

FD-302 (Rev. 11-27-70)

COMMAND AND CONTROL: OPERATIONAL PERSPECTIVES FOR THE
AIRLAND BATTLEFIELD(U) ARMY WAR COLL CARLISLE BARRACKS
PA J C RILEY 23 MAR 87

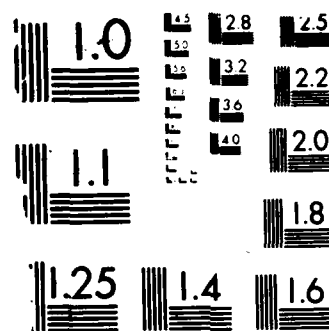
1/1

UNCLASSIFIED

F/G 15/6

NL

FNI
8-87
DTIC



MICROCOPY RESOLUTION TEST CHART

U.S. GOVERNMENT PRINTING OFFICE: 1963 O - 348-094

AD-A102 000

STUDENT ESSAY

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.

DTIC
ELECT

AUG 03 1987

C&D

COMMAND AND CONTROL:
OPERATIONAL PERSPECTIVES FOR THE AIRLAND BATTLEFIELD

BY

LIEUTENANT COLONEL JAMES C. RILEY

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

23 MARCH 1987



US ARMY WAR COLLEGE, CARLISLE BARRACKS, PENNSYLVANIA

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM	
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER	
4. TITLE (and Subtitle) Command and Control: Operational Perspectives for the AirLand Battlefield		5. TYPE OF REPORT & PERIOD COVERED Individual Essay	
7. AUTHOR(s) LTC James C. Riley		6. PERFORMING ORG. REPORT NUMBER	
9. PERFORMING ORGANIZATION NAME AND ADDRESS US Army War College Carlisle Barracks, PA 17013		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS	
11. CONTROLLING OFFICE NAME AND ADDRESS Same		12. REPORT DATE 23 March 1987	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		13. NUMBER OF PAGES 60	
		15. SECURITY CLASS. (of this report) Unclassified	
		15a. DECLASSIFICATION DOWNGRADING SCHEDULE	
16. DISTRIBUTION STATEMENT (of this Report) DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.			
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)			
18. SUPPLEMENTARY NOTES			
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)			
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Since the earliest wars, command and control have been an essential battlefield ingredient. Several contemporary command systems (The German Mission Oriented Command and Control, the Israeli Optional Control, the Soviet Scientific Control and the basis for US command and control doctrine as outlined in FM 100-5, Operations) provide a background for discussing command and control problems encountered by the US, British, and German Armies in North Africa during WWII and by the Israelis and the Egyptians in the Sinai during the 1973 Arab-Israeli War. A review of these campaigns and an assessment of current (over)			

Item 20, Abstract (continued)

technological potential (as well as liabilities) leads to the conclusion that the US Army is on the right course as it develops a command system to exploit the weaknesses of the chief adversary and complement the capabilities of the army's operational doctrine. Several philosophical and structural issues and the personal role of the senior commander require emphasis as the US Army command system continues to evolve. A single comprehensive document is needed to describe this system and, most of all, the basic philosophy needs to permeate the entire army structure so that we can, as General Patton said, "practice those things in peacetime that we intend to do in war."

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.

COMMAND AND CONTROL:
Operational Perspectives for the AirLand Battlefield

An Individual Essay

by

Lieutenant Colonel James C. Riley (Author)

Colonel Harold W. Nelson, FA
Project Adviser

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

US Army War College
Carlisle Barracks, Pennsylvania 17013
23 March 1987

ABSTRACT

AUTHOR: James C. Riley, LTC, IN

TITLE: Command and Control; Operational Perspectives for the AirLand Battlefield

FORMAT: Individual Essay

DATE: 23 March 1987 PAGES: 50 CLASSIFICATION: Unc.

Since the earliest wars, command and control has been an essential battlefield ingredient. Several contemporary command systems (The German Mission Oriented Command and Control, the Israeli Optional Control, the Soviet Scientific Control, and the basis for US command and control doctrine as outlined in FM 100-5, Operations) provide a background for discussing command and control problems encountered by the US, British, and German Armies in North Africa during WW II and by the Israelis and the Egyptians in the Sinai during the 1973 Arab-Israeli War. A review of these campaigns and an assessment of current technological potential (as well as liabilities) leads to the conclusion that the US Army is on the right course as it develops a command system to exploit the weaknesses of the chief adversary and complement the capabilities of the army's operational doctrine. Several philosophical and structural issues and the personal role of the senior commander require emphasis as the US Army command system continues to evolve. A single comprehensive document is needed to describe this system and, most of all, the basic philosophy needs to permeate the entire army structure so that we can, as General Patton said, "practice those things in peacetime that we intend to do in war."

ii

Accession For	
NTIS CRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution /	
Availability Codes	
Dist	Avail and/or Spec
A-1	



COMMAND AND CONTROL:
Operational Perspectives for the AirLand Battlefield

Command and control is the exercise of authority and direction by a commander over assigned forces in the accomplishment of the mission. (JCS Pub 1)

Common to all operations--close, deep, and rear--is the necessity for superior command and control. (FM 100-5)

With the evolution of AirLand Battle doctrine has come the visualization of a battlefield characterized by initiative, agility, depth and synchronization. There has been renewed interest in what has been termed the operational level of war: the planning and execution of campaigns and major operations to attain strategic goals. And we now anticipate a requirement to fight close, deep and rear operations simultaneously throughout the depth of the battlefield.

Wide ranging questions arise concerning how such operations can most effectively be controlled and a number of different "command systems" are

currently in use. Four are briefly described below. They have similarities and they have differences but they all aim at producing some sort of ordered outcome from the chaos of war:

THE GERMAN SYSTEM: Mission Oriented Command and Control. The current version of auftragstaktik is described as a command and control procedure whereby the subordinate is given extensive latitude, within the framework of the intention of the individual giving the order. The missions are to include only those restraints which are indispensable for being able to interact with others, and it must be possible to accomplish them by making use of the subordinate's forces, resources, and the authority delegated to him. Mission-oriented command and control requires uniformity in the way of thinking, sound judgement and initiative at all levels.¹

THE ISRAELI SYSTEM: Optional Control. The Israeli Defense Force (IDF) believes that a proper command system should establish the mission, work to accomplish it with a clear understanding that things will always go wrong, and that when they do

go wrong the system will be able to overcome whatever obstacles arise. When given a choice of either planning everything in advance and then executing, or laying down general objectives and executing immediately, filling in details as progress is made, the Israelis usually choose the latter.² Optional Control is based on the assumption that the fluid setting of the modern maneuver battlefield moves so rapidly that tactical intelligence becomes obsolete very quickly and that opportunities are fleeting, dangers are sudden, command decisions must be prompt and there is no room for a centralized structure. Subordinate commanders are given a mission, very few constraints and the power of immediate decision without consultation with higher headquarters. Great stress, however is placed on situation reporting and a mechanism known as a "telescope" (an informal communications system operated by representatives from higher headquarters who follow and report on the activities of subordinate units) is often used to ease the burden on subordinate commanders and to enable higher commanders to follow the battle and

make informed decisions concerning when to exercise their right of "optional control." The main advantage of optional control is that the fog of war is not only taken into account but actually treated as a protagonist of the battle. Officers are taught that neat battle plans will invariably break down, that the enemy will behave unpredictably and that their job is to impose their will on the confusion of the battle.³ Innovation during execution, discipline, and improvisation are the three basic elements that make up the IDF command system.

THE SOVIET SYSTEM: Scientific Command. While Soviet leaders have recognized that inertia can result from a rigid, highly centralized command system, they continue to believe that war is governed by specific rules (norms) with regard to frontages, depths, weapons densities, relative force ratios, time-tables, etc. This scientific approach to the nature of combat has led to the development of "school solutions" for most combat situations. In other words, war is governed by laws expressing its unique nature, and military

success results from proper application of these laws. Violation of these laws leads to failure.⁴ This notion is coupled to three others that are equally fundamental to Soviet command and control doctrine: First is the principle of one-man command which says that the commander is solely and personally responsible for accomplishment of his mission. Next is the concept of centralization of control which means that the commander unites the actions of subordinate units under a detailed, centralized plan that describes not only what to do but, in many cases, the specific methods for carrying out these missions.⁵ And finally, there is a demand for strict adherence to regulations and precise execution of orders. In the Soviet Army, regulations are much more than just a guide. The Soviet command system therefore, uses a rational, highly structured and centralized approach to planning and executing combat operations. Initiative is encouraged only in the sense that it relates to determination and perseverance, not imagination and creativity.

THE U.S. ARMY SYSTEM: General Donn Starry has said that the commander has to find out what is

going on, decide what to do about it, tell somebody what to do, keep track of how the battle is going and that he needs to do the entire cycle consistently quicker than his enemy.

The command and control system which supports the execution of AirLand Battle doctrine is one that facilitates freedom to operate, delegation of authority, and personal leadership from critical points on the battlefield. Ideally, initial plans establish the commander's intent and concept of operations...they will however, leave the greatest possible freedom to subordinate leaders. Plans must therefore be flexible enough to permit variation by subordinates in pursuit of the commander's goals. Subordinate leaders should receive their orders face-to-face from their commanders on the ground chosen for the operation and commanders should restrict the operations of their subordinates as little as necessary. Mission orders that specify what must be done without prescribing how it must be done will be used in most cases.⁶ The U.S. system then borrows heavily from the German Auftragstaktik and emphasizes subordinate freedom of action much as the Israeli

system does. It does not, however, place the same specific emphasis on using innovation and improvisation to turn the fog of war into a protagonist of the battle. Where the senior Israeli commander assumes control only when necessary to make major changes, the U.S. and German commanders routinely retain general control over subordinate units, and the Soviet will keep tight control until the battle forces him to do otherwise.

With these brief descriptions provided as a background, the purpose of this paper is to examine systems used for the Command and Control of major operations or campaigns. Discussion will focus on structure (the organization for command and control), philosophy (centralization and decentralization), and the personal role of the commander himself. History, current doctrine and the implications of technology will be used to support several conclusions.

Two historical examples (U.S. operations in North Africa leading to the battles at Kasserine in 1943, and actions by the Israeli Southern

Command in the Sinai in 1973) have been selected to draw lessons that might be as applicable to combat today or tomorrow as they were when they occurred.

While many historical reviews are presented as glowing examples, a different approach will be used here as the two selected for discussion are most notable for their avoidable problems:

NORTH AFRICA

In November 1942 a combined force of British and Americans, under the overall command of Gen. Dwight Eisenhower, invaded North Africa with the intent of defeating Field Marshal Kesselring's combined German and Italian armies which were then operating in Tunisia.

Although there were other Allied forces involved, this discussion will focus primarily on battles fought by the British 1st Corps, commanded by LTG Kan Anderson, and the II US Corps, commanded by MG Fredendall.

On the Axis side were Field Marshal Erwin Rommel, commander of the Afrika Korps Detachment and the Centauro Division, and Generaloberst

Juergen von Arnim, commander of the Fifth Panzer Army. Both were subordinate to the Italian chain of command. Field Marshal Kesselring, who was the senior German officer in Italy and North Africa, maintained his headquarters in Rome and exercised administrative control over all German troops in the area. He therefore, acted as a de facto army group commander and attempted to coordinate the actions of Rommel and Arnim, yet was required to obtain approval from the Italian high command prior to issuing orders.

MG Fredendall commanded the II U.S. Corps during the invasion at Oran. His units performed superbly, seized their objectives in less than three days, and were the only Allied units to win a decision by force of arms during the invasion. Fredendall, who remained in his command post aboard ship throughout the invasion, gained a reputation as a forceful commander.⁷ Upon moving ashore Fredendall established his headquarters in the Grand Hotel, the best in Oran, and established "blouses and pinks" as the staff uniform.⁸

On 10 November the 1st British Corps began their move from Algeria toward Tunisia and on 15

November all French forces in NW Africa joined the Allies in their march against Axis forces.

The capitulation of the French resulted in a vague oral agreement between Eisenhower and the French General Giraud; all troops in northern Tunisia, mostly British, some French and a few Americans, would fight under British command; those in the south, mostly French, some Americans, and a few British would fight under the French. Eisenhower himself would exercise direct command of the combined forces fighting in Tunisia from his headquarters in Algeria, some 400 miles from the front.

As contact was made with the Germans in Tunisia on 17 November and Fredendall's II U.S. Corps was inserted into the command structure, it became obvious that the previous arrangements were inadequate. Eisenhower was faced with questions concerning who would command the British division now in II Corps' sector; to whom would the French General Juin, who would also be involved in the fight in northern Tunisia, report; and how would he execute timely and effective direction from Algeria. To establish closer supervision and to

give the senior French general on the northern front (Juin) a firmer position in the Allied command structure, Eisenhower established a forward command post at Constantine (still 200 miles from the front) and dispatched MG Lucien Truscott, as his deputy chief of staff, to be his representative for operations in Tunisia. Highly competent but quite junior, Truscott was to "coordinate" the activities of the three national forces.⁹

During the period 25 December 1942 through 15 February 1943 Arnim and his Fifth Panzer Army executed a series of successful attacks to seize key passes (Pinchon, Fondouk, Faïd, and Sidi bou Zid) that served to block and restrict movement by allied forces. During one of these battles, elements of the 1st U.S. Armored Division under MG Orlando Ward were soundly defeated while counterattacking at Sidi bou Zid. During another, the 1st Armored was forced to retire from Sbeitla in the face of pressure from Arnim's forces. Additionally, during the battle for Faïd, Eisenhower ordered Fredendall to send a suitable force to help the French (Juin) to stabilize the

front. Instead of passing the order to MG Ward, Commander 1st Armored Division, Fredendall bypassed him and telephoned directly to BG Robinette, Commander, Combat Command B, 1st Armored Division. He detached Robinett from 1st Armored and told him to report to Corps Headquarters. During the week of combat that followed, Robinett was "unable to determine whether he was under the command of Eisenhower, Anderson, Fredendall, Truscott, or Juin, all of whom made their presence, weight and superior rank felt."¹⁰ The 1st Armored Division's lack of success and the Corps commander's obvious lack of confidence in MG Ward was to have a significant impact on command and control procedures during future battles.

By 17 February Rommel had moved to Arnim's flank and attempted to gain his support for a cooperative envelopment that would have potential for throwing allied forces entirely out of Tunisia. At 1430 hours 18 February Rommel, having received no cooperation from Arnim (who has been described as surly, ambitious and uncooperative), sent the following message to Kesselring in Rome:

"On the basis of the enemy situation today, I propose an immediate enveloping thrust from the southwest on Tebessa and the area to the north of it, provided the Fifth Panzer Army's supply situation is adequate. This offensive must be executed with strong forces. I therefore request that 10th Panzer and 21st Panzer Divisions be assigned to me...immediately."¹¹ His objective was to make a wide sweep around the Allied flank toward a town called Bone in order to encircle Allied reserves, disrupt lines of communications and ultimately to force the Allies out of Tunisia. During the afternoon Kesselring phoned Rommel to say that he liked his proposal and would take it directly to the Italian high command. Nine hours after his request, Rommel got what he thought was an ambiguous response, approving the additional two divisions and directing a "decisive attack" through Kasserine to Le Kef, seventy miles to the north, while Arnim executed a holding attack. To Rommel this was a very limited objective attack, which rejected his notion of a wide encirclement deep into Allied territory, and held no potential for encircling Allied reserves

or cutting their lines of communication--essential preconditions for success. The Italian high command appeared to favor a quick tactical gain over the possibility of a major operational victory.

Disgruntled, Rommel launched the attack as directed by the Italian high command. Kesselring, however, continued to believe that Rommel would execute the wide circling movement they had discussed, and it was not until the attack was well underway that he learned that the wording of the message had failed to make his intent clear.¹²

Fredendall, at this time was occupying a command post 60-70 miles from the front, far up a canyon, with underground shelters. It is reported that it required 200 engineers nearly three weeks to construct it and that Fredendall rarely left his C.P.. Nevertheless, Fredendall essentially took command of the 1st Armored Division, located in Kasserine Pass. His instructions to Ward were very detailed/restrictive and his meticulous placement of Ward's units froze the defense: there was no way to react quickly. When the Germans attacked, Fredendall said "hold-tight".¹³

Rommel attacked from 19 through 22 February and, as the attack gathered momentum, it became apparent to Eisenhower that his command structure had grown shakey. In order to facilitate quicker reaction, Eisenhower appointed Anderson his "advisor" for the entire Tunisian front.

During the battle Fredendall routinely bypassed Ward and gave orders directly to Robinett and BG Stark, another of the commanders in 1st Armored Division. II Corps Headquarters moved mid-battle while Fredendall was gone and control was lost completely. BG Robinett, who visited the Corps CP during the battle complained that no one coordinated the battle, no one knew the boundaries, no one knew who was on the flanks, there was no fire coordination and the piecemeal commitment of small units caused untold confusion. On 20 February, by the time Fredendall understood what was happening, 1st Armored had been defeated at Kasserine.

Additional confusion existed concerning who was in command at Kasserine on 20 February: Anderson (Eisenhower's "advisor") told Fredendall that he was in command of the forces in the pass;

Fredendall passed command to Robinett; Robinett issued orders to subordinate commanders and was not aware that Anderson had also sent Brigadier Nicholson (ADC 6th British Armored Division), with additional troops to take control of all British, American and French forces in the battle.¹⁴

During Rommel's attack, continued problems arose as a result of Arnim's failure to cooperate. Kesselring, at this point, decided that he could best insure cooperation by placing command of both armies under Rommel. Rommel declined and Kesselring delayed the appointment until 23 February; too late to salvage the operational success of Rommel's attack.

On 21 February the commands of Robinett and Dunphie put up stiff resistance and halted Rommel's attack. Reinforcements arrived and the defense continued to strengthen.

On 23 February MG Ernie Harmon, sent by Eisenhower to help with command and control, arrived at II Corps Hqs. to find a harrassed, worried and fearful atmosphere. When Fredendall, who was exhausted, learned that Harmon had not come to relieve Ward, he gave him command

of the battle. Harmon went to the front, found things begining to stabilize and made sure that Ward knew that he still had command of his Division. He then colocated his C.P. with the 1st Armored Division's and began to reestablish order. At about this same time Rommel, who realized that the Allies were getting stronger by the day, broke off his attack and began to withdraw. By 25 February the Allies had counterattacked forward and reoccupied Kasserine.

The attack had been a limited tactical success for the Germans and a disaster for the Allies. II Corps alone had 300 killed, 3000 wounded and 3000 MIA out of 30,000 assigned. Equipment losses included 183 tanks, 194 half-tracks, 208 artillery pieces, 512 trucks, and more materiel and supplies than the stocks in the depots of Algeria and Morocco combined.

When Eisenhower asked Harmon for his assessment of Ward and Fredendall, he replied that he found Ward "ok" but Fredendall lacking. Fredendall was removed from command and, when Harmon refused the opportunity to replace him

(preferring to return to command of his division),
G.S. Patton Jr. was given command of II Corps.

A review of this brief description of the events leading to the battles of Kasserine reveals several command and control issues that contributed to problems on both sides:

*Philosophy: It is not entirely clear whether the Allies embraced a centralized or decentralized command philosophy. Fredendall, for his part, was inconsistent. Because of his dislike or distrust of Ward, he either bypassed him or gave him such restrictive orders that initiative was out of the question. When giving instructions to the Air Force however, he said "Don't wait for us to order air missions. You know what the situation is, just keep pounding them." With Ward he withdrew the latitude necessary to fight the battle. With the Air Force he abdicated his responsibility to assign specific missions, denying the Air Force the ability to be responsive to the ground commanders' needs. The Axis forces clearly operated with a decentralized system: Rommel, as always, took initiative,

suggested plans upward, and broke off his attack when he knew it was time to do so. Arnim complied selectively with instructions from higher headquarters, and Kesselring issued concise, mission orders (even if they were not fully understood) to his subordinates.

*Command structure. Both the Allies and Axis leaders wrestled with questions of how to organize for command of major formations. Eisenhower found three different arrangements unsatisfactory and, to his credit, attempted to make adjustments. When he realized that he was too far from the troops (400 miles) to allow for timely decisions, he sent Truscott to Constantine (still 200 miles) to coordinate the battle. When he realized that "coordination" was not the same as command, he appointed Anderson as his "advisor". And finally, he sent Harmon to sort things out at II Corps. Unfortunately, he never moved his own headquarters to the front, nor did he ever appoint a single ground commander who was located close enough to the battle to make timely decisions. "Coordinators", "advisors", and "helpers" are NOT commanders. At the height of the

battle for Kasserine, Allied command and control was hopelessly confused. On the Axis side, Kesselring realized too late that he desperately needed a single commander, close enough to the front to exercise timely and effective control. Had he appointed Rommel as Army Group Commander five days earlier, the force ratios, and perhaps the outcome, would have been different.

* The personal role of the commander:

Probably the most significant lessons of this battle come from an examination of what the senior commanders did or failed to do personally. Field Marshal Montgomery outlined six responsibilities of the high level commander in the field: 1) Establish the proper atmosphere; Visitors to II Corps Hqs consistently commented that the atmosphere there was either stiff and rigid, or worried and confused, and was always more concerned with security than with fighting. 2) Choose subordinate commanders carefully (in war it is the man that matters); Fredendall's relationship with Ward is an example of the consequences of not having complete trust and confidence between commanders. 3) The commander

must keep himself mentally fresh and avoid becoming immersed in details and he must 4) decentralize. State the mission clearly then trust subordinates and leave them alone to get on with their own jobs; Fredendall became exhausted, was excessively involved in the details of Ward's defense, and found himself unable to decentralize.

5) Command by direct and personal involvement. Visit subordinate Hqs and issue orders verbally (eyeball to eyeball). Additional personal involvement (visits to subordinate Hqs and verbal orders) by Eisenhower, Fredendall, and Kesselring would have resolved most of the serious command and control problems encountered by both sides.

6) Establish a system of liaison officers from higher Hqs to lower. Their responsibility is to paint for the senior commander a vivid and accurate picture of what's going on every day (very similar to the Israeli "directed telescope"). Such a system would certainly have helped key commanders to learn what was actually going on and could have decreased the fog of war that crippled Allied forces at Kasserine.

SINAI 1973

A study of the Sinai portion of the 1973 Arab-Israeli War reveals a classic example of two modern, well equipped and well trained military forces; one using a highly centralized, Soviet style of command while the other used an extremely decentralized command system. While the Egyptians planned to retain control in Cairo, the Israeli's, fighting a war in two separate theaters, intended to allow theater commanders to control operations in accordance with strategic guidance provided by Tel Aviv.

Throughout 1973, tensions intensified between the Israelis and their Arab neighbors. The Arabs had lost interest in the "War of Attrition" due to the Israeli practice of massive retaliation and, with the help of the Soviet Union, had rebuilt the military capabilities that had been devastated in the June 1967 war. Egypt and Syria received substantial numbers of T62 tanks, SAM 6 and 7 AA missiles, ZSU 23-4's, RPG-7, SAGGER and SWATTER AT missiles, and bridges from their Soviet suppliers. Preparations were made for an October war aimed at recovering territory (the Sinai, the Golan

Heights, the West Bank of the Jordan River and the Gaza Strip) which had been lost to Israel in previous conflicts.

The Israelis were aware of much of the modernization that had taken place within the Arab armies but they failed in their assessment of Egyptian intentions and did not believe the Egyptians would attack across the Suez Canal. In fact, they were so secure in their belief that war was not imminent that the last three months of peace saw massive changes in the Israeli command structure: General Elazar was appointed as Chief of Staff, Israeli Defense Force (IDF); MG Sharon, who had been the Commander, Southern Command (Sinai), and aspired to be Chief of Staff, retired when he was not selected. He was replaced by MG Gonen, who had been one of his division commanders in Southern Command; Additionally, Commander, Central Command was replaced by the assistant chief of operations; and MG Adan, Chief of Armor was scheduled for retirement, to be replaced by MG Mandler, commander of armor forces in the Sinai (this last change did not take place due to the outbreak of war). These and other key personnel

changes constituted what was described as the most sweeping reallocation of jobs the IDF had seen.¹⁶

At 1400 hours 6 October, 1973, the Israeli Yom Kippur religious holiday, the Egyptians initiated the war with massive artillery preparation and a textbook deliberate assault across the Suez Canal. The Israelis were unprepared, only partially mobilized, and stunned by the sudden effectiveness of the Egyptian attack.

During the rapid Israeli mobilization, soldiers of all types came from the reserves and retirement to insert themselves into the command structure. Gonen, commanding the Southern Front, had the disadvantage of being junior to two of his division commanders; Adan, who he had worked for several times, came from his job as Chief of Armor to command a division; and Sharon, who he had replaced as Commander, Southern Command, barely three months before, came to command his (Gonen's) old division.

Gonen was described by Adan as "brave, a master of his profession, but one who created for himself a showy image and was a very strict

disciplinarian. One who imposed punishments on impulse yet was soft spoken with superiors...a "bicycle rider", one who presses hard downward but is always looking upwards. Gonen's method seemed to aim at breaking the personality of his staff officers."17

This was a style that was slightly out of step with the Israeli system of command and one that probably did not sit well with his two very senior subordinates.

By midnight on the 6th of October the Egyptians had crossed the canal with 500 tanks and a full complement of Air Defense weapons. The Israelis, meanwhile, were desperately trying to mobilize. Gonen, at this point, was attempting to control the situation from his peacetime headquarters in Beersheba, about 150 miles from the front. His assessment of the situation on the front on the night of 6 October was so highly inaccurate that he attempted to maneuver about the battlefield several units that were decisively engaged and had losses up to sixty percent. At about midnight Gonen called Elazar, the Chief of Staff, to ask for authority to attack and seize an

Egyptian strongpoint. In what was the beginning of a weakening relationship between the Chief of Staff and Gonen, Elazar told him that approval should be the least of his worries and that he should be concentrating on stopping the Egyptian crossings. At about 0200 Gonen relocated, by helicopter, to his forward command post in the Sinai.¹⁸

On 7 October the attack continued and by evening the Egyptians had 600 tanks and the bulk of six infantry divisions across. AT and ADA missiles had taken a heavy toll of Israeli defenders and aircraft. Moishe Dayan, Israeli Defense Minister, visited Gonen on the 7th and advised him to abandon the fortifications of the Bar Lev line, along the canal, and to withdraw to the high ground about 30 miles east of the canal. Gonen agreed about the fortifications but wanted to stay forward on the artillery road, about 15 miles from the canal. Dayan left the decision with Gonen remarking that anything he said was to be taken as "ministerial advice". Israeli military action throughout the 7th can be best described as a series of small, piecemeal

counterattacks that had little effect, but cost both lives and equipment.

The Egyptians had estimated that the canal crossing could cost as many as 2,000 casualties and yet they had lost only two hundred men. So successful was their attack that they could easily have exploited much deeper into the Sinai. Their military objectives, however, were limited (hoping to defend their limited gains and wait for superpower intervention to end the war on terms that would lead to a negotiated return of their lost territories), and they had neither the inclination nor the flexibility to break from their rigid, centralized command structure to press the attack.

On the evening of 7 October Elazar came to Southern Command Hqs and held a long meeting with the front and division commanders. By 2200 hours all had agreed that, on 8 October, Southern Command would attack to destroy Egyptian forces that had crossed the canal but that the offensive would not include an attempt to attack across the canal into Egypt. At midnight, Elazar briefed GHQ on the plan and at 0200 Gonen's written plan was

finalized. It was a 'frag' order that differed substantially from what had been agreed upon and, in fact, outlined a course of action that had been considered and rejected. To further confuse the issue, copies of this order never reached the division commanders--Adan, Sharon and Mandler all had one understanding, Gonen had an entirely different one. As the Israeli attack got underway, there were misunderstandings as to intent throughout the IDF hierarchy. There was no common language between GHQ and Southern Command and none between Southern Command and the divisions. It was a chaotic day! Adan's mounted attack against the Egyptian 3d Army was destroyed by the defending infantry equipped with SAGGER missiles.¹⁹

On 9 October Sharon launched an attack, despite orders from Gonen to not attack but simply to maintain contact while Southern Command continued to gain strength from the mobilization. Sharon's attack failed and Gonen formally requested Elazar to strip Sharon of his command for disobedience.

Martin van Crefeld conjectures that, at this point, Elazar's lack of trust in Gonen caused him to impose "reverse optional control". "Instead of giving subordinates a free rein and intervening only in case of need, his distrust of Gonen led him to reserve approval of the most important moves to himself. Gonen, in turn, was thereby compelled to restrict Adan and Sharon in a similar way, and right on down the line." Elazar also lacked any kind of "directed telescope" to provide the kind of timely information needed for decision making.²⁰ One of Gonen's subordinate commanders later commented that the dispute between Gonen, Sharon and Adan over what should be done tactically between 7 and 10 October caused confusion and indecision throughout the ranks and led to the army's inability to accomplish the mission. The entire command structure was disrupted and the normal, decentralized way of doing business in the IDF was subverted.

Because Dayan and Elazar agreed that Sharon's relief would not be politically acceptable, on 10 October, MG Bar Lev was dispatched to the Southern command as Elazar's representative (to make peace

with the fueding generals) with approval authority over Gonen's plans. This, obviously gave Bar Lev command authority over the Southern front and, upon arrival, he set about establishing order in the overcrowded war room, in the decision making process, and in the tactical situation. He also initiated daily visits to the divisions and nightly meetings with the division commanders.

During the period 10 through 13 October the Israelis and the Egyptians each conducted a tactical defense; the Israelis to build their strength and the Egyptians to consolidate their gains. Bar Lev's visits to the front on 11 October were the first visits, by senior officers in Southern Command, that the divisions had received. All was not peaceful, however, among the unruly generals. At about this time Sharon pushed for a rapid attack aimed at crossing the canal into Egypt. Bar Lev disagreed, saying that the timing was not right yet, and the conflict grew to such proportions that this time it was Bar Lev who recommended to Dayan and Elazar that Sharon be removed from commard. For the same

reasons that led to rejection of Gonen's similar request, the recommendation was turned down.²¹

Also on 10 October Shazli, the Egyptian Army Chief of Staff, was urging Ismael, War Minister and Commander in Chief, to continue the attack and exploit their successes. Ismael refused, leading to a confrontation that required Sadat to intervene and make the final decision. He sided with Ismael and Shazli resigned. During the war Ismael said that "rigidity is better than looseness, especially in matters of war." Mobile warfare, however, demands a level of initiative among junior officers, a level of confidence among senior ones and a willingness of both to communicate; attributes that the Egyptians simply had not developed.

Planning was underway, by this time, for a 14 October Israeli attack, led by Sharon with Adan following, to split the two Egyptian armies, penetrate to the canal, and then cross into Egypt to cut lines of communication and force withdrawal of Egyptian forces. The plan was approved and the date was set for 14 October.

On 14 October, however, the Egyptians, responding to requests from the Syrians, who were having great difficulties on the northern front, launched six major attacks against Israeli forces. Because the Egyptians had attacked out from under their air defense coverage, the Israeli Air Force, for the first time, played a major role. Egyptian commanders in this attack were given little freedom of action and were ill prepared for combat in a free flowing maneuver environment. By nightfall the Israeli tactical defense and air power had defeated each of the attacks and the Egyptians were forced to pull back. The Israeli attack was delayed until the next day.

On 15 October Southern Command initiated its attack with Sharon splitting the boundary between the Egyptian 2d and 3rd Armies, Adan following to secure lines of communication, and the third division conducting a diversionary attack against the southern flank of 3rd Army. Throughout the 15th, Sharon continued his attack while the Egyptians remained focused on the diversionary attack.

On 16 October Israeli paratroopers secured the west bank and Sharon moved a forward CP and two tank battalions across. Because heavy fighting with Egyptian infantry along the lines of communication threatened movement to the crossing site, Gonen ordered Adan to secure the LOC and reduce the resistance. Sharon objected, saying they should ignore the Egyptians and continue moving across. Gonen and Bar Lev rejected Sharon's suggestion and Israeli paratroopers attacked to reduce stubborn Egyptian resistance.

On 17 October Sharon began building a bridge across the canal and the Egyptian 2d Army, which had, by now, assessed the seriousness of the Israeli attack, responded by ordering the 25th Tank Brigade to attack to close the corridor from the north. Adan detected the movement of the 25th Brigade, ambushed and destroyed this and several other small, piecemeal Egyptian counterattacks in detail. It appears that the highly centralized Egyptian command structure was unable to coordinate and launch attacks from each side of the Israeli corridor. By 1800 hours Adan had begun crossing the canal into Egypt.

During the period 18 through 23 October the Israelis, with two divisions across the canal, attacked to destroy Egyptian air defense batteries and then moved to encircle the Egyptian 3rd Army. As Israel crossed the canal Egypt did not recognize the objective early enough to initiate a coherent tactical defense and Sadat, in Cairo, did not know of the crossing until Golda Maier announced it on the radio.

Once the Egyptian high command correctly assessed the seriousness of the Israeli penetration, they rejected withdrawing to the west to deal with it and issued instructions that the 2d and 3rd Armies must handle the threat without removing one soldier from the east bank.

On 21 October an additional serious rift developed between Sharon and Gonen/Bar Lev: When it appeared that Sharon was dragging his feet during an attack that had been directed on an objective known as "Missouri", Gonen tried to reach him several times. Each time he was told that Sharon was either busy or asleep. When he finally was reached, both Gonen and Bar Lev ordered Sharon to reinforce the attack

sufficiently to seize the objective. Sharon objected and, at midnight, jumped two echelons of his chain of command (Gonen and Elazar), called directly to Dayan, the Minister of Defense, to complain and request his intervention. Dayan, sympathetic to Sharon, called Tal, the Deputy Chief of Staff, and asked him to issue the orders necessary to handle the matter saying "We can't just ignore this kind of appeal from Sharon." Tal called Gonen and had him fix the problem; by this time, the attack on Missouri had resulted in a bloody battle and over one-third of the objective had been taken. During this incident the chain-of-command never played in the decision process: Sharon bypassed Bar Lev and Elazar; Dayan avoided Elazar; and Tal avoided Bar Lev.²²

By 23 October the Egyptian 3rd Army was virtually encircled, Adan was 100 km from Cairo, and the Israeli lines of communication were open.

While the war may have been a strategic success for the Egyptians, the military outcome was more favorable for the Israelis. Egyptian losses were: 222 fighters; 42 helicopters; 1100 tanks; 450 APC's; 300 artillery pieces; 44 SAM

batteries; 5,000 KIA; 12,000 WIA; and 8,000 men lost as prisoners.

For the Israelis the war was a harrowing, traumatic experience. Even though they were ultimately successful on the battlefield, their military superiority was seriously challenged for the first time. Equally costly, their losses included (on both fronts): 103 fighters; 6 helicopters; 840 tanks; 400 APC's; 2,800 KIA; 8,800 WIA; and 508 lost as prisoners.

This short synopsis of events in the Sinai during the October 1973 Arab-Israeli War holds a number of command and control lessons worthy of further discussion:

*Philosophy. During the 1956 Arab-Israeli War, Sharon, who was a brigade commander, attacked the Mitla Pass in violation of orders from the IDF Chief of Staff, Dayan. Dayan took no action because he saw this as a positive type of indiscipline which resulted from exactly the high morale and fighting spirit he had worked to inspire. "Better to be engaged in restraining the noble stallion than in prodding the reluctant

mule!" he said. Dayan frequently bypassed regular chains of command and stressed leadership at the expense of control. In the IDF in 1956, brigades operated as independent forces under the loose control of division headquarters. Brigade commanders did not follow detailed plans prepared in advance and were not subjected to a continuous flow of orders from above. They were given general mission guidance and were free to make their own tactical decisions. Despite the success of the IDF under this system it was recognized that a greater degree of control would be necessary in order to create or exploit operational opportunities when operating against a modern, well-trained enemy. It was a number of years before this very decentralized command system was balanced by additional control measures and evolved into what has previously been described as "optional control." This system was developed under Haim Laskov, Dayan's successor as Chief of Staff in 1958. Optional control requires self-reliant officers who are willing and able to shoulder responsibility without waiting for orders from their seniors, but includes division as well

as front headquarters in the command process, and uses the directed telescope to facilitate the assumption of control when required.²³ Dayan's desire for aggressive, spirited subordinate commanders is universally accepted. Additionally, while his restraint in avoiding the temptation to dictate his solutions to Gonen and Bar Lev is laudable, his tolerance for Sharon's disruptive and uncooperative behavior probably degraded the IDF's battlefield success and appears to be out of step with current Israeli command and control philosophy.

Most armies today use a hierarchical, two-way command system where commanders receive information from subordinate units, then make tactical decisions which are passed down through the chain-of-command until they reach the level of implementation. In the case of the Egyptian Army, the man making the decisions was the Minister of Defense and he was located in Cairo. If the nature of warfare is static or movement is limited to a few miles per day, commanders may have enough time to analyze data and make centralized decisions.²⁴ The rapid pace of modern, mobile

warfare, however, requires not only decentralization of low to mid level decisions, but also reasonable proximity of the commander for whom high level or important decision authority has been reserved.

In the final analysis, despite its problems, the more aggressive and independent Israeli system of command and control proved itself superior to the Egyptian system which was unable to coordinate and maneuver its superior forces rapidly.

*Command Structure. The major structural issue on the Israeli side was--who is in charge? While, on paper, they had a well defined chain-of-command, in practice the structure was chaotic. Gonen, the newly assigned Southern Front Commander, had the misfortune to have two very aggressive, independent, former bosses in command of two of his divisions. It also appears that his domineering manner may have further aggravated the situation. Adan did not always agree with Gonen but it appears that he generally cooperated. Sharon, the former Southern Front Commander, on the other hand, clearly wanted to be in charge. Insertion of Bar Lev into the

command structure, while having some stabilizing influence, did not resolve the issue and Dayan's tolerance of Sharon's antics only further aggravated the situation. This confusion and indecision undoubtedly degraded the IDF's ability to accomplish its mission. The German system of mission oriented command and control requires "uniformity of thinking;" that is, a common approach to solving the problems of control and leadership on the battlefield. This ingredient was badly needed in the Southern Command in 1973.

The Egyptian Army's centralized structure was ideally suited to the set-piece nature of the deliberate canal crossing but broke down badly when decisions were required to respond to Israeli initiatives. Sadat and Ismael, who held the reins, were simply not current enough to coordinate the activities of their two armies in the field. A single front commander (with sufficient latitude and authority), controlling and coordinating the activities of both the 2d and 3rd Egyptian Armies, might have been able to defeat the IDF attack to establish a canal crossing.

*Personal Role of the Commander. Field Marshal Erwin Rommel said "There are always moments when the commander's place is not back with his staff but up with the troops. It is sheer nonsense to say that maintenance of the men's morale is the job of the battalion commander alone. The higher the rank, the greater the effect of the example."

There is little evidence that Gonen was able to break away from his headquarters during the early days of the 1973 war and, in fact, Adan states that his first outside visitor was Bar Lev on 11 October; six full days into the war.

After the 1967 Arab-Israeli War General Gavish said; "There is no substitute for looking into a subordinates eyes, listening to his tone of voice." Gavish was commander of the Sinai reserve force of three divisions (roughly Corps size), reporting directly to GHQ, during the 1967 war. His practice was to spend his days forward, visiting his subordinate headquarters while leaving his chief of staff in command of the rear headquarters. He took a radio network linking him with the three division headquarters, and they

with each other, and a signal staff who monitored divisional communications nets around the clock. Messages were passed to and from GHQ (Tel Aviv) by radio telephone circuit, and his rear CP processed the results of Air recon. The point of this synopsis is that, first Montgomery and Rommel, and now Gavish, in a relatively modern and highly lethal environment, have emphasized the requirement for higher level commanders to be forward and to interface directly with their subordinates.

While technology and modern communications create the impression that battles can be "managed" from the CP, the commander's presence on the battlefield is as valuable today as it was when Napoleon's presence was worth a Corps of men.

TECHNOLOGY

No paper on the subject of command and control would be complete without some comment on technology. One would think that proper application of modern communications, data processing and intelligence gathering equipment would cause a dramatic reduction in the time

required to operate the information-decision cycle that Gen Starry talked about. It is true that modern technology is absolutely essential to the modern battlefield, and the result SHOULD be better and quicker decision making. It will not, however, suffice for the creation of a working command system, and it may, if a great deal of thought does not go into designing it into the command system, create much more serious problems than it has cured.²⁵ Before discussing the potential that technology has, a few pitfalls:

* Technology creates the capability for increased centralization (Vietnam, Mayaguez, Cuban Missile Crisis, Pueblo, Desert I) and the temptation to centralize is often too much to avoid. For example, there is now the capability to install position location equipment on selected vehicles throughout the battlefield. This has tremendous potential for many practical applications from simple land navigation, to indirect fire control. Because this precise position location can be automatically transmitted to higher level commanders, it has the capability

to become a command and control tool (with the potential to develop a high-tech "directed telescope"). If the system that implements this capability is not properly designed we will present commanders with yet another temptation to centralize command and control. The corps commander who receives input on the specific locations of all battalions in the corps is likely to begin micro-managing his many battalions. He will subvert the initiative of his subordinate commanders, cause a tendency for them to wait to be told what to do (rather than actively executing along the lines of his intent) and he will soon be in violation of Montgomery's rule against becoming immersed in details.

* Man has gone through the entire history of war seeking more information on which to base his decisions. We have now come to the point however, where there is a very real danger of having too much information available. Current communications and data processing equipment have the potential for providing the commander (and the staff) with more information than can possibly be used. This increases the "signal to noise" ratio

dramatically and can cause substantial slowdowns as additional analysis time is required at every echelon. The challenge now is to filter through the "noise", identify that which is critical, and expedite its transmission to the appropriate decision maker. It is the commander's responsibility to refine, and clearly state, specifically what his information requirements are. It is then essential that the command system include a carefully managed flow of critical and routine information--filtered, yet timely, and with mechanisms to insure key information gets to the right decision maker. As Clausewitz said--"a great part of the information obtained in war is contradictory, a still greater part is false, and by far the greatest part is uncertain."

*Technological advantages are usually temporary and can usually be defeated or bypassed entirely. Electronics equipment, years in development and procurement, is rarely on the leading edge of technology by the time it is fielded. Often, the equipment is subject to electronic countermeasures or has limitations that

can be exploited by an imaginative enemy. The nature of the equipment itself is such that it is frequently the "softest" or most fragile component of the organization, requiring special handling, climate control, skilled operators and unique maintenance skills. Sometimes there is an identifiable electronic signature and, once located, communications and data processing equipment is easily destroyed.

*There is a tendency toward over-reliance on new, high technology systems. Once fielded there is pressure to show some manpower savings resulting from all the investment, and redundant, or backup human skills are rarely retained. When equipment fails, or is destroyed, there is no capability to perform the function manually (much as when the computer "goes down" at the airline terminal and everything from ticket sales to seat selection comes to a halt).

*The combination of modern organizational complexity and information overload can cause dramatic slowdown in information-decision cycles. The pre-WW II German Army division had fewer than 50 military specialties.

Today's German division has approximately 900 and there has been similar growth in the U.S. Army. Extreme specialization tends to cause the creation of more and more headquarters (to manage the specialties) and results in broader and deeper organizations with wider spans of control and more levels in the chain of command. The demand for information is therefore greater, the number of echelons at which it must be processed or analysed is increased, and the whole process slows significantly.²⁶

Having said all that, modern technology has the potential to absolutely revolutionize warfighting. In order to avoid the pitfalls and realize their full capabilities, technological subsystems must be constructed within the overall context of a coherent system of command and control.

Information processing systems alone, if they can avoid overload and focus on gathering, analyzing and processing the right information, can dramatically improve the capabilities of both commanders and staffs.

If a technologically advanced command and control sub-system does not result in a more rapid information decision cycle, then its utility is limited. Simple sub-systems that serve the commander and focus, above all, on helping him make better and quicker decisions should be the goal.

CONCLUSIONS

The U.S. Army has taken the first step toward developing a command and control system to exploit the weaknesses of its principal adversary and complement its AirLand Battle doctrine. The foregoing discussion of various command systems, the Kasserine and Sinai campaigns and the implications of technology, however, has raised some issues that must be addressed if we are to have a truly comprehensive, effective and widely accepted doctrine for command and control.

*Philosophy. On the modern battlefield, with armies that are capable of maneuvering great distances very rapidly, time takes on a greater importance than ever before. The need for rapid decision making strengthens the argument for a

decentralized command system, where decision thresholds are pushed as far down the chain-of-command as possible. There are broad implications for such an approach to command and control: Trust, confidence and cohesion must be high among commanders and within units; Leaders at all levels must be action oriented, free, and even expected, to exercise initiative (this type of behavior should be specifically rewarded): Mission orders, outlining minimum (rather than maximum) objectives, and allowing subordinates significant latitude, should be the norm; Commanders themselves must routinely take the risk associated with allowing subordinates significant latitude in mission accomplishment (There is a real reluctance to decentralize because, in the "zero-defects" environment, the mistakes of a commander's subordinates can make both the unit and the commander look bad and are, therefore, career threatening); and finally, commanders must, under all but the most dire of circumstances, avoid issuing orders directly to their subordinates' subordinates. They must insure that their intent is clearly understood by their direct

subordinates, and everyone in the chain-of-command must accept responsibility for knowing and pursuing the intent of commanders two levels above themselves.

FM 100-5 (Operations), and Field Circular 22-999 (Leadership and Command at Senior Levels) provide a basis for a command system that will meet the demands of the modern battlefield. The next requirement is to expand on these basic fundamentals in a single, comprehensive document and then to institutionalize the philosophy throughout the educational, training, and leadership structure.

*Structure. Among the most basic of military fundamentals is unity of command. The need for a single commander (not an advisor or a coordinator), who is near enough to the critical points on the battlefield to make and implement timely decisions (Not in Rome or Algeria when the fighting is in Tunisia) would seem to be obvious. Yet even Eisenhower and Kesselring of WW II and Dayan and Ismael (the Egyptian Defense Minister) in the Sinai all had difficulty in creating an effective structure to control the battlefield

activities of more than one major military formation. The lesson here is that the command structure must satisfy the basic requirement to have someone in charge, and that whoever is in charge must be capable of controlling his forces with timely decisions.

Every command structure has a formal communications system and an argument can be made for decentralized command systems to include an informal communications system as well. Subordinate commanders and their headquarters spend a significant amount of time preparing and sending reports. As these reports are passed through successive layers of the chain-of-command, being analyzed and processed at each level, they become very untimely and lose much of their value (Analysis of situation reports received at a division main CP during a recent Reforger exercise revealed that information was six or more hours old upon arrival). A number of very successful commanders (Among them, Patton, Moltke, Napoleon, Gavish, Wellington and Montgomery) have used the "directed telescope" to overcome what Starry called the "tyranny of the message center." A

number of different forms have been used (from simply monitoring subordinates' radio nets, to sending liaison officers downward to visit subordinate units daily, to actually stationing officers inside subordinate unit CP's), but the intent is to avoid becoming a prisoner of the reporting system and to enhance both timeliness and accuracy of information available to the commander without imposing a substantial burden on subordinate commanders. It is key to insure that such a system does not intimidate subordinate commanders (trust, confidence and cohesion are more important), restrict their initiative or create resentment toward the higher headquarters.²⁷ An unobtrusive system design and a clear understanding of its purpose by subordinates should avoid these problems.

Finally, the command and control structure should make use of technology to facilitate the flow of information and help the commander to make better and faster decisions. A high-tech "directed telescope" is certainly within the realm of possibility today.

*Personal role of the commander. It would be easy to assume that, with the proliferation of radios, telephones and satellite communications on the battlefield today, commanders no longer need to be near the front. With all sources of operations and intelligence information being centralized in a main CP, some might say that the commander needs to be at the CP, available to all the staff, and able to make his decisions on the basis of their recommendations. The truth of the matter is that the commander can no more effectively command from a main CP today than MG Fredendall could in North Africa, or than Gonen could in Beersheba, or Kesselring in Rome, or Eisenhower in Algeria. The need for the senior commander to be at or near the critical point on the battlefield, involved in decisions (not leaving it all to his G3) and personally issuing orders to his subordinates, is no less important today than it ever has been.

This personal involvement by senior commanders is key, not only on the battlefield, but in the training environment as well. Too often, in our peacetime army, the senior commander

is content to observe exercises and rarely is one seen actually participating. Once the senior commander has created the team and established the atmosphere he must participate in the training of his organization for combat, not as an "observer" but as a "player".

In order to effectively counter the operational doctrine of our principal adversary, deal with the speed and lethality of modern warfare, and fully support the requirements of our own vision of the AirLand Battlefield, the U.S. Army must have a comprehensive command system. Among the operational imperatives that should be included in such a system are the following:

(1) The basic foundation must be a decentralized leadership philosophy, using some centralized planning, mission orders, and subordinate leaders who understand their commander's intent. Trust, confidence and cohesion must be developed among leaders and within units and a "zero-defects" environment must not be allowed to exist. We will be unable to change our leadership/command philosophy when war

comes and it is, therefore, essential to build, every day, leaders who are bold, secure and will not hesitate to take action in the absence of orders. Administrative systems, personnel policies, and training methods that degrade cohesion in the name of "efficiency" must be energetically isolated and eliminated. Action oriented combat leaders who are professionally competent and willing to exercise initiative (take risk while pursuing their commander's intent) should be accelerated. Those who are more comfortable operating in a highly structured environment, waiting to be told what to do, and who do not tolerate honest tactical mistakes by action oriented subordinates, should be given duties commensurate with their limited contribution to the modern battlefield.

(2) It is essential that we have a simple structure with one man in charge (in a location that allows him to "see" the battlefield) and a formal as well as an informal communications system, thoughtfully enhanced by modern technology to help him make timely decisions. Our ability to gather and process information must be focused on

increasing the commander's ability to operate a decision cycle that is consistently quicker than the enemy's.

(3) Finally, our senior commanders should be selected on the basis of their warfighting, not their administrative skills. Senior commanders must be personally involved in planning, preparation and execution of battle plans, both in training and in war. They must make timely, informed decisions based on what they and their subordinate commanders have personally experienced.

"Training is everything and everything is training" and key to the whole system is that, as General Patton said, we must "practice those things in peacetime that we intend to do in war." The philosophy, the structure and the personal involvement of senior commanders in preparing major organizations for combat cannot simply be implemented on the first day of the next war. They must be used every day and the basic philosophy must permeate everything we do.

ENDNOTES

1. "The German Army's Mission Oriented Command and Control." Armor Magazine, January-February 1981, pp. 12-16.
2. Martin van Creveld. Command in War. Harvard University Press, 1985, pp. 228-230.
3. Edward Luttwak/Dan Horowitz. The Israeli Army. Harper and Rowe, 1975, pp. 160-174.
4. William P. Baxter, "The Scientific Soviet Commander." Army Magazine, June 1980, pp. 61-62.
5. D.A. Ivanov, V.P. Savelyev, P.V. Shemanskiy. Fundamentals of Tactical Command and Control - A Soviet View. Moscow, 1977, pp. 122-123.
6. US Department of the Army, Operations, Field Manual 100-5 (Washington: GPO, 1986) p. 21.
7. Martin Blumenson. Kasserine Pass. Houghton Mifflin Co., Boston, 1966, pp. 82-83.
8. Martin Blumenson and James L. Stokesbury. Masters of the Art of Command. Houghton Mifflin Co., Boston, 1975, p. 267.
9. Blumenson, Kasserine Pass, pp. 90-91.
10. Ibid., pp. 94-94.
11. Ibid., p. 217.
12. Ibid., p. 217.
13. Blumenson and Stokesbury. Masters of the Art of Command, p. 267.
14. Blumenson, Kasserine Pass, p. 260.
15. Field Marshal B.L. Montgomery. High Command in War. 21st Army Group, 1945, pp. 21-28.

16. The Insight Team of the London Daily Times. The Yom Kippur War. Doubleday and Co., 1974, p. 71.

17. Abraham (Bren) Adan. On the Banks of the Suez. Presidio Press, 1980, p. 156.

18. Ibid., pp. 31-32.

19. Ibid., p. 116.

20. Van Creveld, p. 229.

21. The Insight Team, p. 245.

22. Adan, p. 380.

23. Luttwak and Horowitz, pp. 172-174.

24. Ibid., pp. 160-164.

25. Van Creveld, pp. 270-275.

26. Ibid., pp. 234-235.

27. Ibid., p. 142.

END

8-87

DTIC