the news experient in this paper are those of the author

339

AD-A237

No. Co

and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until that been cleared by the appropriate military service or pronument agency.

GLOBAL CONTINGENCY CORPS: A METT-T ANALYSIS

BY

 $f_{\tilde{s}}$

LIEUTENANT COLONEL ROBERT F. FERNANDEZ United States Army

DISTRIBUTION STATEMENT A: Approved for public release. Distributin is unlimited.

Best Available Copy

91-03106

STUDY

PROJECT

16763

USAWC CLASS OF 1991

U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050

SECURITY CLASSIFICATION OF THIS PAGE

-

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
1a. REPORT SECURITY CLASSIFICATION Unclassified	1b. RESTRICTIVE MARKINGS				
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution is unlimited.			
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE					
4. PERFORMING ORGANIZATION REPORT NUMBE	R(S)	5. MONITORING C	DRGANIZATION RE	PORT NU	MBER(S)
6a. NAME OF PERFORMING ORGANIZATION U.S. Army War College Carlisle Barracks	6b. OFFICE SYMBOL (If applicable)	7a. NAME OF MC	NITORING ORGAN	NIZATION	
6c. ADDRESS (City, State, and ZIP Code)		7b. ADDRESS (City, State, and ZIP Code)			
Carlisle, Pennsylvania 17013	-5050			-	
8a. NAME OF FUNDING/SPONSORING ORGANIZATION	8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER			
8c. ADDRESS (City, State, and ZIP Code)	.	10 SOURCE OF F	UNDING NUMBER	S	
		PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification)				L	
GLOBAL CONTINGENCY CORPSA M	ETT-T ANALYSIS				
12. PERSONAL AUTHOR(S) LTC Robert M. Fernandez					
13a. TYPE OF REPORT 13b. TIME CO Final MSP FROM	DVERED TO	14. DATE OF REPOR 91/04/05	RT(Year, Month, I	Day) 15.	PAGE COUNT 45
16. SUPPLEMENTARY NOTATION					
17. COSATI CODES 18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)				by block number)	
FIELD GROUP SUB-GROUP					
19. ABSTRACT (Continue on reverse if necessary and identify by block number) The U.S. has long used a Global Contingency Corps (GCC) concept to protect and pursue its interests worldwide. The GCC has been used many times in the past, most recently in Grenada, Panama and Desert Shield/Storm. The Work Airborne Corps has filled this role very admirably to date. However, their initial employment in Saudi Arabia as a light force on short notice with Reserve Component soldiers raises some questions. They were deployed in open country against invasion forces that would have been highly mechanized. That could have resulted in a disaster. It was also necessary to call up reserve units to provide requisite support to them. Our world is rapidly changing and it's time to reassess the composition and capability of the GCC. This paper applies the basic formula of METT-T to gain some insight into the future force structure of the GCC. Near term projected scenarios are used to accomplish this.					
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT	21 ABSTRACT SECURITY CLASSIFICATION Unclassified 22b TELEPHONE (Include Area Code) 22c. OFFICE SYMBOL				
COL Charles S. Rousek, Proje	ect Adviser	(717) 245	-3840		VCAA
DD Form 1473, JUN 86	Previous editions are	obsolete.	SECURITY	CLASSIFIC	ATION OF THIS PAGE

UNCLASSIFIED

Acees	sion le	·
BIIS	GRAAT	5
DTIC	tab 👘	ā
Vicean	beenuo	
Justi	floatio	12
By Distr	ib ut ion	4
Aval	labilit	y Codes
	Cvail	and/er
Dist	Spee	1al
01	1	
11-1		I
		1

USAWC MILITARY STUDIES PROGRAM PAPER

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

Global Contingency Corps: A METT-T Analysis

AN INDIVIDUAL STUDY PROJECT

by

Lieutenant Colonel Robert M. Fernandez United States Army

> Colonel Charles S. Rousek Project Advisor

U.S. Army War College Carlisle Barracks, Pennsylvania 17013

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

UNCLASSIFIED

ABSTRACT

s

۵

AUTHOR:	Robert M. Fernandez, Lt Col, USA
TITLE:	Global Contingency Corps - A METT-T Analysis
FORMAT:	Individual Study Project
DATE:	5 April 1991 PAGES: 45 Upclassified

The U.S. has long used a Global Contingency Corps (GCC) concept to protect and pursue its interests worldwide. The GCC has been used many times in the past, most recently in Grenada, Panama and Desert Shield/Storm. The XIBLU Airborne Corps has filled this role very admirably to date. However, their initial employment in Saudi Arabia as a light force on short notice with Reserve Component soldiers raises some questions. They were deployed in open country against invasion forces that would have been highly mechanized. That could have resulted in a disaster. It was also necessary to call up reserve units to provide requisite support to them. Our world is rapidly changing and it's time to reassess the composition and capability of the GCC. This paper applies the basic formula of METT-T to gain some insight into the future force structure of the GCC. Near term projected scenarios are used to accomplish this.

Global Contingency Corps - What Should It Look Like?

INTRODUCTION

The U.S. has used a Global Contingency Corps (GCC) concept for many years. The 18th Airborne Corps has responded well to many crises and special missions in the past. Panama and Grenada are the most recent examples. According to the current plans for future U.S. Army force structure, the 18th Corps will remain the designated contingency corps. It may, however, lose its mechanized division, becoming a completely light force. <u>1</u>.

Changes in threats and other shifts in today's dynamic world may require a modification to the structure of our Global Contingency Corps. This was particularly evident during the beginning of the Persian Gulf crisis. The 82d Airborne and 101st Air Assault Divisions were deployed to deter and defend against potential invasion forces which were highly mechanized. This turned out to be a gamble that paid off, but it could have been disastrous for these relatively unprotected, firepower-short, and not-so-mobile forces had they been involved in a fight. There are, of course, many other third-world nations with mechanized forces. Compounding this problem, the Corps Support Command (COSCOM), necessary to sustain these forces, is over 70% Reserve Component (RC). <u>2</u>. Given the momentous changes in the world and the ongoing changes in the Army, we must re-examine the GCC. An excellent way to accomplish this is to use the time-proven analysis of Mission (assigned), Enemy (forces), Terrain (and weather), Troops (friendly) available and Time available (METT-T). Military operational plans are almost always based on these factors. The use of this classical tool will help to shed some insight on what the structure and composition of the GCC should be. In order to use this approach, realistic scenarios are required. The factors of METT-T will be applied to each scenario. We can then see the impact of each of the factors on the force structure of the GCC.

.

o

In an August 1990 speech, President Bush stated:

"Dur task today is to shape our defensive capabilities to these changing strategic circumstances.....We know our forces can be smaller....(but) we would be ill served by forces that represent nothing more than a scaled back or shrunken down version of the ones we possess....What we need are not merely reductions-but restructuring." <u>3</u>.

BACKGROUND

The most recent statement on National Security Strategy by President Bush, shows that the requirement for global contingency forces will be even more important in the future. "Force projection" for "global security interests" are

required. This will be accomplished by:

"maintain(ing) sufficient forces to deter general war while also giving us forces that are well suited for the more likely contingencies of the Third World." <u>4</u>.

To meet this challenge, the leadership of the Army plans for a "strategic force" that must be "versatile", "lethal" and "deployable." <u>5.</u> Under "versatility", General Vuono, the Army Chief of Staff, says:

"we must have powerful forces based within the United States that are designed to respond to contingencies worldwide." <u>6</u>.

Under "deployability", General Vuono goes on to say:

"Depending on the threat, we may be required to deploy only a minor force,....Alternatively, it may demand a major joint operation built around a contingency force of armored divisions to contend with an adversary that itself possesses a powerful arsenal of tanks." <u>7</u>.

It will certainly take years to reshape the Army. In the interim we must be able to respond. The 18th Corps has, in addition to 82d Airborne and 101st Airmobile Divisions, the 10th Mountain Division and the 24th Mechanized Infantry Division. The 24th Division has a National Guard "round-out" brigade, which is not deployable on short notice. In support of these divisions the Corps has many more tactical support increments such as engineer, artillery, and supply units. Only one cavalry squadron rather than a regiment is included.

The time required to respond to a crisis is frequently one of the most critical elements. The capability of a force to deploy is a very important factor. The Mountain Division is capable of deploying by air almost halfway around the world, to the Persian Gulf, within 3 days, the Airborne Division within 5 days, the Airmobile Division within 1 week and the Mechanized Division within 3 weeks (by air or sea). The times for airlift are additive based on availability of U.S. Air Force aircraft. The supporting Corps units require approximately the same amount of time as all the divisions combined. In other words, it would take approximately 4 to 6 weeks to put this Corps on the ground halfway round the world. 8. More importantly this also requires the activation of reserve units to provide support and "round out" the heavy division. The "round-out" Brigade would not be available for deployment in less than 90 days.

Current budget proposals will reduce the size of the Army to 12 active divisions. The GCC may also serve in a dual role, the second being a reinforcing of our forwarddeployed forces in Europe and Korea. These forces will probably be drastically reduced. This reinforcing role would be particularly appropriate in very short warning scenarios.

SCENARIOS

In order to examine the impact on the structure of the GCC, some potential applications of the GCC will be projected to hypothetical scenarios. The scenarios used were developed by examining publications and other documents dealing with the international environment. Current or potential crisis situations were extrapolated. These likely crises involved actual or probable vital interests and employment of U.S. ground forces. 9_{\perp}

Almost all of the publications refer to the volatile situations in Korea and the Mid-East. There were also many references to the "unstable" environment in Europe, the potential collapse of the USSR and ethnic/economic problems in Eastern Europe. NATO, and particularly the U.S., was cautioned not to drastically draw down forces. Primary concerns were civil wars and unrest. Many articles dealt with the difficulties in Latin America and potential U.S. roles there. Finally, although there are many potential crisis situations in Sub-Saharan Africa, there did not appear to be any that would potentially involve a U.S. vital interest.

The actual scenarios used, along with some detailed information relating to each of them, are contained in the

appendices. The pertinent data relating to the METT-T analysis has been extracted and is shown in a matrix on page 9. A brief synopsis of these future scenarios is provided below.

MID_EAST

This scenario postulates the countries of Jordan, Syria, Lebanon, Egypt, Libya, and Iraq allied into a New Arab League (NAL) to fight against Israel. After the Persian Gulf War, expectations had been very high for a resolution of the "Palestinian Question." After several years dragged on, it was obvious that force would be required for an Arab solution. The NAL objective is to conquer Israel with the minimum goal of turning the occupied territories over to the Palestinians (PLO). Syria, Egypt, and Jordan have their entire forces available. Iraq can only contribute 50% of its remaining Army and Libya is deploying 25% of its Army and 75% of its aircraft. The fighting will take place in the northern, southern, and eastern portions of Israel.

ASIA

This scenario pits the North Korean Army against the U.N. command which is almost all South Korean. Kim II Sung recognized that the opportunity for the reunion of Korea on his terms was rapidly slipping away. He had already lost the

active support of the USSR and China. The South continues to grow stronger while the North becomes weaker and more isolated. Kim Il Sung decides to strike while there is still a chance for success. Although some U.S. forces remain, most have left. Most of the fighting will take place in the northern part of South Korea.

EUROPE

Civil war in the Soviet Union and Yugoslavia, along with a Kurdish rebellion in Turkey, have led NATO to a partial mobilization response. Forces ranging from guerillas to armored divisions are fighting each other and threatening neighboring nations. The U.S. is providing additional forces as a hedge. The GCC will initially be sent to Poland. The deployment to Europe is primarily a deterrence mission and to insure that we have forces readily available should anything serious threaten the overall stability of the area. The forces could be further deployed to any place in Central or Eastern Europe in a rapid response. Most NATO nations are not yet willing to use their forces "out of area." NATO and East European nations have volunteered to host the additional troops in this really tumultuous time.

LATIN AMERICA

This scenario involves a complex combination of forces

PAGES ARE MISSING IN ORIGINAL DOCUMENT

equal, in terms of firepower, mobility, and protection. (From this point on, the term armored/mechanized units will be used interchangeably with "heavy" forces. The term "light" forces will mean mountain, airborne, airmobile or regular infantry units.)

The number and type of troops available to the operational or tactical planner is normally a given. In this case, we are analyzing all of the other elements of METT-T to determine their impact on what type of troops should be available. An examination of allied or coalition forces will be made to determine their impact on the GCC. The options will be to strengthen or complement the existing coalition forces.

Terrain and weather are also important considerations. Armored and mechanized forces typically do not do well in restrictive terrain such as jungles, mountains, and heavily forested areas. Light infantry doesn't do well in open areas if opposed by more mobile or mechanized forces. The development of the area of operations (AO) with roads, airfields, communications systems, etc., i.e. infrastructure, can also impact on the type of forces. Even though most mechanized and armored forces can operate off-road, typically their support units need roads and airfields. Light forces are not so adversely affected by poor infrastructure.

Time is a critical element, specifically in the deployment phase. Civil War General Nathan Bedford Forrest's phrase the "fustest with the mostest" still counts for a lct in military operations. The force must arrive with the right mix of firepower, mobility, protection, and the ability to sustain that combat power or it doesn't mean much. The best approach to accomplish that is to determine the forces required for success and then determine how to get them there in time. There are some obvious constraints to this. We must plan to be successful, not just quick.

Although there are some general guidelines for force structure, judgment must always be applied. Forces must be tailored to a combination of the factors of METT-T. This is very difficult to do in a generic sense as the GCC can be used for almost anything, at any place, anytime. The application of METT-T to the scenarios will provide us significant insight into this area. Each area of METT-T will be isolated from the others to examine its impact on the required types of forces that we should provide.

A look at the misrion element of the 4 scenarios provides mixed signals. The mission in Israel or S. Korea could be performed by heavy or light forces. Mobility is not implied in the mission statement. The mission in Europe could also be accomplished by heavy or light forces.

However, it requires both operational and tactical mobility as a very important component. This means that mechanized/ armor or airmobile forces would be the best. The mission in El Salvador also can be accomplished by light or heavy forces. Again, mobility is implied to be able to move around the country. In addition, the forces in El Salvador will require extensive support for the non-combat part of their mission. Engineer, civil affairs, medical, and military police units are some of the specific type units required.

The enemy part of the analysis has much more impact on the composition of the GCC. In order to counter the threats in Israel and N. Korea, armored and mechanized forces are required. The NAL forces are almost 80% armored and mechanized. Israeli forces are completely armored and mechanized. Thus, this scenario clearly calls for a preponderence of armored/mechanized forces. In Korea, the North's assault troops are predominantly mechanized. The S. Koreans have plenty of regular infantry; they require additional heavy forces. The threat in Europe is widespread and ranges from irregulars to completely armored/mechanized units. This calls for highly mobile forces with anti-armor capability. These could be airmobile or mechanized/armored forces. The "enemy" in El Salvador can be countered by light infantry, with a mixture of mobility and some anti-armor capability. Since the guerillas move quickly, hit quickly, and disperse 13.

10

quickly, airmobile forces would be ideal. Regular infantry would be very useful in towns and cities. Mechanized infantry could also accomplish these tasks, although armored forces probably are not needed.

The terrain and infrastructure have a significant impact on the force structure required. The northern part of South Korea has a large coastal plain in the west where Seoul is located. The infrastructure in that area is well developed. The rice paddies are drained and frozen over in the winter, making them trafficable for heavy forces. The center of the peninsula is a rugged mountain range with little population or infrastructure. The critical part of the battle is projected to be on the eastern coastal plain which favors heavy forces. Israel is mostly wide open rolling terrain with some mountainous areas. The infrastructure will support any kind of forces. Armored/mechanized forces are clearly the choice for Israel. However, there are some mountainous areas where light infantry could be very effective against NAL forces. In Europe the open and rolling terrain generally favors armored/mechanized forces, and the infrastructure will support those forces. However, there are large stretches of forested mountains where light infantry would be useful. In El Salvador there are large areas of open terrain and restrictive jungle and mountain areas. A mixture of both heavy and light forces would be effective. The infrastructure will

support both types of forces. More robust combat service support (CSS) would be required in El Salvador and Eastern Europe.

The U.S. troops available (provided) in the GCC is the part that now must be determined. In all applicable cases, we must look at our coalition partners to see what type of forces they already have and what is yet needed. In Israel, their entire force is mechanized due to their own METT-T analysis. They need additional armored/mechanized forces. The South Koreans have 42 divisions of light infantry and only two mechanized divisions. In this case, the critical fight is in terrain best suited for heavy forces, and more light divisions will probably not have a great impact. In Europe, NATO has many heavy forces but most countries will not operate in the required areas. The French and British may send some stabilization forces. Both Poland and Hungary have armored and mechanized forces available to help contain the fighting. The U.S. forces deployed will be to show the flag and provide superpower commitment to containing the strife. Therefore, heavy or light forces could be used. In El Salvador, there are no friendly forces. Our role will be to remain neutral and treat all forces as potentially hostile until the fighting stops.

The time element is the most apparent and frequently

discussed when contingency forces are involved. The obvious requirement is to get there quickly. But how quickly is quickly enough? General Butler, until recently the Director of Strategic Plans on the Joint Staff, said:

"With respect to warning time, the most critical and elusive factor in operational planning, there are only two legitimate answers to the question of how much warning will be available in a given crisis. The short answer is, 'I don't know' and slightly longer is, 'It depends on how the crisis arises and unfolds.'" <u>10.</u>

Although there are many assumptions built into the scenarios, we must try to answer that question as best we can. The situation in Korea is critical. If Seoul falls (30 miles from border) it will be a major setback. It will cost us much more in the long run to get it back. Presumably the Koreans could hold out for a week or two but probably not much more than a month. The situation is paralleled in Israel. They are being approached from 3 directions and have lost some significant territory. The longer it takes for help to arrive, the greater the cost will eventually be. Two to four weeks would appear to be appropriate. In Europe we have more time. Closure within a month or two would probably be sufficient. In El Salvador we also have more time. However, the longer we wait, the worse the situation will be. Again, a month or two seems reasonable.

What is the synergism of all the elements combined? A

matrix of the results of the analysis shows each area's impact on the force structure we should provide:

	MIDEAST	ASIA	EUROPE	LATIN AMERICA	
MISSION:	Hvy/Lt	Hvy/Lt	Hvy/Lt (mobile)	Lt/Hvy	
ENEMY:	Нуу	Нvy	Hvy/Lt	Lt/Hvy (mobile)	
TERRAIN:	Ηνγ	Н∨у	Hvy/Lt (mobile)	Lt/Hvy (mobile)	
TROOPS AVAILABLE:	Нуу	Нуу	Hvy/Lt		
TIME:	Rapid Deployment (<30 days)		Normal Deployment (>30 days)		

SUMMARY:	Hvy	Hvy	Hvy/Lt	Lt/Hvy
			(mobile)	(mobile)
	Rapid De	ployment	Normal	Deployment

NOTE: Hvy = neavy forces, Lt = light forces. Mobile means that light forces are suitable but they must be mobile.

As the summary shows, we need a highly mobile force capable of defeating armored/mechanized heavy forces. A substantial part of the force should be heavy. A mixture of light and heavy forces is needed in several scenarios. The force must be deployable anywhere in the world within 30 days. Since the GCC will, more than likely, be involved in heavy fighting, it must be doctrinally correct (have all required combat, combat support, and combat service support units). The force should be self-sustaining (see next paragraph). Although in 3 of these scenarios, there would probably be

substantial host nation support to assist.

There is an alternate view of putting together a GCC. That is one based on capability. As we've seen in the past (and with these scenarios) it's very difficult to determine all of the different crises and environments for which a GCC would be employed. In fact, sometimes it becomes an option simply because of its capability. A capability statement would say that it is a Corps able to deploy with little or no notice to anyplace in the world within 30 days, conduct a forced entry, sustain itself, and fight any type of enemy for up to 60 days. Interestingly enough, the results will be about the same as the force developed by the scenarios, except that we now need a forced entry capability.

BEYOND METT-T

There are, of course, many other factors which impact on our GCC. They are not all apparent from the METT-T analysis but must be included in order to provide a more complete picture. These factors range from: which service is best able to perform the ground force contingency mission, to areas such as force design which impact on deployability to deployment options. The major factors and considerations are discussed below.

US MARINE_CORPS - The Marine Corps has an excellent contingency force capability. Some feel they should be delegated primary responsibility for contingency operations. Although this argument has pretty much been put to bed, it continues to muddy the water. The USMC and the Army are complementary, not competing, forces. The Marines are optimized for beach forced entry and operations near the coast. Their logistics are designed for that capability. The Maritime Prepositioned Ships (MPS), which have all the equipment and supplies for 3 Marine Expeditionary Brigades (MEBs), are great for a quick response. The Marines can put in up to 3 MEBs with extensive supporting air power anywhere in the world within 10 - 25 days. 11. These forces can sustain themselves for up to 30 days. Beyond this, they face almost the same problems as the Army in deploying forces. In the analysis at hand, the MEBs would be a good addition to both the Israeli and the Korean scenarios. There is also a Marine Expeditionary Force (Division size plus supporting aircraft) stationed on Okinawa which would be employed in Korea. However, any forces beyond these would be limited in their usefulness, due to their predominantly light force structure. They could provide only limited assistance in the European scenario, due to their light force structure and logistical considerations. They could accomplish a lot of the combat mission in El Salvador. However, they do not have the structure for civil affairs, psy-ops, extensive

construction, military police support, and other related tasks.

<u>ACTIVE/RESERVE_COMPONENTS</u> - The Desert Shield/Storm Operation surfaced this as a significant problem. In the 4 scenarios at hand, all preclude the use of RC combat forces based on the amount of time required for training. The brigades activated for the Persian Gulf prepared and trained for over 90 days to reach the required standards. The Korean and Israeli time frames would preclude the use of most combat support (CS) and CSS RC forces under our current laws and authorization capabilities. The European and follow-on missions in El Salvador could use RC forces in CS and CSS roles.

<u>REINFORCING_UNITS</u> - Both Europe and Korea have designated reinforcing units with pre-positioned equipment. Those units would be the forces of choice depending on their deployment times and on the number and type of RC units they had. In either case, 2 divisions are probably all that will be initially available. In the Korean scenario, additional heavy forces (over the designated reinforcing units) will be required. In Europe, additional mobile forces will be

PREPOSITIONED EQUIPMENT - The land-based prepositioned

equipment concept has a lot of merit for rapid response to crises. It can significantly reduce the time required to deploy, however, it also has some significant problems. Equipment is configured and located for a specific geographic threat. It is time consuming to draw and to ship someplace else. In some cases, there may be political problems associated with activating it and using it somewhere else. The maritime prepositioning concept overcomes a lot of these problems, and we should give this careful consideration. Α heavy division would require over 13 ships (based on USMC use of 13 ships for 3 Brigades). The equipment and necessary supplies are immediately available for worldwide deployment. Steaming time and staging area time would be added to the 10 days necessary to off-load and prepare equipment. Some of the drawbacks of prepositioned equipment are the costs for the additional equipment and for the maintenance of equipment and facilities.

MEDIUM FORCES - In every case, we must choose between light or heavy forces. In several of these scenarios, medium or motorized forces would seem to be the best choice. This is particularly true if part of the medium force had some protection and rapid-fire antitank capability. The new Lineof-Sight AntiTank (LOSAT) weapon mounted on a mobile chassis, may be an excellent candidate. All of the force needs to be mobile. Wheeled or tracked armored vehicles, capable of

covering long distances without transporters, would also be welcome additions. These forces would be ideal for the European and Salvadoran scenario. They would be an important <u>part</u> of the forces in the Korea and Israel scenarios.

<u>CAVALRY</u> - The normal roles of Cavalry must be performed in all of the scenarios. A Cavalry Regiment is a critical component of a corps for reconnaissance and security, as stated in the Army's operational guide, Field Manual 100-5. In all of the scenarios, this capability is badly needed. This force must be equipped, based on the overall configuration of the corps, to support both light and heavy forces.

<u>CORPS SUPPORT STRUCTURE</u> - The CS and CSS required to support and sustain a Corps are a critical part of its combat capability. The variability of the combat situations, infrastructure and available support from the host nations in the scenarios, require that the corps support structure be prepared for all environments. This means a force that is doctrinally correct (or close to it) to provide robust support. A GCC should be a force that can deploy anyplace in a short time frame and sustain itself as long as necessary.

MIX & MATCH - The various scenarios suggest that different types of force structure would be most suitable for each different contingency. For instance, 4 heavy divisions

and an airmobile division might be the best for the Korean scenario, while 2 light and 3 medium divisions might be the best for El Salvador. Perhaps it is possible to be able to select different units, in an ad-hoc manner, to be a part of the GCC based on the contingency. However, the planning, coordination, and preparation for units to be able to deploy anywhere on short notice is extensive. If not carefully monitored and controlled, it's possible to be always playing with a "pick-up ball team." It would seem preferable to have a designated corps with enough built-in flexibility to respond to different situations.

DEPLOYMENT ASSETS - The U.S. is critically short of strategic deployment assets. We currently have enough aircraft to airlift one light division to the Persian Gulf in several days, an airmobile division in a week, and a heavy division in 3 weeks. These figures do not include the corps support slice which will take aproximately the same amount of space and time as all the divisions combined. This is based on a 50% availability of the 127 C-5 and 270 C-141 aircraft and a 36-hour flight turnaround time to Southwest Asia (SWA). It is assumed that 20 - 30% would be undergoing maintenance or flying other critical missions, and the other 20 - 30% would be needed for Air Force asset deployment to the contingency. That is simply not enough strategic airlift. Twice that capacity is needed. Based on the shortage of

aircraft and the fact that the C-141s are approaching the end of their design life, we desperately need the new C-17. The C-17 will carry almost 3 times the cargo of a C-141, will hold all the outsize equipment and can land on unimproved runways. 12. We are no better off in sealift capability. We currently have 8 SL-7 fast sea lift ships (FSS). This is enough to deploy one heavy division at a time. It takes 14 -15 days transit time to SWA (8500 Nm). Added to that is the time to move to the Seaport of Embarkation and to load and unload. Typically it takes 1 - 2 days to load or off-load a Roll On-Roll Off (RO-RO) ship. If the unit was located near a port (within 2 days driving time), the whole process would take 20 days. Another 8 ships are needed to deploy the division's corps slice. Some consideration should be given to not-so-fast sealift since a trip to the Persian Gulf would take 25 days for a conventional ship steaming at 20 knots versus the 27 knots for FSS. We currently have 17 not-sofast RO-RO ships in the Ready Reserve Fleet (RRF). However, it takes 1 - 3 weeks to activate and crew them. 13.

CONCLUSIONS

Based on these scenarios and the additional considerations, there are several conclusions or judgments that can be developed:

The force structure of our GCC must be based on a combination of probable scenarios and desired capabilities.

Mechanized/armored units are the forces of choice in two of the scenarios (Israel and Korea) and would have applicability in the other two. Highly mobile forces are needed in Europe and El Salvador. Light forces have limited applicability in three of the scenarios (Israel, Korea, and Europe) and a critical role in El Salvador. Medium forces make a highly useful addition to the GCC structure. The contingencies that are potentially the most dangerous involve threat forces that are armored/ mechanized.

One month should be the goal that we program for a functioning corps on the ground. In two of the scenarios that was not critical, however, in the other two it could mean the difference between success or failure.

The USMC is a valuable partner in global contingencies providing rapid response within the 3 brigade (short notice) limit. They also provide forced-entry capability for the U.S. Army in suitable coastal areas. They are limited only by the relative lightness of their structure.

The GCC must be almost completely active component (AC) forces.

Prepositioned equipment could be used for the heavy forces in two scenarios. However, it's not completely adequate to counter threat forces from either scenario. Maritime prepositioned equipment and/or supplies should be given consideration for the GCC.

A full up cavalry regiment is needed to enable a GCC to perform effectively in all environments.

The CS and CSS should be robust, doctrinally correct, and include support for heavy units.

Fast sealift would be needed for the Mid-East, Korean and perhaps for the European scenario. Additional fast sea lift is required, if a month is the limit that we set.

RECOMMENDATIONS

The recommendations are based on the presented information. They reflect the intuitive feelings and judgments developed after looking at this topic for several

months. Thus, if I were "king" of the GCC force structure arena I would:

Maintain the 18th Corps as the GCC. They are geographically well positioned and very experienced in contingency operations. The 82d Airborne Division would be retained for rapid response to lesser contingencies and for its forced-entry capability. The 101st Airmobile Division would be retained for its unique mobility and firepower capabilities. The 10th Mountain Division would be replaced with a motorized or medium division for additional strategic and operational mobility, protection and firepower. A heavy division would be added to the 24th Division to be ready for all contingencies which require heavy forces. The Corps would be all active and have every unit required by doctrine. All GCC heavy units would be stationed near a seaport and airport. Sufficient supplies would be located in maritime prepositioned ships to provide for 60 days of sustainability for the corps. An additional 8 - 16 fast sea-lift ships would be procured to add to the existing 8 FSSs and 17 RO-RO RRF ships. This would insure simultaneous delivery of two heavy divisions anywhere in the world along with their corps support slice. The C-17 aircraft would continue to be a major priority. Enough additional aircraft would be purchased

to airlift a medium division to SWA, within a week.

This recommended structure would provide a global contingency corps structured to successfully execute the national military strategy any time and anywhere our vital interests are challenged. The existence of such a corps with the required strategic deployment assets, coupled with our recent victory in the Persian Gulf, would in itself be a deterrent to almost any potential adversary. It is time to re-examine and restructure our GCC to the changing realities of today and tomorrow.

APPENDIX 1

SCENARIO - MID-EAST

The Gulf Crisis was successfully dealt with in 1991. Iraq withdrew from Kuwait, its military force having less than 40% of its former strength. The U.S. and the U.N. followed up on their commitments to secure peace and stability in that region. Expectations were very high that, once and for all, the "Palestinian Question" would be resolved.

Many conferences were held, and the United States put a lot of pressure on Israel. Relations with Israel were strained to the breaking point, but resolution of this was important if President Bush's "New World Order" was to be achieved. The U.N. solution was the establishment of an independent Palestinian State in the occupied territories. The Arab states demanded that Israel deal with the PLO. After the PLO's support for Iraq and their past terrorism, that became more difficult.

The steady stream of Jewish immigrants from the Soviet Union and other Eastern Block countries was really alarming to the Arabs as it became apparent that Israel needed more and more area. Israel did agree to return the Gaza strip to

Egypt, but cited Jordan's popular support for Iraq as the reason not to return the West Bank. Jordan said that they didn't want it anyhow, that it should be turned over to the PLO. Israel replied that was not possible, and in any event, would not give up Jerusalem. After Egypt went on record as supporting the other Arab nations, Israel reneged on giving them the Gaza strip back.

Jordan, Syria, Egypt, Iraq, Libya and Lebanon combined to form the New Arab League (NAL). Iran pledged their support. After several years of fruitless negotiations, the NAL massed forces north and east of Israel. These forces remained there for many months, intensely training while negotiations went on. They had an excellent deception plan that caused Israel to mobilize twice. Suddenly, at Hanukkah time, they launched an attack. After the first week of fighting it was evident that their plan was to conquer Israel, if possible, with the minimum goal of recovering the occupied lands. The Palestinians living in Israel staged an uprising which required a lot of the Army to deal with it.

The Israelis initially asked for material aid from the U.S. but not any forces. This was changed after the NAL pushed the Israelis down to Tiberias and took Jerico. U.S. public sentiment was not very strong for support, since Israel refused to honor the U.N. sanctions. However, this

was changed after the NAL started showing real success. At the same time a sizeable force was conducting a crossing of the Suez Canal. Congress went on record authorizing the use of force. Although the U.S. had placed forces on alert, time was now of the essence. The GCC was ordered to deploy.

The METT-T information is shown below.

Mission: In coalition with Israeli forces, conduct defensive and offensive operations to restore the borders of Israel to their pre-war locations.

Enemy: <u>14.</u>

Country	<u>Army Size</u> a	<u>Div/Bde</u>	<u>Tanks</u>	<u>APCs</u> b	<u> Fighter Acft</u>
SYRIA	404 + 392	3 Arm 3 Mech/9 1 SF	4000	37 50	558
JORDAN	74 + 30	2 Arm 2 Mech/1	1131	1244	104
LEBANON	21	12 Bde	200	300	3
LIBYA	14 + 10	1 Arm	300	150	368
IRAQ	191 + 170	2 Arm/M 8 Inf 1 Arm-RG		1500	345
EGYPT	320 + 500	4 Arm/2 8 Mech/4 0 Inf/7		27 4 5	475
NAL TOT	1024 + 1102	15 Arm/2 13 Mech/1 8 Inf/19 1 SF	4	9689	1853

NOTES: a. Force size is shown in thousands with AC + RC. 31.

b. Includes both Armored Personnel Carriers (APCs) and Infantry Fighting Vehicles (IFVs).

Terrain and weather: The terrain in the north and east of Israel varies from a coastal plain, to green rolling hills with wide valleys, to some very difficult mountainous terrain with little to no vegetation. In general, it is very well suited for mechanized forces with some places favoring regular infantry forces. The infrastructure in this area is moderately well developed. The weather is very moderate with high temperatures ranging from 90 degrees in the summer to 45 degrees in the winter. Temperatures are slightly warmer in the Jordan Valley area. Most rains fall in the winter time and range from 40 inches in the north to 3 inches in the south. <u>15.</u>

Troops Available: 16.

Army Size a Div/Bde Tanks APCs b Eighter Acft ISRAEL 104 + 494 12 Arm 4288 5900 533 1 Mech/15

Time: Based on the scenario, which of course has many assumptions, reinforcements were needed "yesterday". It's probably safe to say that anything over 3 - 4 weeks for the entire force could lead to a total defeat.

APPENDIX 2

SCENARIO - ASIA

kim Il Sung recognized the growing strength of South Korea along with the political turmoil. With the fall of many communist regimes throughout the world, he recognized that North Korea's days were numbered. The South would continue to get stronger and stronger. His economy would have made it difficult to sustain the size of his force indefinitely. He had already lost many of his allies and their sources of support, supplies and spare parts. Neither China nor the Soviets could have been counted on for support. He knew that peaceful unification would have resulted in North Korea being converted into a capitalist state. He decided that he must either attack or be overcome by events. North Korea mounted a several year deception program with the aim of convincing the world that they were pursuing peaceful unification, lulling the South Koreans into complacency, instigating the maximum amount of turmoil in South Korea and getting the U.S. forces to pull out. All of this was accomplished by 1995 and the North Koreans launched a lightning attack right before Christmas. They knew that would be a tough time for the U.S. to respond. The South Koreans are able to hang on but are threatened with a breakthrough just from the sheer numbers. The President ordered forces deployed.

The METT-T information is shown below.

Mission: In coalition with the South Korean and other U.N. forces, conduct defensive and offensive operations to restore the boundaries of South Korea to the 38th parallel.

Enemy: <u>17.</u>

Army_Size a Units b Tanks APCs c_Fighter_Acft N.KOREA 1000 + 500 1 Arm XXX 3500 4200 716 5 Mech XXX 1 Inf XXX 8 CAT XXX 25 Inf Div 15 Arm Bde 30 Mtz Bde 26 Inf Div(Res)

NOTES: a. Force size is shown in thousands with AC + RC. b. XXX is a corps-size unit.

> c. Includes both Armored Personnel Carriers (APCs) and Infantry Fighting Vehicles (IFVs).

Terrain and Weather: The area of combat will be immediately south of the 38th parallel. In the most critical sector near Seoul, it is a coastal plain stretching from the Yellow Sea to a very rugged mountain range. The area around Seoul is extensively urbanized. The outlying areas are mostly rice paddies with some rolling hills. The central mountains are very steep with some forests. There is almost no population or roads in the majority of this mountainous region. Across the peninsula from Seoul is another very narrow coastal plain

٠

with little development. The infrastructure around Seoul is excellent and is almost non-existent in the mountains. In general, the coastal areas are most suitable for mechanized units with the mountains most suited for regular infantry. The climate is temperate. Summer highs are around 90 degrees while, in the winter the highs are around freezing. This area receives a moderate amount of precipitation with most occurring in the summer. <u>18</u>.

Troops Available: 19.

Army_Size a Div/Bde Tanks APCs b Fighter_Acft S.KOREA 650k+900 2 Mech 1550 2080 469 19 Inf/9 23 Inf(Res)

Time: As usual in a crisis situation, they should be there already. In this case a month would probably be too late as the capital city of Seoul is at risk. It is the governmental, economic and cultural center of the nation.

APPENDIX 3

SCENARIO - EUROPE

The situation in the Soviet Union continued to deteriorate and finally resulted in full-scale civil war. After a full year of fighting, things have only gotten worse and no one is in control of the country. The worst fighting is in Azerbaijan and Armenia next to Turkey and the Ukraine next to Poland. Although neither Poland nor Turkey is directly involved, they are both threatened by the fighting. It appears that it will spread into both of these countries. In addition, it appears that the Turkish Kurds will take advantage of the situation to fight for their own independence. At the same time Yugoslavia is fighting a bitter internal war. The situation is very uncertain, and all of Europe is braced for the worst. NATO has instituted a partial mobilization in response. NATO units are located in the vicinity of the NATO country borders. Poland asks NATO to send a representative force to its border to let the various Soviet factions know that they need to stay in the old boundaries. Turkey asks for the same help. NATO agrees to the Turkish request, but balks at sending forces out of sector. NATO has developed a rapid response force and sends that to Turkey. The President of Poland makes a personal plea to the U.S. for help. Although Poland has some forces,

they know that the Russians will not respect Polish sovereignty. His only hope is to get a power strong enough to deter the Soviets. President Bush honors his request and decides to deploy the GCC.

The METT-T information is shown below.

Mission: Deter potentially disruptive forces from threatening the peace and stability of NATO countries. Be prepared to deploy to any Central or Eastern European countries to contain the internal struggles of the Soviet Union or Yugoslavia to their boundaries.

Enemy: It's difficult to frame an enemy for this scenario. The "enemy" will be the instability resulting from the civil wars and vast numbers of refugees. Very powerful forces are fighting each other. The forces will vary from guerillas to mechanized or motorized. Sizes of units will vary from gangs to division size or smaller. Weapons will vary from low to high tech.

Terrain and Weather: The terrain in central and Eastern Europe varies greatly. However, in general, it is open and rolling with stretches of forested mountains. The infrastructure varies from excellent in central Europe to austere in eastern Poland. The climate in this area is temperate. Central Europe has moderately warm summers and mild, cool winters. Eastern Europe has warm to cool summers and cold

winters. Moderate precipitation occurs in both regions in all seasons. <u>20.</u>

Troops Available: NATO has 250,000 mostly mechanized forces stationed in the Central Region. However, they are not immediately available to deal with this situation.

Time: This is not a critical factor in this particular scenario. Volatility, uncertainty, complexity and ambiguity are predominant here. One to two months is probably available.

2

APPENDIX 4

SCENARIO - LATIN AMERICA

The negotiations between the insurgents (FMLN) and the government of El Salvador dragged on for several years. The U.N. finally gave up on a negotiated settlement. It became apparent to the insurgents that the government would never agree to power sharing or democracy. To do so would result in their loss of power, wealth and probable imprisonment for many officials and officers. The insurgents from El Salvador made a pact with the insurgents (URNG) of Guatemala. They would band together to defeat the Salvadoran government. As soon as the government was overthrown, they would throw the full support of El Salvador to victory in Guatemala. The combined weight of the two guerilla groups was enough to throw the Salvadoran military for a severe setback. However, the querillas did not have the combat power to defeat them. Instead, they focused on severe disruption of the government and the infrastructure. Although many "campesinos" did not approve of the FMLN, they did support their goals. More and more, they began to support the insurgents. The fighting, as always, was vicious and the nation was being destroyed in the process. Many efforts of the DAS and the U.N. have resulted in nothing. Resolutions were passed in both bodies authorizing the use of force to resolve the situation.

However, it is apparent that it would take some fighting to separate the combatants, re-establish peace and restore the civilian institutions. The U.S. is asked to go in under the U.N. flag. The request was initially declined because of the past animosities of U.S. intervention. However, when nobody else steps forward and all countries ask again, the President orders deployment of the GCC.

٧

S.

t

The METT-T information is shown below.

Mission: Restore the peace in El Salvador, disarm all parties, provide an interim government until elections can be completed. Assist in the restoration of essential services and infrastructure, with a follow-on of national assistance support.

Enemy: 21.

EL SAL.	<u>Army Size</u> a	<u>Div/Bde</u>	<u>Tanks</u>	<u>APCs</u> b	<u> Eighter Acft</u>
	2.5 c	Inf/6 Cav/1	5	96	32
FMLN URNG	7 1.5				
TOTAL:	69.9 + 4.5	Inf/6 Cav/1	5	96	32

NOTES: a. Force size is shown in thousands with AC + RC.

- b. Includes both Armored Personnel Carriers (APCs) and Infantry Fighting Vehicles (IFVs).
- c. National Police, Treasury Police, Civil Defense
 Forces. 40.

d. The total number of combatants is much higher, but unknown. Many of the guerilla supporters will not be hostile to U.S. forces.

Terrain and Weather: El Salvador is separated into 3 geographical regions: the coastal lowlands, the central plateau and the interior highlands. A rugged coastal range of mountains separates the lowlands from the central plateau. The lowlands extend about 10 - 20 miles inland and are primarily agricultural. The central highland is gently rolling and mostly farmland. The highlands are fairly rugged and thinly populated. The climate is tropical with average temperatures varying from 80 degrees F to 73 degrees F. Annual precipitation is high. During the rainy season, from May to October, it rains every afternoon. The infrastructure is moderately developed in the lowlands and central highlands and very sparse in the interior highlands. 22.

Time: Although time is always important, it is not critical to the success of the operation. One to two months for deployment is acceptable, however, the longer it takes the more difficult the mission will be.

ENDNOTES

1. George L. Butler, GEN, "Adjusting to Post Cold War Strategic Realities," <u>Parameters</u>, Spring 1991, p. 7.

2. "The Total Army at a Glance," <u>Army</u>, October 1987, insert chart.

٧

.

1

Ł

3. Butler, p. 2.

4. George Bush, <u>National Security Strategy of the</u> <u>United States</u>, pp. 23-24.

5. Carl E. Vuono, GEN, "The Strategic Value of Conventional Forces," <u>Parameters</u>, September 1990, p. 9.

6. Ibid.

7. Ibid.

8. These times are calculated based on the information from 4 sources: U.S. Army War College, Forces/Capabilities Handbook. Vol. I: Organizations, p 7-4; William J. Price, LTC, Strategic Mobility: Can We Get There in Time?, p. 9.; "USAF's Aircraft - How Many, How Old," Air Force, pp. 48-49.; and the Interview with Jonathan Kashkin, Director of Strategic Sealift Division, Chief of Naval Operations Office, Carlisle, 30 January 1991. There are 127 C-5 and 270 C-141 aircraft in the Air Force, both active and reserve. One-half of these were assumed to be available. The other half were tied up in maintenance, hauling Air Force units to the contingency or in other high priority missions. The flying turnaround time to SWA is approximately 36 hours. The required space for the units is: light division; 469 C-141 plane loads, airborne division; 766 C-141 and 24 C-5 plane loads, air assault division; 887 C-141 and 68 C-5 plane loads and armored division; 1027 C-141 and 486 C-5 plane loads. The 8 fast sea lift ships will carry 1 division. Load, steam, and unload time is approximately 3 weeks. The Corps supporting units take approximately the same space as all the divisions combined.

9. Many publications and newspapers were consulted. Some of the more major ones included: International Institute for Strategic Studies, <u>Strategic Survey 1989-1990</u>,; Sam Nunn, Sen., "A New Military Strategy," excerpts from speeches given on Senate floor 22 March - 20 April 1990.; and Paul Wolfowitz, "Regional Conflicts: New Thinking, Old Policy," <u>Parameters</u>, pp. 2-8.

10. Butler, pp. 7-8.

11. U.S. Army War College, p. 5-17. Ten to fifteen days steaming time was added since the 3 squadrons are dispersed throughout the world.

12. Same as note 8.

13. Kaskin

.

14. International Institute for Strategic Studies, <u>The</u> <u>Military Balance 1990 - 1991</u>, pp. 97 - 122.

15. "Israel," <u>World Book Encyclopedia</u>, 1984, Vol. 10, pp. 388 - 390.

16. International Institute for Strategic Studies, <u>The</u> <u>Military Balance 1989 - 1990</u>, pp. 106 - 108.

17. <u>Ibid</u>. pp. 166 - 167.

18. Willian E. Henthorne, "Korea," World Book Encyclopedia, 1984, Vol. 11, p. 292.

19. International Institute for Strategic Studies, <u>The</u> <u>Military Balance 1989 - 1990</u>, pp. 168 - 169.

20. "Europe," <u>World Book Encyclopedia</u>, 1984, Vol. 6., p. 306.

21. International Institute for Strategic Studies, <u>The</u> <u>Military Balance 1989 - 1990</u>, pp. 195 - 197.

22. Nathan A. Faverstock, "El Salvador," <u>World Book</u> <u>Encyclopedia</u>, 1984, Vol 6, p. 196.

BIBLIOGRAPHY

Bartlett, Henry C. "Approaches to Force Flanning." <u>Naval</u> <u>War College Review</u>, May-June 1985, pp. 37-48.

Bush, George. <u>National Security Strategy of the United</u> <u>States</u>. Washington: The White House, 1990.

Butler, George L., GEN. "Adjusting to Post-Cold War Strategic Realities." <u>Parameters</u>, Vol. XXI, No. 1, Spring 1991, pp. 2-9.

¥

.

2.

Henthorn, William E. "Korea." <u>World Book Encyclopedia.</u> Chicago: World Book Inc., 1984, Volume 11, p. 292.

Christ, George B. "A U.S. Military Strategy for a Changing World." <u>Strategic Review</u>, Winter 1990.

Haverstock, Nathan A. "El Salvador." <u>World Book</u> <u>Encyclopedia</u>, Chicago: World Book Inc., 1984, Volume 6, p. 196.

Herrly, Peter F. "Middleweight Forces and the Army's Deployability Dilemma." <u>Parameters</u>, Vol. XIX, No. 3, September 1989, pp. 46-60.

International Institute for Strategic Studies. <u>The Military</u> <u>Balance 1990-1991</u>. London: Brassey's, 1990.

International Institute for Strategic Studies. <u>Strategic</u> <u>Survey 1989-1990</u>. London: Brassey's, 1990.

Kaskin, Jonathan, Director. Chief of Naval Operations Office, Strategic Sealift Division. Interview. Carlisle Barracks: 30 January 1991.

Kruzel, Joseph, ed. <u>1989-1990 American Defense Annual</u>. Lexington: Lexington Books, 1989. Pp. 108-128: "Forces for Projecting U.S. Power," by Paul Gorman.

Lawrence, John T., II, LTC. <u>Intervention Forces: An</u> <u>American Necessity</u>? Student Essay. Carlisle Barracks: U.S. Army War College, 1986.

McCurdy, Dave, Rep. and Rowland, John G., Rep. <u>Conventional</u> <u>Combat Priorities: An Approach for the New Strategic Era</u>. Washington: Strategic Studies Institute, 1990. Nunn, Sam, Sen. "A New Military Strategy." Excerpts from speeches given on Senate floor 22 Mar - 20 April 1990. Reprinted in <u>USAWC Course 2, Vol 2. Selected Readings</u>, pp. 163-198.

Owens, Mackubin O. "Force Planning in an Era of Uncertainty." <u>Strategic Review</u>, Spring 1990, pp. 9-21.

У

j

t

Price, William J., LTC. <u>Strategic Mobility: Can We Get</u> <u>There in Time?</u> Study Project. Carlisle Barracks: U.S. Army War College, 1990.

Shaver, David E., COL. <u>Ground Forces Report for CNSS Summer</u> <u>Study (Draft)</u>. Carlisle Barracks: J'rategic Studies Institute, U.S. Army War College, 1990.

Shaver, David E., COL. <u>Justifying the Army</u>. Carlisle Barracks: Strategic Studies Institute, U.S. Army War College, 1990.

"The Total Army at a Glance," <u>Army</u>. October 1987, chart (insert).

U.S. Department of Defense. Joint Chiefs of Staff. <u>1990:</u> Joint Military Assessment. Washington: 1990.

"USAF's Aircraft - How Many, How Old." <u>Air Force</u>, Vol. 73, No. 5, May 1990, pp. 48-49.

Vouno, Carl E.,GEN. "The Strategic Value of Conventional Forces." <u>Parameters</u>, Vol. XX, No. 3, September 1990, pp. 2-10.

U.S. Army War College. <u>Forces/Capabilities Handbook</u>. Vol. I: <u>Organizations</u>. Carlisle Barracks: 1990.

Varis, Peter H., LTC. <u>A Strategic Mobility Imperative: Lots</u> <u>to Do</u>. Study Project. Carlisle Barracks: U.S. Army War College. 1990.

Wolfowitz, Paul. "Regional Conflicts: New Thinking, Old Policy." <u>Parameters</u>, Vol. XX, No. 1, March 1990, pp. 2-8.

World Book Encyclopedia. Chicago: World Book Inc., 1984. Vol. 6, p. 306: "Europe."

World Book Encyclopedia. Chicago: World Book Inc., 1984. Vol. 10, p. 388: "Israel."