sup>53</sup> Thomas S. Szayna, RAND, International Studies Group. Email response to the author on 22 May 1998. While these were heavily used airframes and would have required upgrades and/or overhauls, Hungary does not appear to be pursuing any other options at present, either.
- <sup>54</sup> Hungary. Ministry of Defence. Booklet Titled: *Participation of the Republic of Hungary in International Peacekeeping Efforts 1996*, p. 29-30.
- <sup>55</sup> United States. Central Intelligence Agency. *The World Factbook –1997* (<http://www.odci.gov/cia/publications/factbook/country-frame.html>).
- <sup>56</sup> International Monetary Fund. *World Economic Outlook*. Washington, D.C.: International Monetary Fund Publication Services, May 1998, p. 25 and 34.
- <sup>57</sup> United States. United States Information Agency, Office of Research and Media Reaction. *The New European Security Architecture: Volume III – Public Attitudes Toward a Changing European Security Environment*, Washington, D.C., November 1997, p. 17 & 20.
- <sup>58</sup> United States. United States Information Agency, Office of Research and Media Reaction. *The Czech Public Expects Invitation to Join NATO – Support for Sending Troop, Routine Exercises Has Increased*. Washington, D.C., 6 May 1997, p. 2.
- <sup>59</sup> Interview with COL Miloslav Fikar, Czech Republic Assistant Defence Attaché to the US on 11 March 1998.
- <sup>60</sup> Richard L. Kugler and Thomas Szayna. *Military Implications of NATO Enlargement: Assessing the Forces of Potential New Members*. RAND unpublished manuscript. Washington, DC: RAND, May 1997, p. 41.
- <sup>61</sup> Interview with COL Miloslav Fikar, Czech Republic Assistant Defence Attaché to the US on 11 March 1998; International Institute for Strategic Studies. *Military Balance 1990-1991*. London: Brassey's, Autumn 1990. Although *Military Balance* reflects a force of 198,000 in 1990, that figure was for a united Czechoslovakia. COL Fikar provided the 100,000 figure used in this review.

<sup>62</sup> Richard L. Kugler and Thomas Szayna. *Military Implications of NATO Enlargement: Assessing the Forces of Potential New Members*. RAND unpublished manuscript. Washington, DC: RAND, May 1997, p. 43; Interview with COL Miloslav Fikar, Czech Republic Assistant Defence Attaché to the US on 11 March 1998. COL Fikar could only say that it would be approximately 2.0% in 2005.

<sup>63</sup> Tigner Brooks. "NATO Papers Belie Modest Expansion Cost." *Defense News*, 8-14 December 1997, p. 1.

<sup>64</sup> Thomas S. Szayna, RAND, International Studies Group. Email response to the author on 22 May 1998.

<sup>65</sup> Richard L. Kugler and Thomas Szayna. *Military Implications of NATO Enlargement: Assessing the Forces of Potential New Members*. RAND unpublished manuscript. Washington, DC: RAND, May 1997, p. 42-45; Interview with COL Miloslav Fikar, Czech Republic Assistant Defence Attaché to the US on 11 March 1998.

<sup>66</sup> Interview with COL Miloslav Fikar, Czech Republic Assistant Defence Attaché to the US on 11 March 1998.

<sup>67</sup> Richard L. Kugler and Thomas Szayna. *Military Implications of NATO Enlargement: Assessing the Forces of Potential New Members*. RAND unpublished manuscript. Washington, DC: RAND, May 1997, p. 42.

<sup>68</sup> Interview with COL Miloslav Fikar, Czech Republic Assistant Defence Attaché to the US on 11 March 1998.

<sup>69</sup> United States. Central Intelligence Agency. *The World Factbook -1997* (<http://www.odci.gov/cia/publications/factbook/country-frame.html>).

<sup>70</sup> United States. Secretary of State. Statement before the Senate Foreign Relations Committee. *NATO Enlargement*. Washington, D.C.: Department of State, Office of the Secretary of State's Spokesman, 24 February 1998, p. 4.

<sup>71</sup> "Czech Parliament Strongly Supports Entry into NATO." *The Washington Times*, 16 April 1997, p. 13.

<sup>72</sup> Turkey has a larger military force than any NATO member, except the US. However, few, if any, of these forces have traditionally been envisioned for use outside areas adjacent to Turkey. Future efforts may look for a larger contingent from Turkey, but proportionately speaking and in terms of force projection capability, I believe the UK, France, Germany, and Italy will continue to be the most likely sources for significant force projection forces among current NATO allies.

<sup>73</sup> Italy. Ministry of Defense. Reports on "Out of Area Operations" Titled: *Operazioni 'Fuori Area' cui ha partecipato personale dell'Esercito dal 1958*, p.1, and *Le Missioni All'Estero delle Forze Armate Italiane*, p. 1-4.

<sup>74</sup> Interview with COL Ubaldo G. Serino, Italian Republic Assistant Defense and Air Attaché to the US on 11 March 1998.

<sup>75</sup> The Carabinieri are the Italian National Police Force. They constitute a paramilitary force that performs, in addition to its police functions, many of the missions the Army Reserve and National Guard serve in the US.

<sup>76</sup> Interview with COL Ubaldo G. Serino, Italian Republic Assistant Defense and Air Attaché to the US on 11 March 1998.

<sup>77</sup> Ibid.

<sup>78</sup> United States. Central Intelligence Agency. *The World Factbook -1997* (<http://www.odci.gov/cia/publications/factbook/country-frame.html>), section on Italy.

<sup>79</sup> United States. United States Information Agency, Office of Research and Media Reaction. *The New European Security Architecture: Volume III - Public Attitudes Toward a Changing European Security Environment*, Washington, D.C., November 1997, p. 3, 7, 14, 17, and 21.

<sup>80</sup> Interview with COL Ubaldo G. Serino, Italian Republic Assistant Defense and Air Attaché to the US on 11 March 1998.

<sup>81</sup> Ibid. COL Serino stated that the goal was to have a force that was less than 50% draftees. When I contacted him later and noted that IISS's *Military Balance 1996-1997* showed the current figure to be approximately 50% now, he said that the figure was not correct. He was uncertain of the exact percentage, but that it was still well above 50%.

<sup>82</sup> "Italy to Purchase 32 Advanced Hercules." *Defense News*, 1-7 December 1997, p. 2; Interview with COL Ubaldo G. Serino, Italian Republic Assistant Defense and Air Attaché to the US on 11 March and 12 May 1998. Report in *Defense News* cited LTC Fillippi of the Italian Embassy in Washington, DC,

reporting the purchase of 32 C-130J's. COL Serino confirmed with the individual at the Italian Embassy responsible for the paperwork for the purchase that the figure was 18, not 32.

<sup>83</sup> Interview with COL Ubaldo G. Serino, Italian Republic Assistant Defense and Air Attaché to the US on 11 March 1998.

<sup>84</sup> United States. Central Intelligence Agency. *The World Factbook -1997* (<http://www.odci.gov/cia/publications/factbook/country-frame.html>), section on Germany; Anne Swardson. "Europe Banking On Marriage of Money." *The Washington Post*, 28 April 1998, p. 1.

<sup>85</sup> Federal Republic of Germany. *German Security Policy and the Bundeswehr*. Bonn, Federal Republic of Germany: The Press and Information Office of the Federal Government, October 1997, p. 36.

<sup>86</sup> LTG Klaus Reinhardt. "The German Army Forces Command." *Military Technology* 21 (Special Issue, October 1997): 14-17; MG Jurgen Reichardt. "The Heeresamt and Its New Tasks." *Military Technology* 21 (Special Issue, October 1997): 19-21; MG Norbert Majewski. "The German Army Support Command." *Military Technology* 21 (Special Issue, October 1997): 23-27; Federal Republic of Germany. Federal Ministry of Defense. *White Paper 1994: White Paper on the Security of the Federal Republic of Germany and the Situation and Future of the Bundeswehr*. Bonn, Federal Republic of Germany: The Press and Information Office of the Federal Government, April 1994, p. 110, 114 and 118.

<sup>87</sup> The WEU is the security and defense component of the EU. In 1994 the goal of a common European foreign and security policy was incorporated into the Maastricht Treaty. The decision was to develop the WEU as a manifestation of European security and defense identity (ESDI) within NATO and establish new structures within the alliance to enhance the role Europe plays in NATO.

<sup>88</sup> LTG Helmut Willmann. "The German Army On Its Way Into the 21<sup>st</sup> Century." *Military Technology* 21 (Special Issue, October 1997): 11; Ronald D. Asmus, Richard L. Kugler and F. Stephen Larrabee. "What Will NATO Enlargement Cost?" *Survival* 38 (Autumn 1996), footnote on p. 26; Federal Republic of Germany. *German Security Policy and the Bundeswehr*. Bonn, Federal Republic of Germany: The Press and Information Office of the Federal Government, October 1997, p. 36 and 45. The Army's portion of 36,250 is made up 2 armored brigades, 2 mechanized infantry brigades, 1 airborne infantry brigade and 1 aviation brigade, plus sundry support units. A division equivalent with support units would be task organized for the specific mission from these assets.

<sup>89</sup> Federal Republic of Germany. Federal Ministry of Defense. *White Paper 1994: White Paper on the Security of the Federal Republic of Germany and the Situation and Future of the Bundeswehr*. Bonn, Federal Republic of Germany: The Press and Information Office of the Federal Government, April 1994, p. 66-69.

<sup>90</sup> Bernd Wilz. "The Importance of the Army For the Federal Republic of Germany's Security Policy." *Military Technology* 21 (Special Issue, October 1997): 3.

<sup>91</sup> Interview with COL Gerhard Stelz, Federal Republic of Germany Military and Assistant Defense Attaché to the US on 10 March 1998.

<sup>92</sup> Federal Republic of Germany. Federal Ministry of Defense. *White Paper 1994: White Paper on the Security of the Federal Republic of Germany and the Situation and Future of the Bundeswehr*. Bonn, Federal Republic of Germany: The Press and Information Office of the Federal Government, April 1994, p. 94.

<sup>93</sup> United States. Central Intelligence Agency. *The World Factbook -1997* (<http://www.odci.gov/cia/publications/factbook/country-frame.html>), section on Germany.

<sup>94</sup> Federal Republic of Germany. Federal Ministry of Defense. *White Paper 1994: White Paper on the Security of the Federal Republic of Germany and the Situation and Future of the Bundeswehr*. Bonn, Federal Republic of Germany: The Press and Information Office of the Federal Government, April 1994, p. 99.

<sup>95</sup> Interview with COL Gerhard Stelz, Federal Republic of Germany Military and Assistant Defense Attaché to the US on 10 March 1998.

<sup>96</sup> Federal Republic of Germany. *German Security Policy and the Bundeswehr*. Bonn, Federal Republic of Germany: The Press and Information Office of the Federal Government, October 1997, p. 53; International Institute for Strategic Studies. *Military Balance 1996-1997*. London: Oxford University Press, 1996, p. 58; telephonic follow-up with COL Gerhard Stelz, Federal Republic of Germany Military and Assistant Defense Attaché to the US on 28 May 1998. The acquisition of Russian AN-70's is under discussion, but no firm decision has been made. Whether these would be in addition to or replacement for some of the aging C-160's has not been determined at the time of this study. The AN-70 is the Russian replacement

aging Russian inventory of AN-12's and was originally planned for production back in 1988, but was postponed due to budget constraints. This acquisition could be significant, if the combined end quantity of these and C-160's were sufficient for Germany's Reaction Forces and their acquisition were coupled with the acquisition of tanker assets. The latter is not under consideration, at this time.

<sup>97</sup> Federal Republic of Germany. Federal Ministry of Defense. *White Paper 1994: White Paper on the Security of the Federal Republic of Germany and the Situation and Future of the Bundeswehr*. Bonn, Federal Republic of Germany: The Press and Information Office of the Federal Government, April 1994, p. 100-101.

<sup>98</sup> Interview with COL Gerhard Stelz, Federal Republic of Germany Military and Assistant Defense Attaché to the US on 10 March and 28 May 1998; United States. Congressional Budget Office. *CBO Papers – The Costs of Expanding the NATO Alliance*. Washington, D.C.: US Government Printing Office, March 1996, p. 34. Confirmed with COL Stelz as late as 28 May that the conversion of the Boeing 707's was no longer under consideration.

<sup>99</sup> COL Gerhard Stelz, Federal Republic of Germany Military and Assistant Defense Attaché to the US observed that support for NATO is the highest of any international organization and is usually over 80%.

<sup>100</sup> United States. United States Information Agency, Office of Research and Media Reaction. *The New European Security Architecture: Volume III – Public Attitudes Toward a Changing European Security Environment*, Washington, D.C., November 1997, p. 3, 13, 14, 17, 20 and 21.

<sup>101</sup> Federal Republic of Germany. Federal Ministry of Defense. *White Paper 1994: White Paper on the Security of the Federal Republic of Germany and the Situation and Future of the Bundeswehr*. Bonn, Federal Republic of Germany: The Press and Information Office of the Federal Government, April 1994, p. 90 and 99.

<sup>102</sup> Federal Republic of Germany. *German Security Policy and the Bundeswehr*. Bonn, Federal Republic of Germany: The Press and Information Office of the Federal Government, October 1997, p. 34; Federal Republic of Germany. Federal Ministry of Defense. *White Paper 1994: White Paper on the Security of the Federal Republic of Germany and the Situation and Future of the Bundeswehr*. Bonn, Federal Republic of Germany: The Press and Information Office of the Federal Government, April 1994, p. 90; Interview with COL Gerhard Stelz, Federal Republic of Germany Military and Assistant Defense Attaché to the US on 10 March 1998. Although German courts have ruled that in certain circumstances the constitution does not prohibit the use of German military forces outside Germany, the issue could still come into play in the future. Additionally, there is a general reluctance on the part of the public to support extensive active involvement of German forces externally. Note Germans consistently provided the least support for 12 core NATO questions (see Table #3).

<sup>103</sup> William Drozdiak, *The Washington Post*, 18 Apr 98 and "Kohl, Behind in New Poll, Attacks Schroeder", *Post*, 19 Apr 98; Thomas S. Szayna, RAND, International Studies Group. Email response to the author on 22 May 1998. Aside from the former communists from East Germany, the only party in the Bundestag (German Parliament) to vote against NATO enlargement was the Greens. Both the Christian Democratic Union (CDU) and the Socialist Democratic Party (SPD) denounced in harsh terms the pacifist Greens. The German elite, represented in this case by the CDU and SPD politicians, are more informed and do not evidence the chauvinistic tendencies of some of elements of German society.

<sup>104</sup> France. Ministry of Defense. *Defense and the Armed Forces of France*. Paris, France: Information and Public Relations Service of the Army, April 1997, p. 4; France. Embassy of France to the United States. Colonel Dominique Orsini, French Republic Assistant Army Attaché to the United States, slides (19 each) used to brief the author on 13 March 1998. Slide titles cited here: "French Presence in the World," and "Cooperation and Defense Agreements."

<sup>105</sup> Interview with COL Dominique Orsini, French Republic Assistant Army Attaché to the United States on 13 March 1998; France. Ministry of Defense. *Defense and the Armed Forces of France*. Paris, France: Information and Public Relations Service of the Army, April 1997, p. 8 and 29. France will completely dismantle its land-based nuclear missiles, but will modernize the missiles to be carried on its 4 remaining SSBN's (two at sea at all times) and on its Air Force and Navy aircraft.

<sup>106</sup> France. Ministry of Defense. *Defense and the Armed Forces of France*. Paris, France: Information and Public Relations Service of the Army, April 1997, p. 27. France's assessment of the changes to be made to its defense system was announced by President Chirac in February 1996 and makes possible to sketch the outline of what the French military will look like in 20 years.

<sup>107</sup> France. Ministry of Defense. *Defense and the Armed Forces of France*. Paris, France: Information and Public Relations Service of the Army, April 1997, p. 4 and 7; France. Embassy of France to the United States. Colonel Dominique Orsini, French Republic Assistant Army Attaché to the United States, slides (19 each) used to brief the author on 13 March 1998. Slide title cited here: "France and the Defense of Europe." It should be noted that discussions of the last few years aside, France still is not a member of NATO's integrated military structure and, therefore, when and under what conditions it would choose to participate in or support a NATO effort, particularly a non-Article 5 action remains to be seen. Any out of area operation by description would be a non-Article 5 action.

<sup>108</sup> United States. United States Information Agency, Office of Research and Media Reaction. *The New European Security Architecture: Volume III – Public Attitudes Toward a Changing European Security Environment*. Washington, D.C., November 1997, p. 3, 7, 13, 14, 17, 20, 21, and 23. The three questions the French failed to achieve a majority for were: 1) defense of Western interests outside of Europe (still attained a 49% in support), 2) future Enlargement of NATO, and 3) increased funding in support of Enlargement. They gave the highest national support for use of forces to combat international terrorism and drugs.

<sup>109</sup> *Armees d'aujourd'hui* no. 225 (December 1997), p. 17.

<sup>110</sup> United States. Central Intelligence Agency. *The World Factbook – 1997* (<http://www.odci.gov/cia/publications/factbook/country-frame.html>), section on Germany; Federal Republic of Germany. Federal Ministry of Defense. *White Paper 1994: White Paper on the Security of the Federal Republic of Germany and the Situation and Future of the Bundeswehr*. Bonn, Federal Republic of Germany: The Press and Information Office of the Federal Government, April 1994, p. 94.

<sup>111</sup> United States. Central Intelligence Agency. *The World Factbook – 1997* (<http://www.odci.gov/cia/publications/factbook/country-frame.html>).

<sup>112</sup> According to COL Dominique Orsini, French Assistant Army Attaché to the US, 13 Mar 1998.

<sup>113</sup> France. Embassy of France to the United States. Colonel Dominique Orsini, French Republic Assistant Army Attaché to the United States, slides (19 each) used to brief the author on 13 March 1998. Slide titles cited here: "Planning for the 1997-2015 Period: Three Programming Acts" and "Armed Forces 2015"; France. Ministry of Defense. *Defense and the Armed Forces of France*. Paris, France: Information and Public Relations Service of the Army, April 1997, p. 13, 21 and 28. The Gendarmerie in France, like the Carabinieri in Italy, is a National Police Force. They constitute a paramilitary force that performs, in addition to its police functions, many of the missions the Army Reserve and National Guard serve in the US.

<sup>114</sup> France. Embassy of France to the United States. Colonel Dominique Orsini, French Republic Assistant Army Attaché to the United States, slides (19 each) used to brief the author on 13 March 1998. Slide titles cited here: "Reserve," "Power Projection" and "Armed Forces 2015"; France. Ministry of Defense. *Defense and the Armed Forces of France*. Paris, France: Information and Public Relations Service of the Army, April 1997, p. 8, 14, 21, 22 and 23. The French Air Force, like the US, attaches sufficient importance to force mobility that it has a separate Air Mobility Command.

<sup>115</sup> France. Embassy of France to the United States. Colonel Dominique Orsini, French Republic Assistant Army Attaché to the United States, slides (19 each) used to brief the author on 13 March 1998. Slide title cited here: "Armed Forces 2015"; France. Ministry of Defense. *Defense and the Armed Forces of France*. Paris, France: Information and Public Relations Service of the Army, April 1997, p. 8; Interviews with COL Dominique Orsini, French Republic Assistant Army Attaché to the United States and Captain Philippe Angles, French Republic Naval Attaché to the United States on 13 Mar 1998; International Institute for Strategic Studies. *Military Balance 1996-1997*. London: Oxford University Press, 1996, p. 55-56. While the *Military Balance, 1996-1997* lists a total of 160 C160 Transalls or larger "transport" aircraft, only 63 of these aircraft identified for transport; the other 97 are for ELINT, communications, refueling, OCU, testing, etc. It also lists 25 tankers, 11 of which are KC-135's. The French Attaché slides show 97 transport/supply aircraft in 1995 and 68 in 2015. The French Attaché stated that the "12" KC-135's would be retained. It is highly probable that some of the aircraft categorized as "small" in Table 4 are included in the number of transport/supply aircraft identified by the French Attaché.

<sup>116</sup> Frederic Pons. *The French UN Peacekeepers: 50 Years of Service to Peace In the World*. Paris, France: Editions Italiques, 1995, p. 3-6 and 46.

<sup>117</sup> France. Embassy of France to the United States. Colonel Dominique Orsini, French Republic Assistant Army Attaché to the United States, slides (19 each) used to brief the author on 13 March 1998. Slide title cited here: "Our Overseas Operations Over the Last Five Years"; Interviews with COL Dominique Orsini, French Republic Assistant Army Attaché to the United and Captain Philippe Angles, French Republic Naval Attaché to the United States on 13 Mar 1998. The French used US aircraft in Chad and Russian in Rwanda and Bosnia.

<sup>118</sup> United Kingdom. Ministry of Defence. *Strategic Defence Review: Seminar 3 July 1997*. See section titled "Geographical Limits of UK Involvement." <[http://www.mod.uk/seminar\\_july1997.htm#3JULY](http://www.mod.uk/seminar_july1997.htm#3JULY)>

<sup>119</sup> Email Interview with LTC Graeme Hazlewood, United Kingdom, Ministry of Defence Representative to United States, Department of the Army, Office of the Deputy Chief of Staff for Logistics Staff, on 14 April 1997. (Subject matter expert identified by the Embassy of the United Kingdom to the United States).

<sup>120</sup> International Institute for Strategic Studies. *Military Balance 1996-1997*. London: Oxford University Press, 1996, p. 74-75; International Institute for Strategic Studies. *Military Balance 1988-1989*. London: The Eastern Press, 1988, p. 83.

<sup>121</sup> United Kingdom. Ministry of Defence. *Today's Royal Navy Structure: Surface Flotilla, p.3*. <[http://www.royal\\_navy.mod.uk/future/index.htm](http://www.royal_navy.mod.uk/future/index.htm)>

<sup>122</sup> International Institute for Strategic Studies. *Military Balance 1996-1997*. London: Oxford University Press, 1996, p. 73; International Institute for Strategic Studies. *Military Balance 1988-1989*. London: The Eastern Press, 1988, p. 83.

<sup>123</sup> Email Interview with LTC Graeme Hazlewood, United Kingdom, Ministry of Defence Representative to United States, Department of the Army, Office of the Deputy Chief of Staff for Logistics Staff, on 14 April 1997. (Subject matter expert identified by the Embassy of the United Kingdom to the United States).

<sup>124</sup> Speech by Mr. George Robertson, the United Kingdom, Secretary of State for Defence given at Chatham House on *The Strategic Defence Review*, 12 March 1998, in London. <[http://www.mod.uk/speeches/sofs3\\_98.html](http://www.mod.uk/speeches/sofs3_98.html)>

<sup>125</sup> Ibid.

<sup>126</sup> Ibid.

<sup>127</sup> Email Interview with LTC Graeme Hazlewood, United Kingdom, Ministry of Defence Representative to United States, Department of the Army, Office of the Deputy Chief of Staff for Logistics Staff, on 14 April 1997. (Subject matter expert identified by the Embassy of the United Kingdom to the United States).

<sup>128</sup> United Kingdom. Ministry of Defence. *The Royal Air Force: Current Strength of the RAF*, p. 2-3. <<http://www.raf.mod.uk/stations/strength.html>>

<sup>129</sup> Email Interview with LTC Graeme Hazlewood, United Kingdom, Ministry of Defence Representative to United States, Department of the Army, Office of the Deputy Chief of Staff for Logistics Staff, on 14 April 1997. (Subject matter expert identified by the Embassy of the United Kingdom to the United States); James K. Matthews. *United States Transportation Command, the National Defense Reserve Fleet, and the Ready Reserve Force*. 2d ed. Edited by Margaret J. Nigra and Cora J. Holt. Washington, D.C.: US Government Printing Office, December 1997, p. 25 and 28-29. According to *Military Balance, 1996-1997* the correct term for what was Future Large Aircraft (FLA) is now Future Transport Aircraft (FTA), but the term found used universally was FLA, so it is used here for ease of understanding.

<sup>130</sup> United Kingdom. Ministry of Defence. *Strategic Defence Review: Seminar 3 July 1997*. See section titled "United States." <[http://www.mod.uk/seminar\\_july1997.htm#3JULY](http://www.mod.uk/seminar_july1997.htm#3JULY)>; United Kingdom. Ministry of Defence. *Strategic Defence Review: Seminar 5 November 1997*. See section titled "Force Structures," paragraph #29. <[http://www.mod.uk/strategic\\_defence\\_review/seminar\\_nov1997.htm#STRATEGIC](http://www.mod.uk/strategic_defence_review/seminar_nov1997.htm#STRATEGIC)>

<sup>131</sup> United States. United States Information Agency, Office of Research and Media Reaction. *The New European Security Architecture: Volume III – Public Attitudes Toward a Changing European Security Environment*, Washington, D.C., November 1997, p. 3, 7, 13, 14, 17, 20, 21, 23 and 24.

<sup>132</sup> Speech by Mr. George Robertson, the United Kingdom, Secretary of State for Defence given at Chatham House on *The Strategic Defence Review*, 12 March 1998, in London, p. 7.

<sup>133</sup> Email Interview with LTC Graeme Hazlewood, United Kingdom, Ministry of Defence Representative to United States, Department of the Army, Office of the Deputy Chief of Staff for Logistics Staff, on 14 April 1997. (Subject matter expert identified by the Embassy of the United Kingdom to the United States).

<sup>134</sup> United States. Central Intelligence Agency. *The World Factbook – 1997* (<http://www.odci.gov/cia/publications/factbook/country-frame.html>), section on United Kingdom; NATO Fact Sheet Nr. 22, titled, *The Transformation of NATO's Defence Posture*, p. 2; United Kingdom. Ministry of Defence. *Strategic*

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*Defence Review: Seminar 5 November 1997*. See section titled "Public Discussions," paragraph #30. <[http://www.mod.uk/strategic\\_defence\\_review/seminar\\_nov1997.htm#STRATEGIC](http://www.mod.uk/strategic_defence_review/seminar_nov1997.htm#STRATEGIC)>

<sup>135</sup> Email Interview with LTC Graeme Hazlewood, United Kingdom, Ministry of Defence Representative to United States, Department of the Army, Office of the Deputy Chief of Staff for Logistics Staff, on 14 April 1997. (Subject matter expert identified by the Embassy of the United Kingdom to the United States).

<sup>136</sup> Speech by Mr. George Robertson, the United Kingdom, Secretary of State for Defence given at Chatham House on *The Strategic Defence Review*, 12 March 1998, in London.

<sup>137</sup> United States. Department of Defense, USTRANSCOM, Director, Operations and Logistics. Briefing titled, *Getting To the Fight*, slides titled "Air Mobility Peace to War Assets," "Sealift Mobility Peace to War Assets," and "Surge Sealift Force." Scott Air Force Base, IL, February 1998; United States. Department of Defense, Department of the Air Force, Air Mobility Command, Tanker Airlift Control Center (TACC). *TACC Orientation Briefing*, slide titled "Aircraft." Scott Air Force Base, IL, February 1998; International Institute for Strategic Studies. *Military Balance 1996-1997*. London: Oxford University Press, 1996, p. 20, 25 and 28; United States. Department of Defense, Department of the Air Force. *USAF Fact Sheet 92-34: C-130 Hercules*. Scott Air Force Base, IL, October 1992. <[http://www.af.mil:80/news/factsheets/C\\_130\\_Hercules.html](http://www.af.mil:80/news/factsheets/C_130_Hercules.html)>; United States. Department of Defense, Department of the Air Force. *USAF Fact Sheet 92-35: C-5 Galaxy*. Scott Air Force Base, IL, October 1992. <[http://www.af.mil:80/news/factsheets/C\\_5A\\_B\\_Galaxy.html](http://www.af.mil:80/news/factsheets/C_5A_B_Galaxy.html)>; United States. Congressional Budget Office. *CBO Papers – The Costs of Expanding the NATO Alliance*. Washington, D.C.: US Government Printing Office, March 1996, p. 34; Rutherford, GEN Robert L., former Commander in Chief, U.S. Transportation Command and Commander Air Mobility Command. An Oral History conducted and compiled by Dr. James K. Matthews and Mr. Robert T. Cossaboom, at Scott Air Force Base, Illinois, October 1996, 31-32. Depending on the source the number of each type of aircraft or vessels currently available and projected varies widely. The number of aircraft shown as currently available comes from *Military Balance 1996-1997*, except for the Wide Body Equivalent (WBE) figures which come from USTRANSCOM, Director, Operations and Logistics' "Air Mobility Peace to War Assets" slide. Projections are based upon the only determined change is the swap of C17s for C141s. The sealift figures come from the USTRANSCOM, Director, Operations and Logistics' "Sealift Mobility Peace to War Assets" and "Surge Sealift Force" slides. GEN Rutherford made the observation about the possible replacement of tankers with C17 variants.

<sup>138</sup> The four force structure reviews are the Base Force Review or BFR ('91), the Bottom Up Review or BUR ('93), the Commission on Roles and Missions or CORM ('95) and the Quadrennial Defense Review or QDR ('97).

<sup>139</sup> United States. Department of Defense. *Joint Vision 2010 – America's Military: Preparing for Tomorrow*. Washington, D.C.: US Government Printing Office, July 1996, p. 4.

<sup>140</sup> United States. National Defense Panel. *Transforming Defense: National Security in the 21<sup>st</sup> Century*. Washington, D.C.: US Government Printing Office, December 1997, p. 12.

<sup>141</sup> United States. President. *A National Security Strategy for a New Century*. Washington, D.C.: US Government Printing Office, May 1997, p. 1-2.

<sup>142</sup> United States. Department of Defense, USTRANSCOM, Director, Operations and Logistics. Briefing titled, *Getting To the Fight*, slide titled "Contingency Requirements." Scott Air Force Base, IL, February 1998.

<sup>143</sup> United States. Department of Defense, USTRANSCOM, Director, Operations and Logistics. Briefing titled, *Getting To the Fight*, slides titled "The Mobility Requirement," "Air Mobility Peace to War Assets," "Sealift Mobility Peace to War Assets," and "Surge Sealift Force." Scott Air Force Base, IL, February 1998.

<sup>144</sup> United States. Department of Defense, Department of the Air Force, Air Mobility Command, Tanker Airlift Control Center (TACC). *TACC Orientation Briefing*, slide titled "Assets Available." Scott Air Force Base, IL, February 1998.

<sup>145</sup> United States. Department of Defense, Chief of Staff of the Army. *CSA 98-07 Random Thoughts While Running*. Email. Washington, D.C., 7 April 1998.

<sup>146</sup> United States. Department of Defense, USTRANSCOM, Director, Operations and Logistics. Briefing titled, *Getting To the Fight*, slide titled, titled "Joint Logistics Over the Shore." Scott Air Force Base, IL, February 1998.

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<sup>147</sup> United States. National Defense Panel. *Transforming Defense: National Security in the 21<sup>st</sup> Century*. Washington, D.C.: US Government Printing Office, December 1997, p. 2, 33, 46 and 47.

<sup>148</sup> International Institute for Strategic Studies. *Military Balance 1996-1997*. London: Oxford University Press, 1996, p. 21; *Armees d'aujourd'hui* no. 225 (December 1997), p. 17; "Summary of Quadrennial Defense Review." *AUSA Background Brief* no. 74 (June 1997), p. 5; United States. Central Intelligence Agency. *The World Factbook -1997* (<http://www.odci.gov/cia/publications/factbook/country-frame.html>), section on United States; Gary Schmitt. "The Case for Spending On Defense." *The Washington Times*, 7 January 1998, p. 15. Depending on the source used the 1997 percent of US GDP expended on defense varies between 3.2% and 3.5% and projected percent of GDP in 2002 between 2.7 and 2.8%. Both of the latter figures which were cited in the body of the paper come from *Military Balance, 1990-1997*. Even the higher of the current figures is a lower percent of GDP than during the low point of the Carter Presidency when the term "hollow force" was coined when referring to the US military. For most of the Cold War, the US spent somewhere between 6% and 9% of GDP on the military.

<sup>149</sup> United States. United States Information Agency, Office of Research and Media Reaction. *The New European Security Architecture: Volume III - Public Attitudes Toward a Changing European Security Environment*, Washington, D.C., November 1997, p. 27-29.

<sup>150</sup> James K. Matthews and Cora J. Holt. *So Many, So Much, So Far, So Fast*. Washington, D.C.: US Government Printing Office, September 1996, p. 51-57 and 125. Of all sealift cargo, 24% came on foreign flagged ships. In spite of significant constraints allies identified significant airlift for use and flew 200 flights of cargo during the conflict. Due to concerns for troop safety and apprehension of repercussions for any fatalities on a foreign flagged aircraft, no US troops flew on foreign aircraft.

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