STUDY PROJECT

MILITARY MOVEMENTS AND THE PRINCIPLES OF WAR

BY

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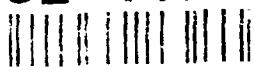

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Military Movements and the Principles of War

An Individual Study Project

by

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Abstract

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Military movements play critical roles at all three levels of war: tactical, operational, and strategic. This essay explores how the principles of war apply specifically to military movements in the rapidly changing global environment of the late twentieth century. Military movement is critical because it is a means by which ways are made effective to achieve ends. Military movement or the credible potential for movement, is essential for the application of each of the principles of war to any conceivable military situation, whether deterrence or combat. Maneuver superiority is essential to the success of future military operations. We must train and tailor our land, sea, and air forces to support our new National Security Strategy—especially in the execution of decisive military movements.

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Introduction

Military movements play critical roles at all three levels of war: tactical, operational, and strategic. This essay will explore how the principles of war apply specifically to military movements in the rapidly changing global environment of the late twentieth century. Whereas our defense doctrine must be soundly based on established principles, it must as well be adapted for successful application to current situations and likely contingencies.

During the current transition from a bi-polar world to a more indeterminate multi-polar situation, we are facing a great deal of uncertainty amidst unprecedented lethality. Secretary of Defense Cheney estimates that by the turn of the century some 15 nations will be able to build ballistic missiles—and as many as eight of them will probably have nuclear capabilities. Likewise, 30 countries will possess chemical weapons, and ten will be able to deploy them.[1] Political columnist Charles Krauthammer calls these nations the "Weapons States." He notes their hostility toward the West and their considerable inclination to use weapons of mass destruction.[2] Undoubtedly then we must prepare our defense along a much broader conflict spectrum than we have used during the past four decades of the standoff of the superpowers.

Despite the dramatically altered global situation, our military strategy, articulated by Secretary of the Army John O. Marsh, Jr., and General Carl E. Vuono, will continue to have the basic objective "to deter war, to control escalation in wars that do start, and to terminate such wars on terms favorable to the United States and our

allies."[3] To meet this objective, we must maintain a properly balanced force structure with declining resources in an uncertain security environment. Our new National Security Strategy, supported by the National Military Strategy and emerging Joint Doctrine, rests on four strategic concepts: nuclear deterrence, forward presence, crisis response, and reconstitution. It will produce a smaller, more flexible, regionally oriented Army based largely in the continental United States. Emerging doctrine must provide guidance to sustain the Army's operations from deployment through redeployment.[4] Movement of this Army (mobility) will be strategically decisive.

Historically, military movements have relied on several increasingly mechanical means: the boot, the hoof, the wheel or track, the fixed-wing aircraft, and the rotary-wing aircraft.[5] Further, frequently armies have been transported to these means aboard ships. To achieve a properly balanced force structure, we must plan for the proper balance of mobility to deliver our force at the right places and the right times, and to provide it with the proper mix of mobility assets for tactical success in any prospective area of operations. Maneuver superiority is essential to the success of future military operations. We must train and tailor our land, sea, and air forces to support our new National Security Strategy—especially in the execution of decisive military movements.

Challenges of the 1990s

As Operation Desert Shield/Desert Storm (ODS) has illustrated, our greatest challenge in the 1990s will be to react promptly and decisively to international contingencies. We can no longer deter aggression simply through containment and forward defense. Now we must be able to respond to crises anywhere, without much power projection in anticipation of a response or to discourage those conditions which might require a military response. The increasing unpredictability, volatility, and dispersion of the threat indeed suggest that we should anticipate more, rather than less, conflict in the near future.[6] Even so, we must attempt to limit such conflict as much as possible. Thus we can begin to specify the challenge:

—We must maintain our superpower status through careful, discretionary, coordinated use of all elements of national power: military, economic, informational, diplomatic, and socio-psychological.

—We must remain a major player in the United Nations, providing support and leadership in all of its initiatives to counter aggression and to deter conflict.

—We must develop coalition strategies to maintain regional stability throughout the world.

—We must sustain a healthy bilateral relationship with Russia; at the same time, we must acknowledge and support the long-repressed nationalist sentiments in the Balkan and Baltic states.

—We must anticipate altered relations with Iraq, especially in a post-Hussein era. We must as well anticipate future developments in the Middle East.

—We must contemplate relations with North Korea in a post-Kim Il Sung era, keeping in mind both its conventional and potential nuclear capabilities. Likewise, we must consider the implications of a unified Korea.

—We must continue to deal with China in its transition.

—We must continue to work toward the reduction of the proliferation of weapons of mass destruction.

—We must continue to define the role of space in terms of our national interest and as a possible means to foster global security and stability.

—We must continue to husband our declining defense resources.[7]

These challenges thus acknowledge regional instability, the increasing technological sophistication of armies outside Europe, and our inability to maintain forces in every potential global trouble spot. Such conditions undoubtedly place a greater premium on our capability to project combat power rapidly in response to crises and to sustain combat-ready forces from the continental United States or from increasingly scarce forward-deployment locations.[8] To support a crisis response, we must be capable of massing these forces on very short notice.

Around the globe threats to our interests are likely to increase as a result of regional rivalries, of competing goals of developing states, and of the growing proliferation of technologically advanced weapons. Even so, the forward-basing of U.S. forces—on which the U.S. has relied for quite some time—will decline considerably. Thus we must rely more heavily on sealift and airlift capabilities to deliver our armed forces to regional trouble spots.[9] And these forces

must be highly trained and unquestionably prepared for rapid force deployment. That is, U.S. strategy currently depends heavily on strategic mobility—the ability to move the right force to the right place at the right time.

In effect, then, strategic mobility is replacing forward deployment in our national strategy. Strategic mobility enables us to project our forces in rapid response to crises of global significance—that is, in response to crises whose outcomes could jeopardize global stability or could impact adversely on the interest of the U.S. and/or its allies. Neville Brown has noted the emerging need for "strong, strategically mobile, conventional forces," which he believes would enable us to "contain or deter diversionary or retaliatory probes at their inception with the appropriate amount of non-nuclear power."[10] Tactical mobility, on the other hand, should refer to our ability to deploy our forces inside the area of operations to which they have been projected.

Our officer corps should be trained to envision the concept of strategic mobility. They should both foresee and train for this kind of mobility. They should comprehend that strategic mobility is contingency-based; thus they cannot precisely anticipate what kind of force they would be tailored into, what kind of environment they might fight in, or what kinds of military objectives they might be called upon to pursue. Deputy Secretary of Defense William H. Taft has frequently noted former Secretary Weinberger's emphasis on our forces' ability to "move, shoot, and communicate," noting the priority—and primacy—of **move** in this triad of capabilities.[11] Whereas our younger leaders are highly trained in tactical

movements, they are relatively unexposed to the complexities and exigencies of strategic movement. It is time now that they receive such exposure and related training, expensive though it will be. However, such training could spell the difference between an imprudent drawdown of forces and a strategically sound reduction of forces.

ODS provides us with a ready, complex example of strategic mobility. It made unprecedented demands on the nation's strategic mobility triad—airlift, sealift, and prepositioning. More than 300,000 Army personnel deployed to the Area of Operation (AO) by air. More than 200,000 tons of Army equipment and supplies were shipped by air to Saudi Arabia.[12] For the first time in the 40-year history of the Civil Reserve Air Fleet (CRAF), civilian aircraft were activated to deploy personnel and equipment. Likewise, the Ready Reserve Force (RRF) was activated in early August 1990 to support sealift of supplies and equipment to the Persian Gulf. Approximately 200 ships transported 681 shiploads of unit equipment and sustainment supplies in support of ODS. They provided 85 percent of the dry cargo that arrived in the theater.[13] All of this movement of personnel, equipment, and supplies was facilitated by worldwide prepositioned war reserve materiel stocks (PWRMSs), which included prepositioning of material configured to unit sets (POMCUS). Theater reserves (TR) also played a key role in supporting our military forces in the Kuwaiti Theater of Operations (KTO).[14] Overall, ODS demonstrated our dependence on adequate, responsive sealift and airlift assets. But the lift capability in itself would have been

worthless if the necessary personnel, equipment, and supplies were not available for movement.

The intricacies of variables involved in large unit movements—time, space, and force size—are not easily understood. Jomini wrote presciently about logistics comprising "the means and arrangements which work out the plans of strategy and tactics."[15] But he could hardly have foreseen the complexity and magnitude of the strategic mobilization which indeed made ODS feasible. Likewise, General George S. Patton, Jr., is justly praised by military strategists and historians for anticipating the need to shift the Third U.S. Army's lines of operation in western Europe from the east to the north in the decisive winter operations of 1944. His foresight and command influence enabled him to move four divisions **across** the axis of advance to provide decisive assistance in countering the Germans' Ardennes offensive.[16] Even so, this brilliant action falls short of strategic movement, for the Third Army was already in the AO, had long maintained some contact with the enemy, and was generally caught up in the fluidity of the campaign. On the other hand, Allied preparations for the invasion of the European mainland involved strategic movement and provided the foundation for General Patton's stunning tactical movements.

Our current strategy establishes the imperative for our officer corps to envision strategic movement. They must, as in the example of General Patton, comprehend its relationship to tactical movement. If it is impracticable to practice strategic movement, then it should be simulated, with mid-level officers taking active parts in such simulations. Whereas young officers in the recent past routinely

experienced the circumstance of forward deployment and whereas they also routinely rehearsed operations in a predetermined AO, they cannot—because of the nature of the beast—so closely approximate in their training the actuality of strategic movement. Even so, they must closely comprehend that there is a great likelihood that their future deployment and mission accomplishment will be predicated upon strategic movement.

The Principles of War

The nine classic principles of war, principles used by the American military since World War I as tools for understanding the dynamics of war, offer a useful framework for analysis of military movements. The principles are not listed in any order of priority. Definitions have been taken verbatim from *Department of the Army Field Manual 100-5: Operations.*[17]

Objective

"Direct every military operation towards a clearly defined, decisive and attainable objective"

In peace or war, military leaders need to communicate a clear picture of the end state they want to create. Shared understanding of the common purpose and goals involved promotes teamwork and serves as a beacon to guide subordinate leaders through the fog of battle. Without specific objectives, initiative may be lost and decentralized operations become difficult to implement.

At the strategic level of war, the principle of the objective takes on a very special importance. Strategically, "the selection of objectives depends on political, military, and economic conditions, which vary in force and effect. The objective assigned military forces must be in consonance with the national objective."[18] Until national goals are clarified by civilian officials, no clear end state exists upon which military leaders can base their plans. Worse still, the populace has no focused direction or main effort. As Colonel Harry Summers,

USA, Retired, has pointed out, the entire U.S. military experience in Vietnam is a classic example of what can happen when there is no clearly stated national objective. The loss of focus on the Objective was particularly damaging, since this is the driving principle of war.[19] The principle of the objective poses the fundamental question: What are you trying to accomplish with the use of military force? Clausewitz clarified the importance of the objective and was one of his main contributions to understanding the nature of war. He emphasized that war was not waged for its own sake but was waged to obtain a particular aim—what he called the political object of war. He stated, "the political object is a goal, war is the means of reaching it, and means can never be considered in isolation from their purpose."[20]

In the Persian Gulf War the coalition's objective was clearly articulated—"the Iraqi invaders must withdraw from Kuwait, the legitimate government there must be restored, and regional peace and security must be secured."[21] The U.S. public strongly supported this objective, set forth by President Bush. For the first time since World War II, the American people were mobilized for war. President George Bush continually drove home the objectives of the war and made the decision for a large-scale call up of military reserve forces. As a result, the entire nation was involved in the war and that made the big difference of consolidating American public opinion.[22]

Application of the Objective is vital to effective strategic mobility. Appropriations critical to the national defense, to include strategic sea and airlift, will not be passed by Congress without public backing.

Without this lift available in time, military movements cannot occur in time to meet operational needs. Military leaders share a broad consensus on the need to maintain a strong deployment capability as an integral part of our national defense. As demonstrated during ODS, civilians, too, need to know and understand our strategic objective so the ability to move combat power anywhere in the world should continue to receive the attention and priority it deserves. In short, the American public supported the strategic movement of U.S. forces into the Persian Gulf. They comprehended and supported the objective of this movement. As reservists, many of them were part of the movement.

Command objectives cannot be obtained without successful movement. Commanders must put their transportation resources to work at the outset of a campaign. They must communicate "movement intent" to subordinates to guide tactical and operational planning. The way forces are arrayed during and after a move impacts on mission accomplishment.

Mass

"Concentrate combat power at the decisive place and time"

This principle embraces logistics and has played an influential role in every war the United States has fought. Nathan B. Forrest, a Confederate cavalry general in the American Civil War, epitomized this concept of battle with the statement, "Get there first with the

most men."[23] In World War II, through sheer quantities of U.S. soldiers and equipment, we turned the tide in our favor. Mass dictates that one should mass—that is bring the bulk of one's forces to bear—on the primary objective.[24] And implementing today's AirLand Battle doctrine of the 1980s with modern, fuel-guzzling machines makes us more supply dependent than ever before. Its increased tempo and emphasis on offensive operations consumed more supplies than the Active Defense doctrine it replaced. AirLand Battle is being replaced in the 1990s with AirLand Operations which may or may not mean the same level of supply demand but stresses anticipation.[25] During ODS, one of the logistic challenges was the movement and distribution of the estimated wartime fuel requirement of more than five million gallons of fuel per day.[26]

Having sufficient quantities of men and supplies meets one part of the challenge. Getting them to the critical point on the ground, placing them where they can achieve sufficient mass to make the decisive difference presents another equally important challenge. That critical point on the ground is where a numerically inferior force can achieve local superiority on the battlefield by concentrating men and equipment.

At whatever level, commanders require some kind of movement to concentrate their mass at their critical point. The task of concentrating combat power is not an easy one. Commanders have to move quickly to take advantage of fleeting opportunities. In high intensity conflicts, forces are not likely to be arrayed in any constant fashion. Forward lines of troops, if a line exists at all, will remain in a state of flux. Unit positions will continually change. Commanders will

have to select a point on the ground and decide that this is where the decisive fight will occur. They have to entertain the opponent while concentrating forces for the attack. Massed combat power must be short-lived; rapid dispersal is necessary to deny the enemy a lucrative target for conventional or nuclear fires.

Massing and dispersal depends on the expert management of movement. At the operational and strategic levels, senior leaders focus well into the future to accommodate the longer lead times required for large scale movements. When corps and army commanders dwell mostly on the close battle, so too will their staffs. Such short-term vision truly limits a commander's ability to mass combat power and constitutes mismanagement that has ripple effects.

There are other reasons, besides movement, for a leader to adapt a longer term vision of the battle. Because transportation assets are always in short supply, prior planning is necessary to intensively manage the limited available resources. Much has been written about our sea and airlift shortfalls. Any future war will have to be supported with the shipping assets on hand at the outset. Without good management of movement, strategic lift capability may be the Achilles heel our national defense.

For example, during ODS, while over 200 ships were used—a large portion of which were foreign flag vessels—the real problem was that ships loaded from 20 ports around the world were discharged at only two ports in the KTO.[27] Further, in Germany alone, it took 465 trains, 119 convoys and 312 barges to move the soldiers and their equipment to ports of embarkation, where 435 aircraft and 109

ships took them to Saudi Arabia.[28] A key word in how to Mass is the ability to react to rapidly changing circumstances—flexibility. The need for flexibility in both thought and action is very critical to the ability to Mass.

Maneuver

"Place the enemy in a position of disadvantage through the flexible application of combat power"

Maneuver calls for much more than tactical troop movements by combat units. The principle applies to the operational and strategic levels of war and includes combat support and combat service support units as facilitators of combat power. Operational-level planning translates strategic guidance into direction for subordinates. Operational level plans provide broad concepts for deployment, operations, and sustainment to achieve strategic objectives.[29] The physical movement of men and equipment is required to maneuver; such movement is especially applicable when taking or retaining terrain that offers a positional advantage over the enemy.

Operational maneuver is the disposition of forces to create a decisive impact on the conduct of a major operation or campaign. It involves simply positioning the needed forces and resources at the critical time and place.[30] Movement of men and equipment is critical during the battle and provides a way to exploit tactical opportunity. Tactics are affected by the loss of life and equipment from both sides; such losses, to a great degree, are the result of positional advantages or disadvantages gained or lost during the battle.

Commanders spend a great deal of thought and energy determining which soldiers need to be where and planning how to move them accordingly. We should all practice maneuver on a large scale.

The scope and complexity of movement and maneuver require joint and commonly combined operations at the operational level. Scale alone does not make maneuver operational. Rather, the basic purpose of creating operational advantage is the significance of maneuver.[31] Operational moves are more than large-scale tactical moves. Theater commanders must consider a wider range of variables—time, distance and force size take on new and greater significance. Hence transportation capabilities are of fundamental concern to theater commanders. The ability to maneuver is basic to any army, and the lateral shifting of forces on the battlefield in a timely fashion is often critical to the success of the campaign. It is the dynamic element of combat, the means of concentrating forces at the critical point to achieve the shock, momentum and dominance which enable smaller forces to defeat larger ones. At the operational level, maneuver is the means by which the commander sets the terms of battle, declines battle, or acts to take advantage of tactical actions.[32]

ODS has provided a graphic illustration of this point. The time and resources required to complete the deployment of forces and equipment underscored the critical role that strategic lift assets played in projecting our forces rapidly and in sufficient quantity to provide a credible conventional deterrent. Time delays required for strategic movement become key factors in strategy and planning. It took the U.S. six months to get sufficient forces into the theater to

conduct offensive operations, and many weeks to deploy even a credible defensive capability.[33]

At the operational level of war, the movement of large numbers of men, equipment and supplies over great distances epitomizes "flexible application of combat power." But maneuver of the combat arms is not practical or strategically effective unless all the rest of the Army can maneuver as well.

Strategic movement of U.S. military forces is the responsibility of the United States Transportation Command (USTRANSCOM) and its three Transportation Component Commands (TCCs): Military Traffic Management Command, Military Sealift Command and Military Airlift Command. How well these components coordinate their missions and use available assets has a broad and lasting impact on the deployment of military forces worldwide. How rapidly USTRANSCOM can project our country's military forces overseas directly impacts on the positional opportunities we will gain initially. Such concerns indicate that even at the highest levels of strategic thought, maneuver is critically important.

Offensive

"Seize, retain and exploit the initiative"

The principle of the offensive logically follows on to the principles of mass and maneuver. Indeed, the chief reason for moving forces and massing combat power is to keep the initiative and remain on the offensive. The offensive, which holds that the best way to win a

war is to carry the fight to the enemy, destroy his armed forces and thereby break his will to resist. Few armies have ever won a war by staying on the defensive, even though many successful armies have maintained a defensive posture awaiting such time as to maximize their offensive efforts. ODS further supports this point. There was not enough US armored or mechanized forces in place to defeat an Iraqi invasion of Saudi Arabia for some weeks after 2 August 1990. Author David Segal quotes one Marine officer as admitting that "if the Iraqis had attacked us anytime in August or September, they could have cleaned our clocks."[34] However, given enough time to build an offensive capability, the results of Desert Storm speak for themselves.

At the tactical level, the offensive actions generally call for deliberate movement to close with and destroy the enemy. As General Patton explained during one of his officers' calls, "We must be able to move around like a boxer. The faster we move the easier it will be to kill the enemy...When we are not moving, we are losing."[35]

At the operational and strategic levels, the principle requires intratheater and intertheater transportation networks. Without the ability to project and sustain combat power by movement, the military situation will deteriorate to the point where the initiative will inevitably be surrendered.

Several other concepts apply to the principle of the offensive. One is freedom of movement. Initiative and the freedom to move are almost synonymous. Commanders need to preserve both, thus they must constantly consider the use and maintenance of transportation assets as well as other logistical considerations. A further relevant

concept is momentum of the attack, which includes physical movement. Moves over long periods of time and great distances require comprehensive sustainment plans. If movements fail, so too does any momentum of the attack and prospects for pursuit operations. Transport operations are essential to assume and retain the offensive.

Surprise

"Strike the enemy at a time or place, or in a manner, for which he is unprepared"

This principle is normally but inaccurately associated with tactical surprise, which involves stealth and undetected movement of friendly forces into close proximity with the enemy. This is a proper use of the term, but surprise encompasses much more. Operational surprise involves the movement of large military organizations in such a manner that the enemy is unable to react by repositioning forces quickly enough. Whereas the reaction time for tactical surprise is seconds or minutes, the reaction time for operational surprise is hours or days.

Deception planning was critical to execution of Desert Storm. Initially, all forces were to remain to the east of Hafar al Batin, "postured toward Kuwait, to project a coalition intent to attack through the strongest Iraqi defenses."[36]

At the beginning of the air war, the two U.S. corps would make an extraordinary move to their attack positions: one corps moved 360 miles west while the other moved an average distance of 140 miles

to the west. The deception was a complete success in that the Iraqi army had no idea that the U.S. corps were poised on the flank of the Iraqi forces and ready to drive deep into Iraq.[37] This tactical surprise enabled the U.S. forces to achieve victory in less than 100 hours of combat.

Surprise is supposed to be a rarity at the strategic level of war. But three of America's last four wars began with a surprise attack—the December 1941 Japanese attack on Pearl Harbor, the June 1950 North Korean invasion of South Korea and the August 1990 Iraqi invasion of Kuwait.[38]

At the strategic level of war, the United States could be caught short with insufficient strategic lift to sustain a war at a distant point on the globe. It takes months to build ships and planes, but years to train crews. Their reaction time is significantly longer. Unless the United States takes action to improve its strategic lift capabilities, it will become increasingly vulnerable to surprise of the gravest proportions, and it will be unable to use surprise to its own advantage. By contrast, the ability to deploy huge forces both to and within a theater create opportunities to exploit surprise, and reinforce all three objective of our military forces—deterrence, control escalation, and end war on favorable terms. This was certainly the end result of the Iraqi attack on Kuwait.

Our country's strategic sealift has attracted attention in recent years because of its inadequacy to meet the needs of the armed forces. Deterioration of the U.S. merchant marine for the last 40 years could still lead to a national catastrophe.[39] Our deployment to Southwest Asia was dramatically successful, yet delays in activating

certain Ready Reserve Force ships, the poor state of maintenance of some vessels and the projected decline in our merchant marine underscore the immediacy of the need to expand sealift with additional ships and a substantially larger Ready Reserve Force.[40] Whatever sophisticated weapon systems and combat soldiers we do retain will do us no good unless we are able to transport them anywhere and sustain them there.

Security

"Never permit the enemy to acquire an unexpected advantage"

Security is more than the reciprocal of surprise; it is as well more than guards, patrols and screens. It encompasses espionage, subversion, strategic intelligence, observation and detection. But, most of all, it requires preparations and actions to thwart the enemy's plans before they can be fully implemented. That means a transportation capability that must be available to project forces on very short notice.

At the tactical level of war, speed provides a degree of security. General Erwin Rommel believed that fast-moving units are difficult to counter. Reaction to them is not easy unless the opposing force is agile and sits poised, ready to strike. He demonstrated at the Battle of El Gazala in North Africa that logistical units as well as combat forces can use speed to their advantage. During the battle, resupply convoys raced past the British to rescue the trapped *Afrika Korps*, which had been depleted of fuel and ammunition. The British

commander, General Auchinlick, violated the principle of security. He could not intervene quickly enough. So General Rommel continued eventually to capture Tobruk.[41]

Our nation has not provided sufficient strategic lift capabilities to handle the surge and sustainment requirements for a one-theater war at the operational and strategic levels. This fact concerns Defense Department planners. Most likely there will be only limited warning of a strategic requirement for the United States or her allies to act and no opportunity to spread out the movement of surge requirements over a period of time. Desert Storm gave us the opportunity to build up force and sustainment capability over a six month period. Future conflicts may not afford us that luxury. Nor can defense planners assume the Commander in Chief will immediately commit military forces at the first hint of trouble. The President may delay commitment of avoid provoking a fight or to await the development of public support, if not political consensus. In either case, the enemy acquires an advantage. In such a case, U.S. security will be violated before the first weapon has been fired.

Our strategic lift capability has to be sufficiently strong to respond quickly and appropriately in the face of adversity. We must be able to deploy enough men and equipment anywhere in time to make a difference in situations which may be as yet unforeseen. In effect, we have to structure a conventional second-strike capability. That's where we get security and quite possible what drives transportation requirements—which may be different.

Unity of Command

"For every objective, ensure unity of effort under one responsible commander"

One of the greatest leadership challenges for military officers is conducting unit movements. Regardless of the size of the organization involved, movements tests the soldier's discipline and reflects the leader's ability to command and control. Maintaining a unified effort is difficult when forces are spread over a large geographic area. While operations must be decentralized, all participants must share a single focus of concept.

Unity of command obtains unity of effort by the coordinated action of all forces toward a common goal. It is best achieved by vesting a single commander with the requisite authority.[42] The principle of unity of command poses the question of who will command the force. The reason for this principle is to facilitate attainment of the objective. While at the tactical level this is best achieved by vesting authority in a single commander, at the strategic level it involves political and military coordination.

No one individual can physically be everywhere at once. But a commander can achieve the equivalent of omnipresence if his intentions are understood and respected by all concerned. He becomes—in effect—the unit. This defines unity of command in it most pure and ideal form.

Successful movements require unity of command. Staff planners develop movement orders, but carrying out those orders is a function of command. Without command and control, the move is doomed to

fail, regardless of how well the movement order is written. Movements personnel can assist the commander by serving as his eyes and ears; in exceptional circumstances they may act on the leader's behalf. But movement specialists and staff officers cannot replace the discipline that only commanders can instill in soldiers.

As the Department of Defense single administrator for traffic management and common-user ocean terminals, the Military Traffic Management Command (MTMC) played a key role in projecting U.S. fighting forces into the Persian Gulf area. In ODS, "MTMC validated its command motto, Getting Combat Power to Its Place of Business."[43] Without a unity of command effort in planning and executing military movements, we risk not being able to mass the right force mix at the right time in the AOs.

Throughout the 1980s, we learned to plan movement operations that can be supported, rather than movement operations that have to be supported. The success of ODS is proof of that fundamental shift in planning focus.

Simplicity

"Prepare clear, uncomplicated plans and clear, concise orders to ensure thorough understanding"

The task imposed by the principle of simplicity is to take the difficult and translate it into simple terms. To a large degree this principle of war is the sum of all of the others. Clausewitz remarked, "Everything about war is very simple, but the simplest thing is difficult."[44]

Unit movements are inherently difficult, regardless how simple they seem at the outset. A complicated movement plan adds to the difficulties; unworkable situations can result. Simplicity should be a guiding principle of movement at all levels of command.

Movement specialists face command and control challenges when planning or conducting movement operations. Complications arise in getting railcars, airplanes, ships, boats and barges to the railheads, airports, seaports and inland waterway terminals on time. ODS revealed that USTRANSCOM's centralized traffic management is the most effective and flexible method to combine airlift, sealift and ground movements. Key to the effective use of strategic lift assets was the ability to direct and control them. ODS was the first major military operation in U.S. history where transportation was directed by one central headquarters.[45]

In order for movement orders to be carried out, changes should be minimized to avoid confusion. Finally, the ability to move increases the number of options open to a commander. Part of the selection criteria for a course of action should be the feasibility of movements. A simple plan from the fighters' standpoint may involve a not-so-simple unit move. Yet an appreciation of all the challenges involved helps to minimize surprises and confusion later.

Economy of Force

"Allocate minimum essential combat power to secondary efforts"

Economy of force results from implementation of the principle of mass. These two principles of war are reciprocal: Mass dictates that one should mass—that is bring the bulk of one's forces to bear—on the primary objective and use an Economy of Force against secondary objectives. [46] It is the fundamental principle from which other principles are derived. The process of concentrating men and equipment in one geographic area mandates that forces be relocated from other areas. No matter how temporary the move, such withdrawals create vulnerabilities which, if discovered by the enemy can be exploited.

Mobility is integral to all military organizations regardless if the unit has a move mission or not. But the resources and assets are simply not available to provide all units with the same movement capability. An organization's mobility requirement is dependent upon the functions to be performed and the time-distance factor inherent to accomplish these functions.[47] Economy of force depends on movement. The smaller the force in proportion to its areas of responsibility, the more critical movement capability becomes.

During ODS, for the first time since World War II, the United States was able to mass forces in the AO and use an economy of force in other secondary AOs. This was due to the fact that no longer was there the need to devote the majority of its assets and attention to guard against the Soviet threat.[48]

At all levels of war, commanders capitalize on the capability of units to move in an organized fashion with little prior notification. That deployment capability is a combat multiplier—it provides the flexibility to take uncommitted combat power anywhere in the world and apply it where it will do the most good. Such an efficient approach to using available assets can make the decisive difference in combat. But is requires adequate transport capability.

At the strategic level of war, our nation is using an economy-of-force approach to our nation's air and sealift. The "secondary effort" has been the strategic lift program itself. This is reflected in Military Airlift Command's share of the total Air Force budget and Military Sealift Command's portion of the Navy budget.

Shortfalls in strategic lift, which, in turn, deny our ability to practice economy-of-force, can only be resolved by a continued investment in modernization programs which correct mobility shortfalls. We cannot effectively practice economy-of-force as things now stand.

Defense expenditures and priorities will continue as subjects of debate. Further economy of force measures will surely be adopted in the future. The critical task for Congress, the Defense Department and military services is to determine where the most important priorities lie and then to fund them accordingly. To date, strategic lift has not been at the top of the list. But at least it is now becoming a more hotly contested issue. Without strategic lift, we cannot practice economy-of-force and maintain security at the same time.

Conclusion

Napoleon wrote that "aptitude for war is aptitude for movement."[49] The statement is as true now as it was in the 18th Century. Perhaps it is even more applicable today, because a faster tempo of battle results from modern transportation technology and weapon systems. But the basic relationship of unit moves to the principles of war remains the same, whether horses or jet airplanes are the primary means of transport.

Movement, or the credible potential for movement, is essential for the application of each of the principles of war to any conceivable military situation, whether deterrence or combat. Therefore, all commanders must be movement experts, and they should demonstrate their skills. The larger the unit, the more the commander must use his logistics staff to effect his will. So, to be prepared to meet any conceivable military situation, every commander must have a well-honed movement capability. In order to ensure that, he must exercise his movement staff and move his unit regularly. As a matter of military and national policy, we must allocate sufficient resources to make that possible. Doing so will require changes in our ways of doing business.

All professional military officers need to be well versed in the importance and mechanics of military movements. It is too important a task to be left—often—to any particular group of specialists. Movement is a command responsibility. Direct involvement by all commanders is required for plans to be successfully executed. At the highest level of command, national policy must provide adequate

resources to make possible the successful execution of whatever movements become necessary.

We can only master movement skills at the command and staff level through practice in the field. The command and control challenges are considerable. Battalion, brigade, and division commanders' personal interest in movement will immediately impact on the quality of execution. Command attention catches everyone's attention.

But commanders do have access to skilled assistants to help them with their movement responsibilities. Theater commanders have staffs, such as the Theater Army Movement Control Agency, which maintain a future focus and make allowances for transport shortages. Tactical commanders have staffs with a similar charter. Movement control centers, division transportation officers and movement control specialists plan ahead to act in accordance with command priorities. They help preserve the commander's ability to mass combat power whenever and wherever he chooses. *Field Manual 100-5* applies in the field or garrison, during peace and war.

Military movements play a greater role at the operational and strategic levels of war. Movement specialists participate in the deliberate planning and crisis action processes that take place at unified and specified commands and on joint and combined staffs. The transportation challenge lies at the heart of the Joint Operational Planning System. Total movement requirements for a theater have to be identified, translated into measurable logistic terms, simulated and analyzed. These steps are required to determine whether an

operations plan is feasible from a movements perspective.[50] Such feasibility analysis is the honest broker for theater operational plans.

The United States Transportation Command, or USTRANSCOM, was established in 1987 to correct the systemic deficiencies that existed within and between the Transportation Component Commands. It handles strategic mobility planning and execution for all unified and specified commands in the military.

Almost without exception, application of the principles of war requires movement. The more scarce the combat assets, the more critical movement becomes. It is vital that, especially as our combat assets are reduced, our ability to move them be proportionately enhanced. The nation should provide those movement assets. Every military officer must learn to use them effectively.

This paper has examined the role movement plays in applying the principles of war at each of the three levels of war. Military movement is critical at all levels, because it is a means by which ways are made effective to achieve ends. Military movement specialists play a significant part in the movement planning and execution process. But their role is second only to, and in support of, tactical, operational and strategic commanders. Appropriately, commanders are the military's principal movers. They will succeed in integrating movement into our national strategy to the degree that they have the means to use maneuver and that they have the personal commitment to use the "dynamic principle" as a means of using other principles effectively.

Notes

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