

# Sustainment

... see pages 22-62



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#### CONTENTS

#### 2 The Politics of Low-Intensity Conflict

by Lieutenant Colonel Rudolph C Barnes Jr , US Army Reserve

- 11 The Communist New People's Army J
- 22 Sustainment Doctrine Not Keeping Pace With AirLand Battle Doctrine by Lieutenant Colonel Charles W. McInnis. US Army
- 30 Can a US Army Corps Support Itself in War?

by Captain Douglas K. Zimmerman, US Army

- 40 Sustaining the Corps: Is the COSCOM Ready for AirLand Battle?
- by Lieutenant Colonel Kenneth L. Privratsky, US Army

  46 Operational Level of Support:

In Search of Doctrine
by Major William R Fast, US Army

- 54 Battlefield Damage Assessment and Repair
  by John de S. Coutinho
- 63 Task Force Smith: A Study in (Un) Preparedness and (Ir)Responsibility

by Major Michael W. Cannon, US Army

74 The Imjin War

by Major Karl W. Elkenberry, US Army

- 83 Insights
- 84 Summaries the best from other journals
- 86 Letters
- 90 News
- 91 Book Reviews contemporary reading for the professional
- 96 Bulletin Board

#### From the Editor

Sustaining the force is one of an army's greatest challenges. A wise military theoretician once said, "Amateurs talk about tactics; professionals discuss logistics." In this issue of *Military Review*, a group of military professionals present their ideas and concerns about sustainment doctrine in the US Army.

In his article, "Sustainment Doctrine Not Keeping Pace With Airland Battle Doctrine," Lieutenant Colonel Charles W. McInnis highlights the need for a solid combat service support (CSS) doctrine to complement our rapidly maturing Air-Land Battle concepts and procedures. He feels current doctrine is inadequate and cites a "business as usual" mentality among sustainers and fighters as the major culprit.

Lieutenant Colonel Kenneth L. Privratsky is concerned about the corps support command's ability to support the corps in battle. His article, "Sustaining the Corps: Is the COŞCOM Ready for AirLand Battle?" maintains that serious organizational and doctrinal problems exist that diminish the effectiveness of CSS as a combat multiplier. He goes on to recommend some solutions. Like Privratsky, Captain Douglas K. Zimmerman focuses on sustaining the corps. He asks the question, "Can a US Army Corps Support Itself in War?" His article concludes that the answer lies beyond mere doctrinal changes.

Major William R. Fast is concerned about a lack of sustainment doctrine for echelons above corps (EAC). His article, "Operational Level Support: In Search of Doctrine," defines EAC CSS doctrine and discusses the planning challenges of joint and combined CSS operations.

On a related topic, John de S. Coutinho, a general engineer at the Army Materiel Systems Analysis Activity at Aberdeen Proving Grounds, Maryland, writes about "Battlefield Damage Assessment and Repair." He investigates ways for future warriors to fix their equipment during battle so they can continue the fight.

Although these articles find fault with various aspects of current sustainment concepts and operations, they serve a very useful purpose as our profession evolves to meet the demands of the 21st century. After all, well-reasoned, responsible criticism is the highest form of institutional loyalty. We need to hear these differing viewpoints. Only through the exchange of ideas can we learn and grow stronger as an Army.

If you have other ideas or disagree with what is said in this issue, let us hear from you.

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#### Articles to Watch for:

Low-Intensity Campaigns
Colonel Richard H. Taylor, US Army, and
Lieutenant Colonel John D. McDowell, US Army



Antitactical Ballistic Missile Defense In Nato

Robert M. Soofer

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The Army Space Command
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# BULLETIN BOARD

#### Submissions Due By End of April

Only three months remain before the 30 April deadline for submission of articles for Military Review's second writing contest. In conjunction with the US Army Command and General Staff Officers Course Class of 1985, we are offering a \$500 cash award for the best article concerning "Military Operations Short of War." Please submit all manuscripts typed double-spaced and keep them between 2,000 and 3,000 words. Also, we ask that you clearly indicate that your submission is for the writing contest. Send your efforts to: Military Review, US Army Command and General Staff College, Function Hall, Fort Leavenworth, KS 66027-6910.

#### 2 MILPERCEN Becomes TAPA

The US Army Military Personnel Center, better known as MILPERCEN, became the United States Total Army Personnel Agency, or TAPA, on 1 October of last year. Joining forces with MILPERCEN to form TAPA were the Army's Civilian Personnel Center, the Physical Disability Agency and the Drug and Alcohol Operations Activity.

#### 3 Master Plan Published

Department of the Army (DA) has published and distributed Armywide an approximate 4,000-page intelligence/ electronic warfare master plan. DA intends to use the plan as a guide in developing doctrine, organizations, training strategies and material requirements for the areas of intelligence, electronic warfare and target acquisition. The master plan is supported by a combined Headquarters, DA/TRADOC (US Army Training and Doctrine Command) study called the Intelligence/ Electronic Warfare 2004 Study. The master plan, which will be updated regularly, is designed to assist the intelligence community in transitioning from current capabilities to future architectures.

#### 4 An Hye on Protection

The Medical Research and Development Command, the Army Materiel Command and the Combined Arms Combat Developments Activity (CACDA) at Fort Leavenworth have developed a laser/ ballistic eye armor program designed to protect soldiers and their equipment from projectiles and laser emissions. Approximately 100,000 sets of newly produced goggles with specialized, clip-on laser protectors are being distributed in the program's first phase. Units considered to be at high risk will receive the new protective goggles this year. The remainder of active units will receive the goggles under the program's second phase. CACDA participated in the program as the Army's proponent for directed energy warfare.

## Bibliography Readied

The Combat Studies Institute of the US Army Command and General Staff College recently published a research survey on German defensive doctrine and is preparing an annotated bibliography on light division operations. The research survey, number 5, titled "Standing Fast: German Defensive Doctrine on the Russian Front During World War II," was written by Lieutenant Colonel Timothy A. Wray. It addresses doctrinal methods of the German army from its prewar doctrinal developments through the spring of 1943 and analyzes the constraints and circumstances that shaped actual battlefield practices. The other work, titled "Bibliography on Light Division Operations in Low Intensity Conflict" is being prepared by Major John Diviney. It will provide an annotated listing of writings on this subject arranged by functional area and also several pertinent case studies. For more information or to order copies of these items, write: Director, Combat Studies Institute, US Army Command and General Staff College, Fort Leavenworth, KS 66027-6900.



US troops on Bataan listen to a radio broadcast from the United States

# For Want of Logistics The Fall of the Philippines

After initial landings in the Philippines in December 1941, Japanese forces advanced rapidly. Hardpressed on all fronts, US and Philippine forces withdrew to the Bataan peninsula to continue the fight.

On 26 January 1942, the Japanese launched a major offensive to reduce the Bataan stronghold. After early gains along the Bataan perimeter and landings along the coast, counterattacks by the Allies stopped the advance. Japanese forces were cut off and surrounded in three "pockets," while the landings were contained and the invaders destroyed. Allied forces reduced the pockets by the end of February, inflicting more than 7,000 casualties on the invaders and forcing the Japanese Army to withdraw. Had the Allies

launched an offensive then, Manila may have been recaptured.

The Allied logistic situation precluded any offensive, and the ability of the Japanese to resupply and reinforce at will would have made any Allied gains shortlived. Unable to be resupplied, troops in a defensive situation consumed less supplies. The greatest problem for the Allies was food. "(A)rmy-built rice mills threshed the local palay; Filipino fishermen netted fish; horses, mules, carabao, pigs, chickens, dogs, monkeys, snakes, and iguanas were slaughtered; everything edible . . . was harvested—but the troops' diet became more and more meagre." Disease spread rapidly, and the end was in sight.



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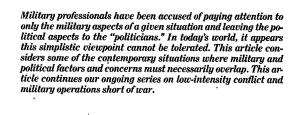
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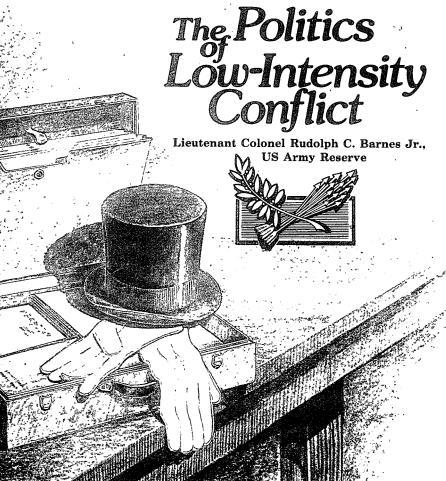
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Antitactical Ballistic Missile Defense In Nato

Robert M. Scoter

The Army Space Command Lieutenent Colonel Pat Gagan, US Army





HE UNITED STATES may be at peace, but much of the world is not. Numerous nasty little conflicts are going on around the globe, primarily in underdeveloped countries. Most of these conflicts are internal or involve traditional regional rivalries. Not all of them affect US security interests, but where they are in jeopardy, US resources are ill-equipped to protect them.

With the likelihood of conventional conflict reduced by the fear of a nuclear holocaust, the proliferation of these little conflicts in strategically important areas represents the most serious threat to US security interests. In military parlance, these peacetime conflicts are known as low-intensity conflict (LIC)<sup>1</sup>, but any definition of LIC is inadequate because of its inherent ambiguity.<sup>2</sup> Secretary of State George Shultz has acknowledged the ambiguity of LIC, at the same time confirming US national policy develop a capability to protect national security interests in a LIC situation.<sup>3</sup>

The role of LIC in the contemporary strategic environment emphasizes the social dimension of strategy. In the conventional military operations of mid- and highintensity conflict, the operational, logistical and technological dimensions of strategy prevail. As long as the opposing sides in conventional conflict are relatively cohesive. the fourth dimension of strategy, the social or political dimension, is subordinate to the other three. However, it is the lack of cohesiveness or clear lines of demarcation between opposing sides that characterizes LIC and accounts for its ambiguity. The ambiguity of LIC emphasizes its political orientation: the primary objective of opposing factions in LIC is to maintain or establish political control through public support.4

It is the political nature of LIC that has prevented development of an effective capability to compete in LIC. The capability to protect national security interests in higher-intensity conventional conflicts where military objectives are paramount is there, but this capability cannot cope with the political warfare of LIC.

US defense capability is analogous to a medical capability to treat only serious diseases, with no preventive medical program. Because of a lack of LIC capability, the United States must wait for LIC to escalate to conventional conflict before it can effectively intervene to protect its interests. Unfortunately, by the time LIC escalates this far (for example, the last stages of insurgency), it is often too late to affect the outcome.<sup>5</sup>

US adversaries are aware of this selfimposed handicap and will exploit LIC to achieve their political/military objectives as long as they are allowed the option. There seems to be little public awareness that US adversaries are allowed to achieve their political objectives in LIC by default. In fact, American traditional aversion to mixing politics and military operations has given US adversaries carte blanche to destabilize It is the political nature of LIC that has prevented development of an effective capability to compete in LIC. The capability to protect national security interests in higher-intensity conventional conflicts where military objectives are paramount is there, but this capability cannot cope with the political warfare of LIC.

friendly regimes. This is evident in Central America, where Cuba and Nicaragua are supporting insurgencies throughout the region.

US capability to protect its security interests in LIC is only a preclusive military capability to prevent escalation to conventional conflict. It makes sense to resolve conflicts at the lowest level on the conflict spectrum, using the least amount of force necessary to achieve US national policy objectives. An effective capability to compete in LIC represents the ounce of prevention that could avoid the pound (or megaton) of conventional cure.

#### **Politics and the Military**

The maxim that military operations are an effective extension of the political process has been attributed to Carl von Clausewitz, but this great strategist had a blind typical of military thinkers. Clausewitz was convinced that once the military became an instrument of national policy, the only option was to apply unlimited force. While Clausewitz opened the door to an understanding of the political nature of military operations, his failure to appreciate the limited use of military force renders much of his classic strategy inapplicable to LIC.

More contemporary practitioners of LIC, such as Mao Tse-tung, Ho Chi Minh and Fidel Castro, have successfully demonstrated the effective use of limited military force to attain political objectives. Success in LIC has depended upon subordinating military operations to political objectives. The successful practitioners of LIC, whether insurgency or counterinsurgency, have understood that gaining and maintaining public support is far more important than terrain. Conventional military operations have seldom been successful in LIC, with the US involvement in Vietnam being the most notable example. 10

It is easy to understand our aversion to mixing politics and the military. Since our own revolution, which was politically oriented and a LIC insurgency until the last stages, "I there has been a separation between the military and politics. Our Founding Fathers were suspicious of a political military and provided for a civilian commander in chief to preserve their new democracy. To emphasize the point, General George Washington resigned his commission before accepting the presidency.

However valid the concept of civilian supremacy, it was never intended that the separation of the military and politics would prevent the protection of national security interests. In many strategically important countries of the Third World, there is little separation between politics and the military.

Civilian governments, including fragile democracies, often serve at the pleasure of military strongmen, so that indigenous military forces are highly politicized. Protection of US interests in such an environment requires a military capability oriented to political objectives and capable of functioning in such a politicized environment.

#### Special Doctrine for LIC

Military/political operations in LIC are known as special operations (SO).12 President John F. Kennedy made the first serious effort to develop a national policy to protect.



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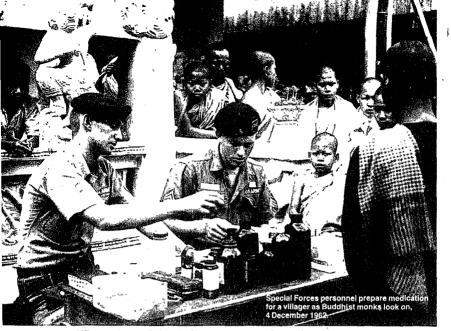
US national security interests in LIC. In the early 1960s, military strategy and doctrine for SO in LIC were formulated.<sup>13</sup> The strategy and doctrine were sound enough. The problem was that they were not properly executed in the Vietnam conflict after 1965, when domestic political pressures preempted sound judgment, and the conflict was escalated from LIC to mid-intensity conventional conflict.

The Vietnam debacle illustrated the US inability to cope with the political dimension of SO in LIC." America learned the painful lesson that its superiority in the operational, logistical and technological dimensions of strategy could not compensate for political weakness: the weakness of the South Vietnamese government and the lack of US domestic political support.

Unfortunately, US reaction to defeat in Vietnam was to throw the baby out with the bathwater, Rather than learn from that experience, US leaders bowed to antimilitary sentiment in the early 1970s and discarded the strategy, doctrine and fledgling capability for SO in LIC, only to reinvent them 10 years later.<sup>15</sup>

In contrast to the Vietnam experience, US LIC (counterinsurgency) doctrine was successfully applied elsewhere in Southeast Asia, Africa and Latin America until the capability was dismantled in the early 1970s. <sup>16</sup> There is much to be learned from the experiences of the Special Action Forces (now called Security Assistance Forces, but sharing the same acronym, SAF) as they worked with indigenous military forces to support friendly governments facing insurgency threats. <sup>17</sup> The problem was that the successes of the SAFs were overshadowed by the failure of Vietnam.

Despite the fact the Vietnam conflict escalated beyond LIC in 1965, US failure there continues to be associated with LIC:



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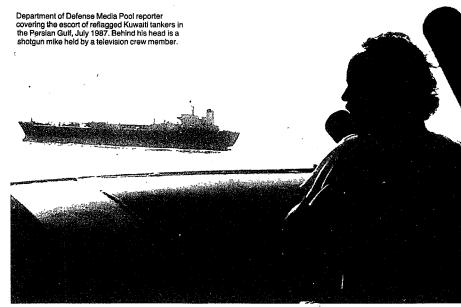
Had established LIC (counterinsurgency) doctrine been honored in Vietnam, the United States may not have won, but it certainly would not have escalated the conflict and suffered the heavy losses associated with conventional conflict.<sup>18</sup>

Accepting the political nature of LIC, the role of US forces should be limited to advising and assisting indigenous forces to achieve political objectives. Should US forces assume a dominant, direct-action role in LIC, it indicates an inability of indigenous forces to do what they must do to win As learned in Vietnam, the United States cannot force political change to suit its standards. It must have the patience for

long-term commitments to ensure that indigenous forces, not US forces, are the victors in LIC. Notwithstanding US success in Grenada, there are few quick fixes.

Contemporary events underscore the sensitivity of LIC operations to domestic politics. The questionable diversion of proceeds from the sale of US arms to Iran to support the Contras in Nicaragua has jeopardized future congressional support for Contra aid. Such legal/political issues are critical to congressional support, and the War Powers Resolution requires this support for extended LIC operations.<sup>20</sup>

The political nature of LIC creates an unforgiving environment for the unwary com-



The political nature of LIC creates an unforgiving environment for the unwary commander. His every move can be observed by a news media served by instant satellite communication. . . . A thoughtless violation of law or policy can turn an otherwise successful operation into a disastrous news event.

mander. His every move can be observed by a news media served by instant satellite communication. In the past, a commander might violate a law or two with impunity as long as the battle was won. Not so today—a thoughtless violation of law or policy can turn an otherwise successful operation into a disastrous news event. The need for continuing domestic political support for LIC and the fickle nature of that support in democratic society are significant complicating factors for LIC operations.

Initially, any involvement in LIC should be based upon a thorough and objective political assessment, indicating the likelihood of success of those indigenous forces to be supported, and such assessments must be continuing.<sup>22</sup> Domestic political considerations are as important as indigenous political assessments, since Congress can effectively abort SO in LIC. Once involved, leaders must have the courage to recognize a nowin situation. Like bankers who recognize abad loan, they must be able to minimize their losses, never putting good money after bad. Withdrawal should occur if ultimate political objectives do not appear feasible.<sup>22</sup>

Current doctrine for LIC acknowledges the political dimension<sup>24</sup> and is not appreciably different from that developed for unconventional warfare 20 years ago. It provides four categories of LIC operations:

- Foreign internal defense (FID), which includes counterinsurgency.
  - Terrorism counteraction.
  - · Peacekeeping operations, such as the



There is clearly a disparity between the concept of SO in LIC, with its political dimension, and the actual capability to conduct SO in LIC, which is oriented to conventional conflict.

Lebanon peacekeeping mission.

• Peacetime contingency operations, a catchall for short-term military operations such as the Grenada intervention.<sup>22</sup>

All of these operations have a political common denominator: by definition they are "... politico-military struggles to achieve political, military, social, economic or psychological objectives."<sup>26</sup>

While some operations characterized as LIC can be conducted by conventional forces (for example, the 82d Airborne Division in Grenada), most require specialized forces. In the early 1980s, the services created these specialized military forces, known as Special Operations Forces (SOF), from the remnants of those dismantled 10 years earlier. The Army's SOF are Special Forces (SF), Rangers, psychological operations (PSYOP), Civil Affairs (CA) and Special Operations Aviation.<sup>27</sup>

In spite of this revitalization, the SOF has been severely criticized by Congress as being little more than conventional force structures by another name and for not providing an effective capability for operations in LIC. <sup>26</sup> There is clearly a disparity between the concept of SO in LIC, with its po-

litical dimension, and the actual capability to conduct SO in LIC, which is oriented to conventional conflict.<sup>29</sup>

There are, however, encouraging indications of a new appreciation for the political dimension of SO in LIC and the need to provide the specialized training and integrated force structure for SOF elements to achieve the military/political objectives of LIC. <sup>30</sup> Unfortunately, there has been no effective operational integration of the SOF since the old SAFs were dismantled in the early 1970s. <sup>31</sup>

To develop an effective capability to conduct SO in LIC, SOF personnel must have diplomatic as well as military skills, and operations must be closely coordinated with the State Department. While US doctrine acknowledges the political dimension of LIC, the conventional orientation of military leaders has so far precluded an effective capability to conduct SO in LIC.<sup>32</sup>

#### The Special Operations Command

In 1985, Congress lost patience with the failure of the Department of Defense to develop an effective LIC capability. After considering proposals ranging from a new

special operations agency modeled after the National Security Agency to no change at all, Congress mandated the creation of a new unified command, the US Special Operations Command (USSOCOM).<sup>24</sup>

In addition, Congress required the designation of an Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict (ASD/SOLIC) to provide the necessary oversight for policy, cognizant that the effectiveness of USSOCOM could be neutralized by service parochialism without such oversight. Congress also provided for representation on the National Security Council (NSC) and recommended that the president appoint a deputy assistant for LIC within his executive office. 35

Unlike the other unified commands oriented to wartime contingencies, USSOCOM has a peacetime mission and a full complement of troops. The law effectively removes Army SOF from the US Forces Command (USFORSCOM) and gives USSOCOM the same direct chain of command to the national command authority (NCA) as other unified commands. While USSOCOM remains under the Joint Chiefs of Staff, its linkage with the ASD/SOLIC should give it a suitable environment, independent from conventional forces, to develop a capability to conduct SO in LIC. However, the law provides that, unless otherwise directed by the NCA. SO in LIC missions will be conducted by the appropriate geographically oriented unified command.36

The new-force structure satisfies two criteria for an effective capability to plan and conduct SO in LIC: integration and independence. It provides an integrated joint service force structure for those SO assets currently scattered throughout the services and provides a force structure independent from conventional forces to develop the unique doctrine, training and planning necessary for SO in LIC. While the new force structure cannot guarantee success, it has the poten-

SOF personnel must have diplomatic as well as military skills, and operations must be closely coordinated with the State Department. While US doctrine acknowledges the political dimension of LIC, the conventional orientation of military leaders has so far precluded an effective capability to conduct SO in LIC.

tial of providing an effective capability to conduct SO in LIC, a capability not had recently.

The decision to use the capability for SO in LIC remains with civilian authority—the NCA, made up of the president and the secretary of defense. Also, the ASD/SOLIC and representation on the NSC provide civilian accountability for USSOCOM. Within USSOCOM, a political adviser should provide the necessary coordination of command activities with the Department of State. Thus, the new law seems to provide the proper mix of civilian and military control essential for effective SO.

In a paper presented in 1983, Sam C. Sarkesian recommended a force structure for SO quite similar to that recently enacted by Congress. He summed up his recommendations as follows:

"In the final analysis, there is a need to devise an organizational strategy that is linked to the existing system, but one that provides enough freedom of maneuver for developing flexible and imaginative responses. This necessitates a command system whose primary mission is to plan, prepare, and implement low-intensity operations. But even more than an organizational strategy, there must be a conceptual synthesis regarding low-intensity conflict, that reaches out to all organizations, civilian and military, and through all levels of command. It is through such a synthesis that

unity of command and coherence emerge. Organizational strategy without a conceptual synthesis cannot overcome bureaucratic tendancies, status quo power plays, and organizational mind-sets. Nor can organizational strategy alone respond to the requirements of a democratic political system involved in low-intensity conflict."37

The US Congress has mandated the creation of a new force structure to conduct SO. The question remains whether the country has the necessary organizational strategy. conceptual synthesis and political will to use the force structure effectively.

#### NOTES

1 Field Circular (FC) 100-20 Low-Intensity Conflict (LIC) US Army Command and General Staff Coilege, Fort Leavenworth, Kansas, 16 July 1986 See also, Special Operations in US Strategy, ed. Frank R. Barnett, B. Hugh Tovar and Richard H. Shultz, (New York, National Defense University Press National Strategy Information Center, Inc., 1984)

2 John D Waghelstein. Post Vietnam Counterinsurgency Doctrine Military Review (May 1985), 42, also LTC John S. Fulton, "The Debate About Low Intensity Conflict," Military Review (February 1986) 60, For a critical assessment of Army LIC doctrine see Colonel Richard M. Swain, Removing Square Pegs From Round Holes Low-Intensity Conflict in Army Doctrine Military Review (December 1987)

3 Secretary of State George Shultz, Low Intensity Warfare The Chailenge of Ambiguity," address before the Low Intensity Wartare Conference National Defense University, Washington DC, Current Policy no 783, (Washington, DC US Department of State, Bureau of Public Affairs, 15 Janu ary 1986) 4 Michael Howard, "The Forgotten Dimensions of Strategy," Foreign Air

tairs (Summer 1979), reprinted in Military Strategy (N3020), (Washington, DC National Defense University, 1983), 6, also, Maurice Tugwell and David Charters. "Special Operations and the Threats to United States Interests in the 1980s," Special Operations in US Strategy, 34, also, Major Thomas J. Kuster Jr., "Dealing with the Insurgency Spectre Military Review (February

1987) 23, 26 and 27

- 5 Douglas S Blaufarb, Economic/Security Assistance and Special Operations, Special Operations in US Strategy, 222 See William S Lind. An Operational Doctrine for Intervention, Parameters (December 1987) 30 Lind argues that our policy should be to delay involvement until the last phase of insurgency, intervene with overwhelming conventional force decapitate the new government, impose a government acceptable to the US and leave within 90 days. This view assumes a population willing to accept such a forceful political imposition, an assumption not borne out historically, at least not in Central America. Grenada represents the exception, not the rule.
- 6 See Patrick M. Cronin, "Clausewitz Congensed," Military Review (August 1985) 40
- 7 B H. Liddell Hart. "National Object and M. Itary Alm," Strategy, 2d rev ed. (New York, Frederick A. Praeger, 1967), chap 21, reprinted in Military Strategy 17, also, Sam C Sarkesian, Organizational Strategy and Low Intensity Conflicts," Special Operations in US Strategy 274

8 Ibid

- 9 P Funkhouser "Terrorism A Global Concern. Special Operations (Summer 1986), 23
- 10 Robert F. Osgood, Strategic Thought in the Nuclear Age (Bastimore MD Johns Hopkins University Press, 1979) 93–130 reprinted in Military Strategy, 179, also Sarkesian 271-74
- 11 Secretary of the Army John O Marsh Jr , n h s keynote address to a special operations (SO) symposium, noted the sign f-cance of General Francis Marion, the Swamp Fox, who stimled the British during the Revolutionary War (Georgetown University 1983) Special Operations in US Strategy 21
- 12 Special Operations (SO) and LIC are not interchangeable terms. LIC is a level of contact while SO is a military capability with missions in all leve's of

conflict. See US Army Operational Concept for Special Operations Forces TRADOC PAM 525 - 34 (26 July 1984) For a current critical assessment of SO, see "A Long Needed Net Assessment U.S. and Soviet Special Operations: Armed Forces Journal International (February 1987) 48.

13 Sarkesian, 263-74 also Osgood, 194

14 Ibid For a discussion of the two dominent schools of thought on Vietnam. see M-chael L. Brown Vietnam. Learning from the Debate " Military Review (February 1987) 48

15 Ibid

16 For an excellent history of special operations, see Charles M. Simpson. III, Inside the Green Berets, The First Thirty Years. A History of the US Army Special Forces (Novato CA Presidio Press, 1983)

17 Ibid , chapter 18

- 18 Sarkesian, 263 Osgood 93 19 For a discussion of US policy avoiding a direct combat role for US forces in LIC, see Swain, 10
- 20 Rudo-ph C Barnes Jr Specia' Operations and The Law," Military Review (January 1986) 49-55
- 21 William V O Brien. Special Operations in the 1980s. American Moral Legal, Political, and Curtural Constraints. Special Operations in US Strategy 53
  - 22 Sarkes:an 280 FC 100-20

29 lbid

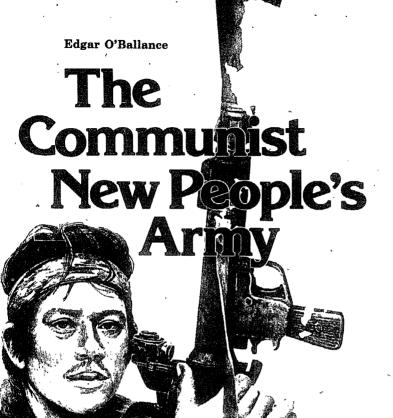
- 24 S.mpson, FC 100 -- 20 and chapters 3 and 4. Field Manual (FM) 41-10, Civil Affairs Operations. (Headquarters, Department of the Army, 17 December 1985
  - 25 Peter A Bond, In Search of LIC," Military Review (August 1986) 79

26 Ibid 27 See FC 100-20 and TRADOC PAM 525-34

- 28 William S. Cohen. A Defense Special Operations Agency. Fix for an SCF Capability That is Most Assured y Brokens Armed Forces Journal International (January 1986) 38
- 30 See Donald R. Morelli and Michael M. Ferguson. Low-Intensity Conflict An Operational Perspective Multary Review (November 1984) 12-15 also William P Johnson and Eugene M Russell, An Army Strategy and Structure Military Review (August 1986) 69
  - 31 Salkes an 274-87, Osgood 186
  - 32 Cohen, 39-40 Sarkesian, 282 33 Cchen 45
- 34 Ammendment to Goldwater Nichols Department of Defense Reorganization Act of 1986, (Public Law 99-433, October 1, 1986), Part B. Special Operations Matters, 10 US Code (USC) 167, 1311. For a summary of events leading up to the Act, see Michael Ganley Congress Creates New Unifies Command for SQF and New Cyvilian SQF Chief, "Armed Forces Journal In-
- ternational (November 1986) 20 35 10 USC 167(f), (g)
  - 36 10 USC 167(d)

  - 37 Sarkesian 286-87

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While much US attention is focused on Communist gains in Central America, this is certainly not the only region in the world facing such a threat. The Philippines have faced a continuing insurgent threat for many years, and at this time it is questionable whether they will be able to defeat it.

THE COMMUNIST New People's Army (NPA) in the Philippines has been fighting an insurgent guerrilla war against the central government for 18 years. It now has 24,000 armed fighters; operates more than 50 "guerrilla fronts" across the country; controls more than 18 percent of the rural villages having the support, willing or forced, of some five million peasants; has active "front" organizations in urban areas; and its "Sparrow" assassination squads are operating in the main cities.

The NPA is following the Maoist blueprint for Communist subversion: progression from conception to survival and expansion, through the stages of guerrilla, protracted and mobile warfare, to the ultimate conventional attack against government armed forces. It hopes this will be coupled with a mass uprising by a large sympathetic section of the population to seize national power. The NPA boasts it will reach parity with the Armed Forces of the Philippines (AFP) by 1990—the way things are going this could be possible.

Differences between pro-Soviet and pro-Chinese Filipino Communists within the defeated and shattered Partido Kommunistang Pilipinas (PKP) caused 10 Maoists, all middle-class intellectuals led by Jose Sison, to break away to form the "Communist Party of the Philippines" (CPP), in Tarlac Province on Luzon Island in December 1968. It was declared to be an "Organization of Disciples of Marxism, Leninism and the Thoughts of Mao Tse-tung."

#### The NPA

In March 1969, the CPP formed its military arm, the NPA, often referred to as the "BHB" (Bayan Hukbong Bayan). Reports in-

The art on the title page was based on a photograph by Robert McDonald of the Pacific Defence Reporter, recently killed covering the unfolding story in the Philippines. dicate the NPA began with "50 men, 36 pistols and some rifles." Bernabe Buscayno became its commander, adopting the codename "Commandante Dante." The NPA leadership was obsessed with secrecy, as the former PKP leaders had been targeted by government forces to be eliminated or captured. Many leaders took a nom de guerre—that of Sison being "Amado Guerrero."

The strategy of the NPA was to establish guerrilla fronts in remote areas. These small cells would eventually expand and develop into "liberated zones" on the larger Philippine islands. The Huk Insurgency of 1950–54 had been confined to Luzon Island and was containable. The NPA wanted a wide spread to stretch security forces to the utmost and strain their lines of communication. The Philippine archipelago consists of 7,107 islands, of which about 2,000 are inhabited. Large areas of mountain, forest and jungle in the interior of the main islands provide ideal terrain for guerrilla warfare.

The NPA began by using familiar Communist tactics of ostensibly siding with the poorer peasants; killing unpopular landlords, agents and government officials; extracting retribution and vengeance for peasant "wrongs"; protecting villages; and then imposing itself on groups of villages to indoctrinate and regiment the inhabitants. The main platform of the CPP-NPA was that of land reform, as rural peasants were badly exploited and struggled along at a very low level of subsistence. Some 90 percent of the cultivable land is owned by 10 percent of the people, either absentee landlords or large commercial undertakings that extract for themselves more than 80 percent of the produce. More than 60 percent of the national work force is engaged in agriculture, of which some two-thirds find only seasonal work, such as on the sugar cane plantations at harvest time.

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Of necessity due to land communication problems, the NPA adopted a policy of "democratic decentralization" for its guerrilla fronts. Eventually nine "regions" materialized, and the regional commanders and their committees (politburos) became virtually autonomous, something unusual in a Communist organization. This accounts for a varying quality, capability and amount of activity within them:

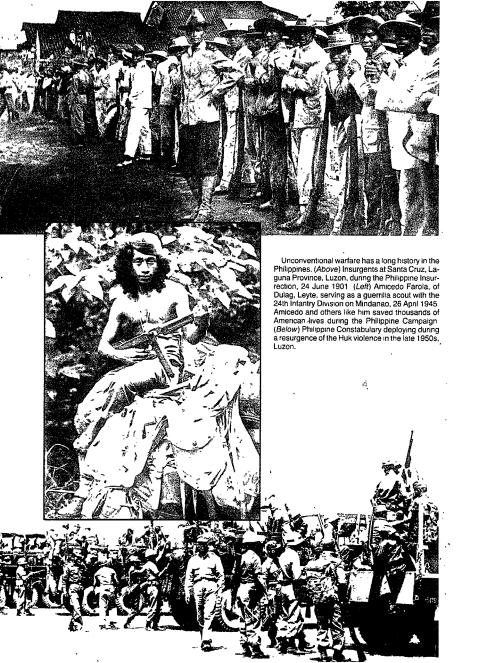
ocratic decentralization" for its guerrilla fronts. Eventually nine "regions" materialized, and the regional commanders and their committees (politburos) became virtually autonomous, something unusual in a Communist organization. This accounts for a varying quality, capability and amount of activity within them. The NPA organization was a copy of the usual Maoist army, with political officers dominating at all levels. The overall NPA maxim is "We fight on our own initiative, and then only if we are able to achieve superiority and surprise." So far it has generally followed Mao's four Golden Rules of Guerrilla Warfare \*The bases.

sic NPA field unit became the 20-man platoon for elementary hit-and-run tactics, ambushes and raids on small government posts.

The NPA looked initially towards China for inspiration and help. Mao did send small quantities of arms, mainly grenades and Chinese look-alike AK-47s, but these supplies ceased and contact was severed after Mao died in 1976 and the Philippine government opened diplomatic relations with China.

Some of the early NPA leaders and cadres had been trained in China. The NPA leadership seriously studied the Communist insurgencies in China, Vietnam and, later, that in Nicaragua. At first NPA expansion was slow. It was not until 1980 it could boast of 600 armed fighters, after which its strength increased more rapidly.

<sup>\*</sup>These are When the enemy advances—we retreat; When the enemy halts—we harass; When the enemy avoids battle—we attack; When the enemy retreats we follow



#### The AFP

The brunt of the Communist insurgency fell on the AFP. This force was small for the size of the country (114,834 square miles) and its population (39 million in 1972, increasing to 54.5 million in 1986). As the NPA insurgency developed, the army—only 16,000' strong in 1970—was increased to 50,000 by 1975 by voluntary recruitment. The paramilitary Philippine Constabulary (PC) also expanded, and part-time militias were raised for local static protection duties. In September 1972, President Ferdinand E. Marcos declared martial law.

The army carried out periodic futile crosscountry sweeps and negative cordon-andsearch operations to try to find and trap NPA guerrilla fronts. Soon, in frustration, it began "search and destroy" missions which were indiscriminately deadly and destructive.

The AFP had more success in capturing, or eliminating, the NPA leadership. In August 1976, 25 captured NPA leaders were displayed at a press conference. These included the NPA commander, Buscayno, which left, of the founders, only Sison at large. He was captured in November 1977.

#### NPA Expansion

As top NPA leaders were captured or killed, others were appointed in their place. Secrecy was tightened up, and political organizer teams (POTs), led by dedicated activists, toured villages. They agitated, indoctrinated, recruited, formed small liberated zones or no-go areas for government troops, administered them, collected "revolutionary taxes" and meted out punishments to informers and collaborators. As the territory under its domination increased, the NPA extracted "protection money" from plantations, factories and business concerns, sometimes sending representatives to examine accounts to decide how much to take without bankrupting them.

The period 1980–84 was one of expansion and success for the NPA, during which its strength rose to about 11,200 armed fighters. This expansion was due to NPA success in capturing government weapons, mainly M-16 rifles, grenades and a few light machineguns. The NPA always had more members than arms. In September 1984, a captured NPA political officer confirmed the chronic shortage of arms and said the NPA was about to move into the protracted stage of insurgent warfare.

A number of young women had joined the NPA, but few of them were armed fighters; most were given political, administrative or educational tasks. Also, a few priests, nuns and church lay workers joined the Communists in the field, disillusioned by the failure of the Marcos regime to improve social conditions. A large majority of Filipinos were at least nominal Roman Catholics. One priest, Father Roberto Salac, who joined the NPA in 1984, was later killed in an army attack on a National Democratic Front (NDF) meeting on Mindanao Island on 20 May 1987.

By 1984, the NPA claimed to control onefifth of the 41,615 rural villages in the country. The government admitted "Communist rebels" controlled 6 percent of them and had infiltrated into another 11 percent. Later, the government also admitted the NPA had penetrated "63 out of the 74 provinces" of the country. NPA guerrilla fronts had been established, not only in several parts of Luzon, but also on other large islands including Samar, Negros, Panay, Mindoro and Mindanao. On Mindanao, in Davao City (population about one million), the NPA began to operate its "armed city partisan units"-the Sparrow squads-of three or four men. So named because they flitted quickly from one place to another like sparrows, the squads carried out selective assassinations of government officials, police and military personnel.

Datu (Chief) Halun Amilussia with his tather's World War II rifle. The Datu boasts that his rifle has killed Japanese, Muslims during feuds, and soldiers from the Airhed Forces of the Philippines. The Datu's younger brother and father, who was awarded the Bronze Star for his work as a guerfilla during World War II, were killed in September 1985 when Philippine Army troops attacked his house.



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ment's military response was to blindly counter brutality with brutality.

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ambushed or attacked, and the practice of "salvaging" increased—the summary
execution in the field of insurgents, suspects and collaborators, and often
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Concurrent with the NPA insurgency was the long-running Moro (Muslim) insurrection in southwestern parts of the country. The Moro National Liberation Front (MNLF) demanded separatism and was supported by Colonel Moamar al-Gaddafi of Libya. Envious of the MNLF's plentiful supply of arms and manpower, on several occasions the NPA unsuccessfully sought to obtain some of its weapons and to collaborate with it. Both organizations operated on Mindanao Island and although there were occasional clashes and some friction, they mostly kept their distance from each other.

#### The Military Response

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tice of "salvaging" increased—the summary execution in the field of insurgents, suspects and collaborators, and often those who simply would not cooperate. Free-fire zones were created, and in many instances military discipline was wanting.

The large part-time militia—Civilian Home Defense Force (CHDF)—that had developed, especially lacked discipline and training. It was hated and feared by peasants and townspeople, as were the regular armed forces, which not only disregarded human rights, but, owing to low pay and poor rations, took from peasants when out on operations. Rural peasants came to regard the NPA as the lesser of two evils.

In 1983, the chief of staff, General Fabian S. Ver, centralized control over the 12 military regional commands, integrating the police and all auxiliary forces into them, based on the pattern used by the British in Malaya (1948–60). Joint security commit-

tees were established at all levels with representatives of the AFP, government departments and civilian agencies. This unified national resources and involved the civilian population. Also, an attempt was made to tighten up military discipline and accountability. By this time army strength had risen to about 60,000 men, the armed PC was about 43,000 strong and the CHDF had about 65,000 members. The growing intensity of the struggle can be judged from a chief-of-staff statement that "765 military personnel" had been killed in 1984 in NPA-related incidents.

#### A Change of Presidents

The US administration began to tire of supporting Marcos, not so much because of his despotic rule and corruption, although that rankled the American people, but because he was obviously not winning the war against the Communist insurgents. He had been trying to disguise this for sometime, to continue receiving US support. In January 1971, he tifted martial law, but this only benefited the insurgents. In August 1983, Benigno Aquino, a returning opposition politician, was murdered by a suspected rightwing military clique. Ver and others were arraigned, but eventually acquitted.

Political opposition leadership was taken on by Mrs. Corazon Aquino, widow of the murdered man, who stood against Marcos inthe presidential election in February 1986. Although Marcos was declared the winner. the result was disputed. A swell of opposition, the so-called "People Power," of demonstrations and rallies against Marcos developed, Defense Minister Juan Ponce Enrile and the acting chief of staff, General Fidel Ramos, deserted Marcos and swung support to Aquino. The US Central Intelligence Agency (CIA) whisked Marcos off to Hawaii: Aguino assumed the presidency, to be later confirmed in that office by a plebiscite; and a new constitution was produced.

Aquino dismissed a number of senior officers who preferred the old order to the new, and overage officers were progressively retired. Fearing that too much power remained in just a few hands, she broke down the centralized, "integrated" system of command and control of the security forces, devolving control of the PC back to the regions and the CHDF back to the provincial governors and town mayors.

This constitution, among other things, provided autonomy for the small "Cordilleras Group" of the NPA on Luzon. This group was led by Father Conrado Balweg, a Roman Catholic priest who had come to a private agreement with Aquino and had disregarded NPA policy.

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Later still, Aquino disbanded the hated CHDF, thus leaving many areas defenseless against Communist insurgent activity. This caused a host of impromptu militias and vigilante groups to spring up, especially on Mindanao. Such new militias were partisan, undisciplined and barely subject to local, let alone central, control. One such group on Mindanao was the Christian Alsa Masa (Rising Masses), which operated against the Moros as well as Communist insurgents. This introduced a disruptive

Christian versus Muslim factor into the equation. The Alsa Masa had to be quickly disbanded.

In July 1986, some military personnel joined Marcos' supporters in the "Manila Hotel Incident," when a 36-hour siege was brought to an end, without bloodshed, by Ramos. None of the military personnel were punished. Servicemen were allegedly involved in the so-called "Enrile Plot," in November, which was also aborted by Ramos. In January 1987, troops seized a television station in Manila and called for the return of Marcos. This 54-hour siege was also resolved by Ramos; but again no one was punished, except allegedly with 30 push-ups. Another anti-Aquino incident occurred in March, when an explosion occurred at a practice Passing-Out Parade at the National Military Academy, killing four people and injuring others. That week, 108 people were killed in 30 incidents, including 37 soldiers in two ambushes.

Meanwhile, during February and March 1986, Aquino released many political prisoners, including Sison, Buscayno and other top CPP-NPA leaders who did not return to the NPA, but remained in Manila. In May, they formed a legal political party, the "People Party" (PP), known also as the "Bayan," meaning people. Although openly disclaiming any knowledge of or contact with the NPA, the PP was a Communist "front" organization.

Sison linked forces with the KMU (initials of words meaning 1st May Movement), a radical trade union movement, strong in urban areas, with a claimed membership of half a million. The KMU was led by Rolando Olalia who, although not a Communist, controlled left-wing street mobs. Olalia was assassinated in November, at the time of the Enrile Plot, leaving Sison as the dominant personality in this large joint grouping. Rumors were rife of the activities of both rightwing and military "death squads."

#### The Quiet Revolution

The NPA had shunned the February presidential election, which had not pleased all sections of its scattered leadership. Many felt an opportunity to gain popularity in the removal of Marcos had been missed. The June 1986 issue of Ang Bayan, the NPA periodical, admitted the election boycott had been a blunder and a period of self-criticism and reorganization was in progress. This became known as the NPA's "Quiet Revolution." Eventually in the reshuffle, Benito Tiamzon, a former commander of guerrilla fronts on Samar Island, emerged as leader of the NPA. As yet little is known about him or of any reorganization.

A cease-fire between government security forces and the NPA (and MNLF) went into effect on 10 December 1986, to last for 60 days. NPA negotiators were nominated from the NDF, a coalition of left-wing groups formed by the NPA in 1974 as a "front" organization. The government offered an amnesty to rebels, but there were few takers. The NPA pulled out from the negotiations, which were sterile, on 30 January 1987, after the "Mandiola Bridge Incident," in which government troops fired on peasant-farmer demonstrators in Manila, killing 15 and injuring others.

Aquino has been in power for more than 18 months. She has many problems, but the people are beginning to expect results. Ostensibly, she remains a popular figure, but her main rival, ex-defense minister Enrile, now leading the Grand Alliance for Democracy, organizes demonstrations to erode her popularity, while the NDF works politically against her. Although much discussed, little has been done about land reform, a key issue. Here she has difficulties. She is of a land-owning family; many of her prominent supporters have vested interests; it would mean a radical upheaval of society; and would cost billions of dollars.

The Philippines are a major debtor coun-

The US naval base at Subic Bay in the Philippines: A portion of the Cubi Point Naval Air Station runway can be seen across the bay at the far right.



Another political issue is the two large US strategic bases in the Philippines—Subic Bay (home of the US 7th Fleet) and Clark Air Base (home of the US 13th Air Force). These are generally unpopular with Filipinos as they remind them of their colonial past. The NPA considers them to be dangerous footholds for a Vietnam-type US military intervention.

try. Often in desperation, poor landless peasants turn towards the Communists, but their desire is to own the land they work and not to become employees of massive state farms or members of collectives. A landless peasant may become a Communist for the time being, but give him an acre of land and he becomes a capitalist, anxious to expand his holding. This is a nettle that needs to be grasped.

#### **US** Bases

Another political issue is the two large US strategic bases in the Philippines—Subic Bay (home of the US 7th Fleet) and Clark Air Base (home of the US 13th Air Force). These are generally unpopular with Filipinos as they remind them of their colonial past. The NPA considers them to be dangerous footholds for a Vietnam-type US military intervention. There have been minor incidents around these two US bases, but none of a serious nature. (Four US citizens were killed in late October 1987—Ed.). The NPA appeared to think incidents would provide an excuse for US military intervention, not believing Aquino's statement that she

will not permit foreign combat troops on Philippine soil. As she relies upon the United States for moral support and financial and military assistance, she is unlikely to terminate these leases abruptly. Enrile, should he come to power, has said he is in favor of them remaining.

Much depends upon the AFP. If one subscribes to the theory that a 10-1 numerical superiority is necessary to defrat guerrilla insurgent forces, as the British had in Malava, the AFP is still much too small for the task. Its quoted strength is 114,000 (excluding the PC and former CHDF). This must mean the actual combat strength is below 90,000, indicating a 4-to-1 ratio. The AFP has lacked sufficient mobility and motivation and has incurred the hostility of the rural peasant body. In 1984, a US CIA assessment was that the AFP was deteriorating and within three years would no longer be able to defeat the Communist insurgents. This is three years ahead of the NPA's expectation.

On assuming power, Aquino renamed her security forces the "New Armed Forces of the Philippines" (NAFP) and declared they

must become more professional, be divorced from politics, reorganized and retrained. Dogged by its former indifferent reputation, this task is a gigantic one. A number of regular officers formed the "Reform the Army Movement" (RAM), also known as "We Belong," to sharpen professionalism. It was re-

The NPA is growing in strength, capability and influence in the island hinterlands and in large urban communities. It is still short of weapons and has recently solicited the Soviet Union and China for some. As yet, none seem to have been received. Should either of these Communist powers change their policy, the armed strength of the NPA would suddenly increase rapidly.

cently reported that about half the serving officers have joined RAM which, conversely, indicates that half have not yet done so.

Aquino cannot be absolutely sure of the loyalty of the NAFP—in mid-July 1987, yet another military plot was unearthed. Some elements are still politicized; the chief of staff seems unable to enforce discipline and punishment; and the "integrated" system of command and control with civilian involvement has not yet been reassembled to coordinate a united military-civilian national effort against the insurgents.

The NAFP badly needs more equipment, especially to give it better mobility, including small craft and boats for rapid interisland movement. However, the United States seems to be having second thoughts. The US Congress has reduced the military allocation to the Philippines for 1987, and promised US military material is slow to arrive. On Air Force Day (4 May), Aquino openly complained that the promised "120 US Huey helicopters" (10 for each military

region) had not been delivered despite several reminders.

Roads are generally unsafe for normal use, except by well-armed convoys with armored escorts, and lack of sufficient vehicles exacerbates this problem. NAFP units tend to lock themselves up in camps, garrisons and posts breeding a siege mentality. It also gives freedom of movement to insurgents over the countryside, especially at night.

A far more serious flaw is the NAFR's lack of aggression and motivation. At a military function in May, Aquino openly chided her army, complaining of its incompetent intelligence service and that "units are unable to strike swiftly when rebels are located!" Allegations abound of a reluctance of NAFP units to attack known NPA camps. The usual excuse by local commanders is the shortage of helicopters, vehicles, ammunition and petrol. Morale remains uncertain, and reports on the NAFP by the resident US Military Assistance Group are not encouraging.

Casualty figures vary, depending upon who puts them out, and tend to contradict each other. They are often inflated for effect, but by consensus reckoning, probably more than 3,000 people were killed in NPA-related incidents in 1986.

#### **NPA Progress**

The NPA is growing in strength, capability and influence in the island hinterlands and in large urban communities. It is still short of weapons and has recently solicited the Soviet Union and China for some. As yet, none seem to have been received. Should either of these Communist powers change their policy, the armed strength of the NPA would suddenly increase rapidly.

Field tactics remain elementary, still based mainly on the 20-man platoon used extensively for ambushes on roads. Company-size formations of three or more platoons are assembled for larger operations and raids on provincial towns. As yet, there seems to be no evidence of larger formations in action, indicating the NPA is still in its protracted warfare stage. It will not be ready for awhile to embark upon the next stage, mobile warfare, when it would have to challenge NAFP brigades. To achieve its boast, the NPA has three more years to form and train its battalions and brigades.

Communist POT teams still tour villages in marginal areas preaching and punishing. In the cities, Sparrow squads extract a toll of death, averaging in Manila, for example, aboût a dozen killings à month to destabilize the government and demoralize security forces. NPA morale is high and during 18 years of insurgent war, it has developed cohesion. Constant indoctrination of members and the elimination of those who do not conform have generated a collective sense of dedication, purpose and conviction that ultimate victory will soon be achieved. Remarkably few NPA "returnees" have responded to government amnesty offers and blandishments.

In the Philippines the NPA seems to be slowly winning, and the NAFP slowly losing the insurgent struggle. In Manila, there is government hesitation and indecision. In late March 1987, Aquino admitted her "peace policy" had failed and ordered the NAFP to resume operations against the NPA. Right-wing, and perhaps military, death squads are in spasmodic action and one allegedly shot and wounded Buscayno in Manila on 9 June.

In June 1987, Aquino declared a "people's war against terrorists, of both the Left and the Right" and is said to be in favor of raising a citizen army on the Israeli model. The Israeli army has been successful against external enemies, while the NPA is an internal foe that is dividing the nation. She seems to overlook the effect of Communist indoctrination on a section of the people and, in any case, such a project would take time to implement. Time is a vital factor.

The NPA, while still short of weapons and with its mobility in strength distinctly limited, remains vulnerable to a well-equipped and well-trained NAFP that is mobile and hard-hitting. Somehow the NAFP must be quickly transformed into a professional military body with vigor and aggression breathed into it. It needs a nonpolitical, competent, dynamic military commander, able to inspire and lead it. Aquino also desperately needs an effective intelligence service to assess and monitor the NPA. Assuming she retains power, she must gain the support and respect of a major part of the nation. What better way to start than with land reform, the Communist "Achilles heel"?

The United States must not repeat its mistake of trying to spearhead the war against the insurgents, as it did against the Vietcong in Vietnam for the South Vietnamese. Filipinos must fight their own war and win it. They need Western financial help and materiel aid, but not Western soldiers. To the Communist NPA, these would be classed as foreign invaders. A distinct Vietnam-type danger is developing in the Philippines, and 1990 is fast approaching. A Communist gain of the Philippines would strengthen the movement internationally and would be a strategic blow to the United States and its Western allies.

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# Sustainment Doctrine

## Not Keeping Pace With AirLand Battle Doctrine

Lieutenant Colonel Charles W. McInnis, US Army

The US Army's AirLand Battle doctrine is maturing. The skeletal concepts contained in earlier editions of US Army Field Manual (FM) 100—5, Operations, have been broadened in the 1986 version, and AirLand Battle terminology is beginning to find its way into the soldier's vocabulary. Unfortunately, according to this author, doctrine for sustainment of AirLand Battle has not kept pace.



LL AROUND the US Army community, people are "discovering" that the ability of Army forces to sustain themselves in combat has been degraded. Upon discovering this startling fact, they start trying to "pin the rose" on someone or some- thing as the culprit in the misadventure. Variously, the blame has been laid at the door of the misguided, logistically ignorant killers who run the Army; the poorly informed, parochially motivated Congress; the development of nuclear weapons; and Robert McNamara's zero-based budgeting. An article in this publication even traced the decline back to the elimination of the Technical Services.

If Army generals are "logistically ignorant"; if intelligent officers can spend 30 vears in the service and reach the very pinnacle of the military profession without having acquired a due regard for sustainment of forces in the field; if the congressmen who appropriate funds for the military do not understand the value of sustainment to an army in time of war, whose fault is it? For that matter, why is it a commander, who willingly spends two hours discussing whether the engineers in the covering force should be attached or under operational control (OPCON), is not willing to spend five minutes discussing arrangements for sustaining the force?

As we decry this sad turn of events and look for a culprit, those of us in the sustainment business must take an agonizing look inward. We are the people who were (and are) responsible for ensuring the sustainability of the force. This responsibility can be neither delegated nor blamelessly abdicated. The fact is, units or equipment not contributing directly to the successful outcome of the battle do not survive in today's constrained, "more bang for the buck" Army. Commanders devote their time to those things they perceive as having the greatest and most immediate effect on the

outcome of the battle.

Have we, perhaps, distanced ourselves from the battle outcome too far in our sustainment doctrine and organizational structure? Are we "team players" in the Army's preparation for the next war? Answering these questions does not require a journey back through history. We need only to look

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at doctrinal developments in the most recent editions of US Army Field Manual (FM) 100—5, Operations, to get the answers.

The basic building blocks for sustainment doctrine are in place. The sustainment imperatives are clearly stated in chapter 4, FM 100—5, and sustainment receives proper emphasis in the manual. What has not occurred, however, is the "popularization" of the doctrine within the combat service support (CSS) community; the incorporation of AirLand Battle into the sustainment lexicon

Before I get into trouble with my fellow sustainers, let me state for the record that many logisticians and other CSS officers fully understand AirLand Battle doctrine and are leaving no stone unturned in the effort to fully integrate sustainment with maneuver. The US Army Logistics Center, Fort Lee, Virginia, is at the forefront of doctrine development. However, there remains much to be done, and there are too few involved in the effort.

All of us, sustainer and fighter alike,

must rid ourselves of the "business as usual" mentality regarding sustainment of Air-Land Battle. This line of thinking maintains that a change of maneuver doctrine has no impact on how we supply, maintain or transport the force. After all, a truck is still a truck and a forklift is still a forklift. How can'a change in doctrine altering the manner in which people and material are employed after delivery affect the unit which delivered them?

It is time to recognize that AirLand Battle doctrine substantially changed the way the US Army fights, and AirLand Battle sustainment will be vastly different than anything encountered on previous battlefields. Sustainment doctrine must change to the same extent and for the same reasons that maneuver doctrine changed. This means there can be no "business as usual," sacrosanct aspects of the doctrine. The tenets of AirLand Battle apply to all forces on the battlefield, not just to maneuver forces. The challenge to writers of sustainment doctrine is to "get sustainment into the battle."

The first order of business must be to establish and make credible the fact that there is such a thing as "sustainment doctrine," as opposed to the collection of procedures and organizational diagrams that we previously called doctrine and promulgated in field manuals. Currently, most sustainment manuals, regardless of which CSS discipline is involved, read like the organization and functions manual of an administrative organization.

For example, the preface of FM 63—3J, Combat Service Support Operations, Corps, states: "This manual describes how the Army corps employs combat service support to sustain combat units and weapons systems." However, the manual devotes at least a part of 39 pages to organizational "wiring diagrams," contains 26 charts with arrows running back and forth between acropyms indicating "flows," and devotes 27

pages (one full chapter) to a delineation of the responsibilities and functions of the corps support command (COSCOM) staff.

What it does not contain is a chapter on how AirLand Battle tenets apply to a COS-COM. Similarly, there is no discussion of agility, initiative, depth or synchronization within any of the COSCOM staff officers' functions. In fact, AirLand Battle tenets are mentioned only very generally as buzzwords that apply to maneuver units. This is not to question the need for FMs containing procedures and flows-rather to question that those manuals constitute complete sustainment doctrine. The current move toward integration of sustainment into tactical manuals is a first (and important) step. FM 71—3, Armored and Mechanized Brigade Operations, is the best extant example of integrated doctrine. Other integrated manuals are in the works; however, there will still be a need for COSCOM and division support command (DISCOM) manuals, and these must be given a battle focus.

An example of the dysfunctional fanguage that must be eliminated is contained on page 2-1, FM 63—2—2; Combat Service Support Operations-Armored, Mechanized and Motorized Infantry Divisions. "The effective provision of CSS for the division commander's tactical plan is a continuing and vital function of the division support command commander, staff, and subordinate commanders." Language such as this is an example of how we sustainers have isolated ourselves from the battle. The effective provision of CSS to the battle is the only reason for the existence of the DISCOM!

The plan we are to support is not "the commander's tactical plan," it is the plan for employing all resources to achieve success and that makes it as much a sustainment plan as a tactical plan. Page 2-3, FM 63—2—2, states, "the CSS plan is developed concurrently with the tactical plan." The thought behind this quote is a good one: one cannot

develop a tactical plan and then, later, determine if the plan is supportable. The problem is, this implies that the commander has no single plan for applying resources to the battle. Rather, he has two separate plans, and the best hope is that they are well coordinated. Do we really have (or want) a system which produces separate plans: one for the application of howitzers to the battle and one for the provision of howitzer ammunition?

CSS manuals contain frequent references to the maneuver commander, as in "the maneuver commander's intent," as if this maneuver commander is a slightly eccentric, but sort of likeable neighbor whom we would like to help out if we could. Why the distinction between "maneuver commander" and "commander" or between "supported force" and "supporting force"? Does not the corps commander command the COSCOM as directly and as surely as he commands the divisions? Does not "the supported force" plus "the supporting force" really equal "the force"? The isolation of sustainment units from the battle, fostered by such language, incorrectly implies the battle can be fought without CSS.

Sustainment doctrine has not incorporated AirLand Battle tenets as has maneuver doctrine, and sustainment imperatives receive little more treatment than a listing in CSS manuals. We must get beyond paying lip service to AirLand Battle doctrine. The sustainment imperatives must be recognized for what they are—a logical way to tie sustainment to AirLand Battle tenets and, through the tenets, to the successful outcome of the battle. Then we can begin to develop an applicable sustainment doctrine which conforms to overall doctrine.

#### Agility

Writers of sustainment doctrine do not treat agility as a required characteristic of the sustainment system, but as a character-



All of us, sustainer and fighter alike, must rid ourselves of the "business as usual" mentality regarding sustainment of AirLand Battle. This line of thinking maintains that a change of maneuver doctrine has no impact on how we supply, maintain or transport the force.

istic of the maneuver force to be supported. While it is not currently feasible to think that a COSCOM can be as physically agile as an armored division, the physical dimension of the tenet is but a small part of its overall meaning. Sustainers are agile in the true sense of the word. History is replete with examples of the unforeseen and seemingly impossible being rapidly accomplished. However, innovation is no substitute for doctrine.

What is needed is a discussion in doctrinal publications of how the sustainment system consisting of tons of supplies and material; heavy, slow moving vehicles; and maintenance facilities full of disabled vehicles, can be made more agile. There must be something the COSCOM Materiel Management Center, the COSCOM assistant chief of staff, materiel, and the other principal players in the sustainment arena can and should do to increase the agility of the force. We must analyze the duties of these important sustainers in view of the agility requirement and address the results of that analyse.

The commander has no single plan for applying resources to the battle. Rather, he has two separate plans, and the best hope is that they are well coordinated. Do we really have (or want) a system which produces separate plans: one for the application of howitzers to the battle and one for the provision of howitzer ammunition?

sis in our doctrinal publications. Agility must be addressed in both contexts—the agility of the COSCOM from the perspective of the COSCOM commander and staff, and the impact of the COSCOM on the agility of the corps.

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#### **Synchronization**

FM 100—5 states, "In the end, the product of effective synchronization is maximum economy of force, with every resource used when and where it will make the greatest contribution to success and nothing wasted or overlooked." No reasonable interpretation of this statement could lead to an understanding that it refers only to the synchronization of supporting artillery with ground maneuver or Air Force assets with Army aircraft.

The applicability of this tenet to the DIS-COM, COSCOM, theater army area command (TAACOM) and all other echelons and levels of sustainment should be obvious. Yet there is no discussion in the doctrinal publications of these organizations of how synchrönization is, or should be, achieved. As with agility, there are two aspects of this tenet. when applied to the sustainment system:

- How to best synchronize CSS with the other elements of combat power to achieve success.
  - How to synchronize supply with trans-

portation, maintenance with supply and so forth.

CSS doctrinal publications emphasize the need for coordination between the staff elements and units that provide the various components of sustainment. However, FM 100-5 makes it abundantly clear that coordination does not equal, or necessarily result in, synchronization, "... synchronization may and usually will require explicit coordination among the various units and activities participating in any operation. By itself, however, such coordination is no guarantee of synchronization. . . . " FM 100-5 also states. "Some of the activities which must be synchronized in an operation ... must occur before the decisive moment. and may take place at locations far distant from each other."

What activity requires more synchronization than sustainment? The arrival, intheater, of ships loaded in the United States must be synchronized with the availability of port capacity, terminal units, line-haul transportation assets and, most important, with the requirements of the force. Currently, CSS manuals treat this as an internal coordination problem. This is more than a matter of semantics; it strikes at the very heart of the issue. Synchronization of the battle is **commander's** business and that includes CSS! We must all speak the same doctrinal language.

#### Depth

Depth receives more treatment than any of the other tenets in CSS publications, but it is a very narrow and shallow treatment. Discussion of depth is limited to the participation of CSS units in rear battle and the difficulties in supporting the deep battle, especially if forces are sent across the forward line of own troops (FLOT). The broader implications are largely ignored.

How does a COSCOM commander achieve depth in his operations? How does

the COSCOM contribute to the depth of the force? When applied to the COSCOM, the term "depth" is similiar to terms traditionally used by CSS planners and operators. such as robustness, redundancy and resiliency. Since CSS units, like artillery, are never in reserve and have no idle capacity. even these terms have fallen into disuse. CSS doctrine must begin to address how units are deployed and employed to provide depth to sustainment operations and to the force. Depth should also have application to the manner in which materiel stocks are positioned, how much of available stocks are kept in reserve for future operations, the establishment of safety levels and so forth. All these considerations are discussed in current manuals, but not in a cohesive fashion and not under the heading of depth.

#### Initiative

Initiative is not new with AirLand Battle. but it has achieved a new importance and emphasis. Sustainers have never had a shortage of initiative. The "Red Ball Express" of World War II is an example of logisticians making things work. CSS manuals have not ignored this tenet. In fact, it is discussed well in several manuals, most notably in the draft of FM 100-10, Combat Service Support. However, there is no discussion of how it might be applied. The discussion often leaves the impression initiative is the concern of senior commanders. most often in maneuver units, and deals almost exclusively with "do what is necessary without waiting for orders." That is certainly a major component of the tenet.

In the larger sense, initiative means shaping the battlefield, setting the conditions for combat, as opposed to accepting what fate and the enemy hand you. In this sense, prepositioning supplies, the establishment of sustainment priorities and innovative methods of delivering barrier materials to the covering force, could all be

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ways of assisting the force in gaining the initiative. Every unit in the COSCOM could well have a role to play. The COSCOM manual must discuss the tenet in regard to the sustainment system and provide guidance on how it can be achieved.

The sustainment imperatives in chapter 4, FM 100—5 provide a framework on which to build a legitimate body of sustainment doctrine. Every CSS manual published subsequent to this should have been founded on these imperatives and how they are achieved and enhanced by CSS unit commanders and planners. However, even the most recently published manuals still do not connect sustainment with the battle



"The ASG command structure must acknowledge its role in sustainment as the primary reason for its deployment on the battlefield." Sustainment of battle is not the primary reason for the deployment of ASGs; it is the only reason!"

through use of the imperatives.

FM 54-50, Area Support Group (ASG), recently approved for publication, has the obligatory section in which AirLand Battle tenets are listed, along with an abbreviated copy of the FM 100-5 discussion of their meanings. However, the tenets are not used as a foundation for the subsequent discussion of the ASG organization, employment or operations, and there is no mention of the sustainment imperatives. The manual treats the ASG employment as if it were the function of an equation. "One ASG is employed to command and control three to seven battalions or battalion equivalents. . . . Work-load levels and the geographic dispersal of units also influence the decision to deploy ASGs." This certainly does not constitute a very direct battle tie-in!

The manual does "throw a bone" at the

connection of the ASGs to the battle. "The basic missions of the ASG are instrumental in the overall sustainment of theater operations. The ASG command structure must acknowledge its role in sustainment as the primary reason for its deployment on the battlefield." Sustainment of battle is not the primary reason for the deployment of ASGs; it is the only reason! Further, ASGs should be employed in the numbers and locations required to best ensure the success of the commander's plan. Probably, none of us doubts that this will be the case. Why do we not say so in our doctrine?

FM 100—10 (currently nearing publication) will be a breakthrough manual for sustainment doctrine writers. It contains a discussion of AirLand Battle tenets and the sustainment imperatives. It does not, however, link the two. In fact, in the same chapter as the discussion of the tenets and imperatives, is a section titled "Organization for Sustainment." This section discusses how CSS elements are organized by task, echelon and area. There is no discussion of how this organization does, or could, provide depth to the force. Similiarly, there is no discussion of the imperatives of integration, continuity and responsiveness, even though such an organizational laydown appears to foster these characteristics.

Further linkage of the imperatives and the tenets is one of the more difficult tasks facing sustainment doctrine writers. The surface connection between sustainment, which is continuous, integrated and responsive, and the commander's ability to maintain the initiative, is clear. It is not clear how all these factors intermix with organizational laydown, interior versus exterior lines of communication, maintenance priorities and so forth, much less with the need for synchronization, depth or agility.

The full ramifications of the synergism of these concepts will undoubtedly not be encapsulated in sustainment doctrine for a long time. The sustainment community has made an excellent start in FM 100—10 and in integrating sustainment in FM 71—3. Every writer of sustainment doctrine, whether the doctrine is integrated into tactical manuals or is in CSS specific manuals, must further this effort with every new publication and every revision of old publications. The result will be a legitimate, applicable body of sustainment doctrine.

This discussion is more than a matter of

semantics or of "word smithing." There is a tie-in between the lack of credible sustainment doctrine and longstanding Army problems. The tie-in may be obscure and indirect, but it is nonetheless substantial. It deals with the gut-level belief of many commanders and staff officers that "sustainment is important and we need someone to look after that for us so we can concentrate on the really important things." To counter this belief, and the resultant isolation of sustainment from the battle, sustainment doctrine must be couched in AirLand Battle terminology, anchored to the tenets of Air-Land Battle and inseparable from the other elements of combat power.

FM 100—10, when published, will be a start toward resolving the doctrinal problems this article attempts to address. Chapter one says, in effect, that the forces' manning, arming, fueling, fixing and force movement requirements have not changed, although, "how" to do these has changed to reflect more responsive and aggressive support. Both support principles and internal support organizations have evolved with the development of AirLand Battle doctrine.

The task now facing CSS sustainment writers is to build on this foundation and incorporate this battle focus in all future CSS doctrinal publications. Once established, this doctrine will increase the chances that CSS will be viewed as an important combat multiplier and, as a result, CSS units may have a better chance of surviving the budget cutter's axe.

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THE US ARMY and its critics are currently engaged in a heated debate concerning the ratio of supporting forces versus supported forces. There are several "hot" topics involved in this debate. The appropriate troop strength and the Reserve: Active strength ratio are closely related topics figuring into discussions. Another topic is whether or not the Soviets will only be deterred by a large number of combat units, regardless of their supportability. Even current materiel acquisition practices and how they affect support are factors.

As recently as January 1986, the Congressional Budget Office and at least one senior Army officer have publicly conceded the Army is unsure whether or not sufficient Reserve forces exist to successfully support combat operations. The Total Force Army is approaching a 50-50 mix of Active and Reserve forces.

Approximately 70 percent of the III Corps combat service support (CSS) units, which will support the corps in time of war, are Reserve units. CSS units provide logistic support to combat units in the form of supply and services. Equipment, personnel and training are all significant factors in preparing a unit for deployment. "However diluted by improvisation, logistics is essentially a planned and organized activity."

Historically, the US Army has been allowed sufficient time to mount its operations and develop the CSS capabilities necessary to adequately support combat operations. In response to questions asked in 1935 by the then chief of staff, General Malin Craig, concerning current mobilization plans, the G1 (personnel) and G4 (logistics) officers were brutally honest. The G1 stated:

- (1) The manpower contemplated to be mobilized during the first month . . . could not be obtained.
- (2) Plans were inadequate... for processing into units the men procured by voluntary enlistment.

Approximately 70 percent of the III Corps combat service support (CSS) units, which will support the corps in time of war, are Reserve units. CSS units provide logistic support to combat units in the form of supply and services. Equipment, personnel and training are all significant factors in preparing a unit for deployment.

- (3) All corps area commanders had not solved the problems involved in their service commands.
- (4) The mobilization plans of the various echelons were incomplete.
- (5) Had mobilization occurred at that time [1 February 1936], the objectives set for the first thirty days of mobilization could not have been achieved.3

The G4 added:

- a. It may be concluded that when all mobilization plans have been completed . . . the forces to be mobilized during the first thirty days . . . :
- (1) Can be fed, clothed, transported and sheltered in a reasonably satisfactory manner.
- (2) Can be supplied with the required equipment from storage or procurement except for airplanes, tanks, combat cars, scout cars, antiaircraft guns, 50 caliber machineguns, pontoon equipment and possibly organizational motor equipment. There will be shortages in . . . gas masks, radio and telephone equipment, and equipment for medical regiments.

Logistic lead times required during World War II were 18–24 months. If preparations had not been made prior to our declaration of war, the character and eventual outcome of the war could have been drastically different. For example, the decision to mount Operation Torch, the invasion of North Africa,

was made in July 1942. It was conducted in November 1942. Without the benefit of previous preparations initiated, in part, because of the analysis of Craig's staff, it might not have taken place prior to 1944.

During World War II, at least, the logistic lead time was far longer than the planning

The current estimate is that only 31 percent of all ammunition plants designated to provide ammunition for the next war would require no extensive repair prior to beginning production. A planned-for goal of just 30 days' ammunition war reserves for all of NATO, to be stockpiled by 1983, slipped more than two years, according to the Senate Armed Services Committee.

time. This scheduling conflict was resolved by developing resource pools ahead of time. These resource pools included not only deployable units, but essential items of supply, such as fuel and ammunition. Despite all prior planning, it took approximately two and one-half years for ammunition production to meet all requirements, finally meeting demands in mid-1943.7

If the lessons learned during World War II were properly applied today, there would be sufficient manpower reserves and ammunition, fuel and materiel on-hand, or stockpiled, to ensure adequate supply and support until production lines were fully operational. The increased complexity of production and the theory that the next war will begin with short-to-no notice have complicated matters somewhat. Acceptance of this theory should, obviously, result in increases of all types of reserves. Congress and the Department of Defense have, instead, allowed a relatively minor increase in the size of the Active force and operational re-

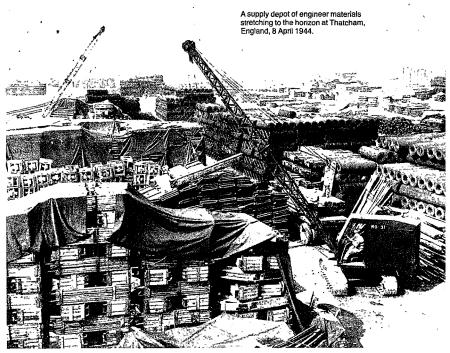
source stockpiles, while retaining insufficient reserves of both.

Kenneth J. Coffey states "... the role of the reserves is being severely limited by equipment, supply, war reserves, and strategic mobility weaknesses." Secretary of Defense Harold Brown wrote in 1980, "We have economized (some would say skimped) on the nuts and bolts needed to sustain a nonnuclear conflict in a particular theater for more than a relatively short time." 9

The current estimate is that only 31 percent of all ammunition plants designated to provide ammunition for the next war would require no extensive repair prior to beginning production.10 A planned-for goal of just 30 days' ammunition war reserves for all of NATO, to be stockpiled by 1983, slipped more than two years, according to the Senate Armed Services Committee.11 Current war reserves of petroleum products would be consumed quickly, once combat was initiated.12 "Given previous U.S. attention to short-war scenarios, the United States has neglected important elements of port and transit security after the outbreak of war. . . . The Soviet naval mine warfare potential has gone largely uncountered."13 Consequently, deployed forces' resources may well be reduced to their inadequate operational reserves and pre-positioned CSS units oncethe battle begins, if not sooner.

Lieutenant Colonel John M. Vann's August 1987 Military Review article, titled "The Forgotten Forces," clearly defines the shift in manpower from CSS forces to combat forces in the Active force. His title refers to those forces identified as required, but existing only on paper. These units are "assigned" to corps, ostensibly as part of their go-to-war forces.

Obviously, at the strategic and theater levels, there are significant logistic problems. What of actual unit capabilities, assuming that sufficient war reserves of critical supplies exist? AirLand Battle doctrine



During World War II, at least, the logistic lead time was far longer than the planning time. This scheduling conflict was resolved by developing resource pools ahead of time. . . . Despite all prior planning, it took approximately two and one-half years for ammunition production to meet all requirements.

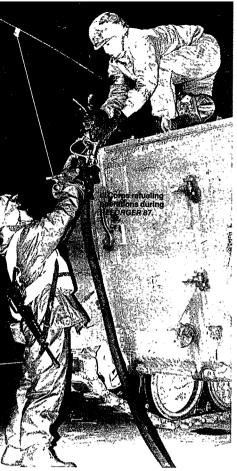
currently espouses the absolute need for deep attacks by indirect and direct fires. This doctrine increases the complexity of meeting consumption rates of necessary supplies and services, especially when considering launching ground forces in the deep attack. To better support this doctrine, lighter ammunition, more easily maintained vehicles, alternative energy sources and less-vulnerable CSS systems have been proposed, among other suggestions, as importative steps to improving support. 19

One analysis examined a single division's requirements to execute a seven-day deep

attack. It found that not only the division's transportation units, but also the parent corps' and theater's ground transportation units would be required to support it. It suggests that such a force would have to be considered a "throwaway" unit because it simply could not be adequately supported for seven days. <sup>15</sup> Such analyses have led to the conclusion that AirLand Battle doctrine is the source of the supportability problem.

## III Corps

At Fort Hood, Texas, the commanding general tasked the 13th Support Command



It was found that the III Corps CSS structure was incapable of providing adequate support for even the relatively small percentage of combat forces, before or after combat was initiated. CSS units are not assigned in sufficient numbers or adequately designed and are not effectively scheduled for deployment, given the survey results.

to determine what was the actual, current CSS structure's readiness. The resultant study concerned itself with examining the III Corps' ability to support itself and engage in sustained combat given its current CSS forces' capabilities and deployment schedule. The findings of this study and its examination of alternatives would enable III Corps logistic planners to better understand the requirements and capabilities of their assigned units. The methodology developed would provide a basis for contingency planning and mission analysis, heretofore lacking, at the corps level.

The corps commander's instructions specified that all assumptions made were to be neither optimistic nor pessimistic, but midrange values. Every CSS unit in the III Corps' CAPSTONE (Reserve Component) trace, with the exception of adjutant general and psychological operations units, was contacted and surveyed for critical military occupational specialties (MOSs) and equipment. Perfect distribution and unlimited supplies, except Class VII (major end items), were assumed. Requirement figures for the entire force were based upon authorized strengths, while capabilities were figured upon actual CSS unit strengths. Reserve units were assumed to be able to deploy at their assigned strengths.

The scenario used did not include a deep attack, but instead, a fairly standard offensive action. The III Corps' time-phased force deployment list was used to determine which units were in-theater at the time of the scenario. By design, the timing of the scenario was such that more than 90 percent of the CSS units were in-theater compared to only 60 percent of combat and combat support units.

Corps' requirements were generated with planning factors extracted from Student Text (ST) 101–2, *Planning Factors*, a US Army Command and General Staff College text, and by three models. The models were



AirLand Battle doctrine currently espouses the absolute need for deep attacks by indirect and direct fires. This doctrine increases the complexity of meeting consumption rates of necessary supplies and services, especially when considering launching ground forces in the deep attack.

used for specific areas' capabilities and requirements. Two models analyzed the maintenance situation, and the third generated casualty and hospital data. In general terms, the capabilities and requirements of the III Corps were analyzed for every class of supply, water, maintenance, transportation, graves registration and hospitals.

It was found that the III Corps CSS structure was incapable of providing adequate support for even the relatively small percentage of combat forces, before or after combat was initiated. CSS units are not assigned in sufficient numbers or adequately designed and are not effectively scheduled for deployment, given the survey results. This was the case for every area and type of unit examined, except transportation. Only the transportation units even approached a

level of capability sufficient to meet the III Corps(-) requirements. The design issue does not refer to organization, rather it addresses the number and kinds of MOSs and equipment authorized.

Maintenance units, for example, are currently configured on the basis of requirements, which include reliability, availability and maintainability (RAM) data and combat damage maintenance requirements. This study distributed the combat damage exactly as the RAM requirements were and found certain MOSs to be completely overloaded.

Only one nondivisional maintenance unit, out of all such units in the CAPSTONE trace, was found to possess equipment allowing it to maintain M1 Abrams, M2/3 Bradleys or the Multiple-Launch Rocket

System (MLRS). There are no funds for the purchase of such equipment for the Reserve units apparently, despite the establishment of training centers and programs for the same, specifically targeted for Reserve soldiers.

Because of time constraints, the sensitivity analysis was not extensive, and adequate solutions to the problems were not found. Because of the classified nature of the study, more specific results cannot be disclosed here. An associated finding was made, though, that the tools and data currently available for a study at this level are sadly lacking. There are efforts underway to simulate combat damage maintenance requirements by the Logistics Center, Fort Lee, Virginia.

## A Short Bridge, Getting Shorter

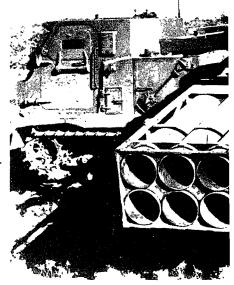
Two major issues are involved in strategic logistic military planning for combat:

- Resources must be available to supply these units once deployed.
- Sufficient numbers of CSS units must be deployable in terms of equipment, personnel and training levels.

During World War II, concerted efforts to plan for logistical support began well before direct US military involvement did. Given the increasingly complex equipment being fielded today and the current status of US mobilization plans, it seems unlikely these lead times have been reduced.

In 1983, the undersecretary of defense for policy, Dr. Fred Iklé, described current industrial preparedness as a "short bridge": "One is reminded of a bridge builder whose bridge fails to span the river. When asked whether he does not need additional timbers to complete the job, he answers that none are needed since he is planning for a 'short bridge'." 16

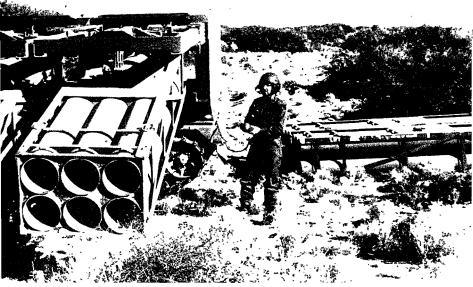
As the majority of the Total Army's CSS units are Reserve units, attention must be paid to their actual readiness. "Reserve



A MLRS crewman uses a portable control device to unload two six-pack rocket launch pods. The MLRS can be loaded and unloaded by a single crewman, even though a crew of three can do it faster.

equipment is traditionally inferior to that of the Active forces: marginal to obsolete . . . it is inadequate in both quantity and quality for rapid mobilization." "Pentagon planning routinely assumes about 70% of reservists summoned show up on time . . . mobilization exercises conducted over the past decade, however, have pointed to much lower results." Yet, here is where most of the CSS units are found.

In 1981, the General Accounting Office reported to Congress on its analysis of 24 major weapon systems under development. Six of these systems had demonstrated RAM deficiencies, seven had serious vulnerability and survivability problems, and four were being developed despite built-in logistic support problems. To Some of these systems have since been fielded.



Only one nondivisional maintenance unit, out of all such units in the CAPSTONE trace, was found to possess equipment allowing it to maintain M1 Abrams, M2/3 Bradleys or the Multiple-Launch Rocket System (MLRS). There are no funds for the purchase of such equipment for the Reserve units apparently, despite the establishment of training centers and programs for the same, specifically targeted for Reserve soldiers.

## It Is Not AirLand Battle

Two analyses appearing in this publication have faulted the deep attack doctrine as the root of the CSS problem:

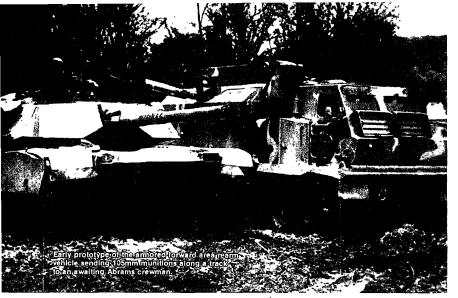
"The Army must be realistic about the deep attack doctrine and its implementation. We must begin to prepare now in terms of materiel, doctrine and training so that, if implemented ... it] does not become a tragic and embarrassing sacrifice of the deep strike force because we failed to plan, prepare and support it logistically."<sup>20</sup>

"The concept of a division-size force . . . driving rapidly to a depth of 150 kilometers is truly appealing. . . . But the US Army is neither structured nor manned to adequate-

ly support this concept."21

The III Corps' study has shown that there simply are not enough people in the right places with the right equipment. Vann has suggested centralizing the responsibility for logistics at the Secretary of Defense level. Before taking this approach, however, it is important to understand why AirLand Battle is being singled out. Quite simply, it is because of the fact that planners at the Department of the Army (DA) level use one set of planning factors and assumptions, and the rest of the Army is fending for itself.

At DA level, planning already tends to be done with assumptions of 100 percent authorized strengths and planning factors



[Before] centralizing the responsibility for logistics at the Secretary of Defense level. . . . it is important to understand why AirLand Battle is being singled out. Quite simply, it is because of the fact that planners at the Department of the Army (DA) level use one set of planning factors and assumptions, and the rest of the Army is fending for itself.

based upon theater-level averages. Lower-level headquarters, and even some US Army Training and Doctrine Command (TRADOC) schools, are using ST 101–2; for lack of any current field manual. Consequently, comparisons of the results demonstrate gross discrepancies. Some DA-level studies have actually "demonstrated" a superfluity of CSS capabilities, while brigade and division, and now corps, analyses show extreme deficiencies.

It follows then, that the lack of a single, coordinated source of planning factors and models is a very real handicap to planners and staffs at all levels. Ideally, both the factors and models included in such a source would be modular. With a modular-designed data source, the support platoon

leader, the DCSLOG (deputy chief of staff, logistics) analyst and any planner in between would be able to verify one another's data and assumptions. Every intervening headquarters would be able to use the results of their subordinate headquarter's findings. Corps and theater headquarters would be able to interject actual requirements and reserve capabilities under a standardized approach and conduct far more accurate analyses.

This proposal should be considered as a modification to Vann's centralization proposal. The dissemination of sufficient statistical tools would allow all staffs to provide actual data and analyses similar to that of III Corps'. Continuity such as this can only be provided by a single source of planning

factors and models, Once corps commanders can demonstrate their actual CSS shortfalls to their theater commanders, changes could then be pushed and pulled. Without a central source for all planners and at least DA-level interest, there will continue to be discontinuity between the levels of planning.

Logistical support of US forces in combat is a multifaceted problem. Strategic reserves and mobilization planning are inadequate. Continued headlong materiel acquisition of unsupportable equipment and ongoing scheduled reorganizations complicate analyses of where we currently are, much less where we are going. Before any attempt to truly solve the problem can be successful, actual data must be used wherever possible, and all planning has to be based upon common grounds and assumptions.

The III Corps and its combat forces to CSS ratio may well be unique. If the assumption is made that it is not, however, it is not Air-

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Land Battle that has caused the problem. Further research must be done before concluding whether or not deep attack doctrine has significantly affected supportability at all, besides lengthening supply lines and exposing vulnerable CSS vehicles. Meanwhile, Congress and the Department of Defense are continuing to base their judgments upon assumptions of 100 percent strength and paper units, further shortening the CSS bridge.

## NOTES

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<sup>1,</sup> LTG Johnny Johnston and the Congressional Budget Office cited by Scott Thurston in Weekend Warriors Put on Front Line in Military Strategy Atlanta Journal, 27 January 1985.

<sup>2</sup> Richard M. Leighton and Robert W. Coakiey, Global Logistics and Strategy 1940-1943 (Washington, DC Department of the Army, 1955) 709 3 Marvin A. Kreidberg and Merton G. Henry, History of Military, Mobilization in the Vinited States Army 1775-1945 (Washington, DC Department of

the Avery, 1955), 468

<sup>5</sup> Leighton and Coakley 709

<sup>6</sup> Ibid

<sup>7</sup> Kreidberg and Henry 679

B Kenneth J Coffey 'Are We Really Sengus' A Critical Assessment of Manpower Policies in the Army Reserve Forces in *Defense Manpower Planming Issues for the 1980's* ed. William J Taylor Jr. Enc T O.son and Richard A Schrader (New York, Pergamon Press 1981), 158

<sup>9</sup> Secretary of Defense Harold Brown as cited in Coffey 162

<sup>10</sup> Harry Ennis, Peacetime Industrial Preparedness for Wartime Ammuntion Production (Past, Present and Future) in The U.S. Defense Mobilization Infrastructure Problems and Prinorbes ed Robert L. Pfaltzgraft air and Uri Ra anan (Hamden CT Archon Books, 1983) 57

<sup>11</sup> Thomas A. Callaghan Jr. NA. O's Nonexistent Industrial Mobilization

Capability Its Impact on America's Alling Defense Industrial Base, in The U.S. Defense Mobilization infrastructure. Problems and Profiles, 229

<sup>12</sup> David A Deese Oil and Western Security The Mobilization Dilemma." in The U.S. Defense Mobilization Infrastructure Problems and Principles 197-98

<sup>13</sup> Norman Friedman. "Surge Mobilization" Ground Forces, "in The U.S. Defense Mobilization Infrastructure, Problems and Priorities, 92

Detense Mobilization infrastructure Problems and Priorities, 92 14 LTC Bloomer D. Sullivan. Log stical Support for the AirLand Battle Military Review (February 1984) 11-13

<sup>15</sup> COL William A Brinkley, The Cost Across the FLOT Military Review (September 1986) 40

<sup>16</sup> John C Mclaurin RX The Industrial Preparedness Planning Program—Bad Medicine or Poorly Administered? In The U.S. Defense Mobilization Intrastructure. Problems and Pronties, 120

<sup>17</sup> Philip Gold. Evasions The American Way of Military Service. (New York: Paragon House. 1985), 142

<sup>18</sup> Ibid . 143

US General Accounting Office. Acquiring Weapon Systems in a Penor of Hising Expenditures. Implications for Defense Management. a Report to the Congress. (14 May 1981)
 Survain, 16

<sup>21</sup> Brink'ey 41

## SUSTAINING Is the COSCOM Ready

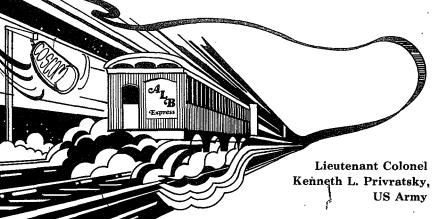
The corps support command (COSCOM) is the organization primarily responsible for the logistical support of the corps and its subordinate units. Is it capable of fulfilling its mission under current combat service support (CSS) doctrine? This article says it is not and proposes some changes.

ARSHAL Konstantin K. Rokossovsky, commander of the Soviet Union's Central Front at the Battle of Kursk, once remarked, "It's not' the troops' job to think of the rear but the rear's job to think of the troops." Rokossovsky and many others in the Soviet army came upon this wisdom the hard way. For the first years of World War II, faulty doctrine split his and other combat commanders' focus in a way that restricted offensive mobility. A brief reflection on what happened provides a historical framework for assessing present US Army preparedness for providing combat service support (CSS) to a corps in the offense.

When Adolph Hitler unleashed his panzer units across Soviet borders during Operation Barba

rossa in June 1941, he caught the Soviet army doctrinally ill-prepared to sustain its divisions. Supply point distribution was the cornerstone of the army's tactical- and operational-level sustainment. This meant that division commanders had to send their CSS units to army-level depots in rear areas to receive supplies. Additionally, they had responsibility for maintaining road networks to supply locations, distances that on some occasions exceeded 200 kilometers (km)

Even under ideal conditions, the plight of division commanders was logistically precarious. It was worsened by the strategic surprise achieved by the Germans during the invasion, since incomplete mobilization meant many divisions fought without CSS soldiers who were in the reserves. Conse-





quently, the commander, seeing an opportunity on the battlefield and wanting to counterattack, was limited in what he could actually do.

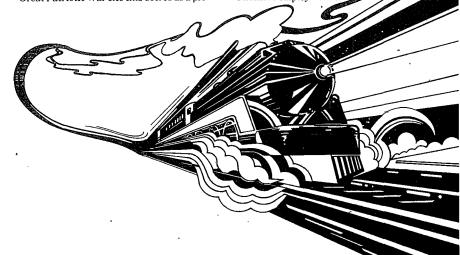
As defeats mounted, the Soviets struggled to regain the initiative and in so doing, they proved innovative. Use of forward detachments to strike key targets in German rear areas was one example, but these brigadeor division-size units experienced costly defeats as well and often for comparable reason. Detachment commanders were caught between mission and doctrine. Orders directed them forward; supply point distribution pulled them back.

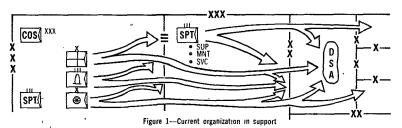
In June 1943, Joseph Stalin signed a decree replacing supply point with unit distribution throughout the Soviet army. This required higher echelons to deliver supplies to lower echelons. Although this may seem relatively minor, the effect for combat commanders was substantial since the doctrinal change permitted them to focus more on the battle being waged. Soviet accounts of the Great Patriotic War cite this decree as a pri-

mary contributor to major victories that started a month later against the Germans at Kursk and continued through the lightening-like thrust into Manchuria two years later to end the war with Japan.

Changes to doctrine and organization are not unusual during war, but few, if any, armies have the terrain and forces to spare-—as the Soviets did in World War II—as they adjust to demands of the battlefield. The US Army certainly will not if it becomes involved in a large-scale conflict. Although the Army has long since seen the importance of concepts like unit distribution, real questions remain; does it fully understand the wisdom behind Rokossovsky's comment and the Soviet experience, particularly when it comes to providing CSS to large formations? It appears the US Army stands on the verge of splitting the focus of its combat commanders like the Soviets did in World War II, forcing commanders unnecessarily to "think of the rear" when this jeopardizes opportunities at hand.

Offensive employment of





the corps and the incumbent difficulties that employment entails have received increasing attention in recent years with the publication of the 1982 and 1986 versions of US Army Field Manual (FM) 100—5, Operations. Imperatives put forth in these manuals-agility, initiative, depth and synchronization-are becoming common terminology. Additionally, much is being said in and out of print about maneuver warfare, deep attack, exploitation and auftragstaktik. Current doctrine and literature reveal beliefs that tomorrow's battlefield will offer premiums to the combat commander who can act quickly and decisively when windows of opportunity open.

Striking when the windows are open, though, becomes more challenging with larger forces, simply because of the added difficulty of maintaining coordinated mobility of tooth and tail. For the corps, the Army's largest tactical formation, the greatest potential inhibitor to mobility is the corps support command (COSCOM). As divisions look to charge forward, the COS-COM faces greater resupply distances and, in all likelihood, greater tonnages. Consequently, it is imperative the COSCOM be configured and trained so the divisions and nondivisional units it supports are not forced to waste time coordinating sustainment requirements. COSCOM doctrine and organization raise doubts about whether this is, in fact, the case.

FM 63—3J, Combat Service Support Operations, Corps, the cornerstone doctrinal manual for cosps-level CSS, says the COS-COM is a tailored organization based on geographic area of responsibility, number and types of weapons to be supported, and the type and volume of supplies to be provided. Major subordinate commands include a medical brigade, a transportation brigade, an ammunition group and a variable number of support groups.

The support groups, which theoretically bear the brunt of supporting committed forces, also are tailored organizations "responsible for the maintenance, supply support, and field services for the corps and its divisions." Major subordinate commands of typical support groups include a supply and service battalion, direct support maintenance battalion(s) and a petroleum supply battalion, if one is assigned or attached. It is important to note, however, that support groups perform only some of the vital functions needed by division and nondivisional units. They are not completely multifunctional CSS organizations since they do not have any transportation, ordnance or medi--cal units. Lack of such functional capabilities in support groups complicates matters considerably for supported forces

Figure 1 graphically portrays the flow of supplies and services from the COSCOM to divisions as this flow is envisioned in current doctrine and tables of organization and equipment. From the perspective of a division commander, the sustainment process is far from simple. The division commander, through his division support command (DISCOM) commander, communicates requirements and receives supplies or services through a variety of channels. For example, he looks to the support group com-

mander for some supply and services and for maintenance. For transportation, ordnance and medical support, though, he must look either to three other commanders or to the COSCOM commander to task the three other commanders to provide the support.

The division commander may not have to travel to his rear to get the support, as Soviet commanders did in the first half of World War II, but the potential for a split focus is substantial. Present procedures require him or others in the system to coordinate requirements with multiple commanders, who, in turn, may have to coordinate with each other before providing the support—all of which can consume valuable time, increase the likelihood for errors and, depending on how everyone is communicating, create added opportunities for the enemy to pinpoint locations.

As difficult as the plight of the division may seem, it pales next to that of the nondivisional unit. Nondivisional units, ranging from military intelligence teams to artillery battalions, frequently operate forward of brigade rear boundaries when supporting a division. For them, the predicament depicted in figure 1 mirrors exactly the disastrous situation faced by many Soviet commanders in World War II. CSS doctrine, for many understandable reasons, calls for supply point distribution to nondivisional units. These units have to go to the rear for resupply. As missions take them forward, doctrine pulls them back, quite literally against the traffic, to distances beyond the depth of the division's rear boundary to a corps support group. Additionally, these smaller units face larger obstacles if required to communicate CSS requirements to multiple commanders, since they have less communications capability over large distances.

Consider what happens if a division or corps commander sees an opportunity and decides to take advantage of it. Consider a

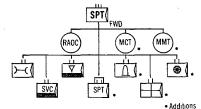


Figure 2-Possible organization

two-division attack, where a support group is providing area CSS to two divisions. Division A has achieved a significant penetration and is in position to exploit to the rear of the enemy. Should the commander of Division A receive this mission, or should he do so on his own because he knows the corps commander's intent, the sustainment process is complicated.

The division commander, not having a dedicated support group behind him, finds himself communicating requirements to multiple CSS commanders over distances even greater than before. Furthermore, the support group supporting Division A, and providing support to another division as well, finds itself in the predicament of providing area support over a much-expanded area. Lines of communication to Division A could easily become too long for any type of area support to work well.

FM 63—3J, for example, indicates the depth of a perfectly linear corps combat zone to be 180–200 km. That alone is beyond the daily line-haul planning factors for transportation units. It is not hard to imagine the effects distances half this great will have for commanders trying to communicate requirements to multiple CSS units during the confusion of a real fight on a nonlinear battlefield

What is a solution to the current dilemma? The answer may reside in the recent organizational change to DISCOMs providing dedicated forward support battalions for maneuver brigades. Backing up these battalions is a multifunctional main support battalion. As a result, the DISCOM com-

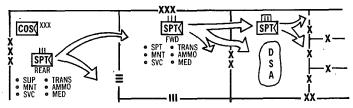


Figure 3-Proposed organizations in support

mander no longer has to implement CSS through several functionally oriented battalions as the COSCOM commander must do with brigades and groups. It would appear that communication, coordination and overall sustainment would be enhanced if COSCOM major subordinate commands were comparably configured to be truly multifunctional; if forward support groups were established to provide dedicated CSS to divisions; and if these forward support groups were further organized to permit task organization of a multifunctional support battalion to go forward into division areas to bring CSS closer to nondivisional units.

Figure 2 reflects the possible structure of such a forward support group. Ordnance, transportation and medical battalions have been added to the other battalions normally included in support groups, as well as a forward support battalion designed to be tailored using company building blocks to support nondivisional units operating in the corps forward area. Actual size and composition of these additional battalions would be dependent upon mission.

It may be advisable, in fact, to organize the entire support group with multifunctional battalions. That would offer distinct benefits in training young officers to think logistically rather than functionally. The group commander could always reorganize his group to functional battalions if the situation warranted. Additionally, movement control and materiel management teams have been included to assist the support

group commander in coordinating the movement of supplies. A similar structure could be used to form a rear support group.

Figure 3 captures the benefits such multifunctional support groups offer to commanders. Supported forces have single points of contact for CSS and potentially simplified procedures for satisfying sustainment needs. The division commander communicates all requirements directly to the support group providing support. The nondivisional unit commander communicates requirements to the forward support battalion of the forward support group supporting the division that he, too, is supporting. Should the forward support group commander require additional sustainment capability, he also would coordinate assistance from a single source

With subordinate organizations such as these, the COSCOM commander appears more capable of providing coordinated and responsive support when time is of the essence He can prioritize sustainment by communicating his desires to one group commander rather than to three functionally oriented brigade/group commanders as before. More important, if a division commander sees an opportunity on the battlefield and has to "go it alone" for awhile, he is in far better position to do so since he is not tied to an organization supporting him and others on an area basis. The division commander has the benefit of a dedicated support group prepared to support him. In essence, multifunctional, corps-level support groups offer CSS flexibility embodied by

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AirLand Battle imperatives such as agility, initiative and depth, and they permit the corps commander to synchronize sustainment and combat operations.

Despite these apparent advantages, the creation of COSCOM permanent, multifunctional support groups has its disadvantages. Rounding out existing area support group's and establishing others may be more than current manning and resourcing permit. Moreover, it would have substantial impact on Reserve Component commands since they own the majority of corps-level CSS units. The advantage of fracturing these organizations to create multifunctional support groups could be offset by political disadvantages. The impact on active component units and branches could be just as sensitive, given branch interests and the push for regimental affiliation and association.

Nevertheless, a solution is needed to bring sustainment of the corps more in line with what is expected in AirLand Battle doctrine. Problems inherent in the CSS procedures described previously will not go away while long-term viability analyses are performed. The harsh reality remains that corps, division and nondivisional unit commanders should not have to accept the sustainment risks currently awaiting them.

FM 63-3J provides guidance, brief though it may be, for planners and commanders to be flexible. It warns against the traditional approach to all situations. It states, "The problems of providing support to a task force a great distance away over unsecured lines of communication are far different from providing it on the traditional linear battlefield."6 Additionally, it recommends the commander "not hesitate to tailor organizations and methods for specific situations."6 COSCOM commanders clearly have the prerogative to task organize their organizations to accommodate tactical or operational plans as they see fit. It is imperative they anticipate the challenges on future battlefields and prepare to do so when situations require.

Task organizing a COSCOM in the heat of battle will not be an easy process. In fact, training toward that end in peacetime may confront a mountain of parochial interests. Be that as it may, logisticians should not forget the ramifications of Rokossovsky's remark and Soviet experiences in sustaining large formations. Occasionally, the CSS community forgets that it is the "rear sjob to think of the troops." The cost of not doing so in the future, however unintentionally, may be more than the US Army can bear.

## NOTES

Regimental Rear Rear and Supply Journal of the Red Army no 1 (1945).

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<sup>1</sup> Leutenam General Nikolon Antipenko, Logistics, The Battle of Nursk ed Maior General Nikolon Antipenko, Logistics Publishers 1974, 239 2 S.K. Kukrickin Soviet Anned Forces Rear Services in the Great Patriotic War vans US John Pubrications Research Service (Moscow Voyenz at 1977) 199 Kuriokin provides a complifig a scussion of Soviet logistics during World War it from strategic to factical-Metes. For a division-revel per spective, see A. Semashin. Organization and at byout of the Division and

trans Directorate of Military Intelligence AHQ Ottawa 3 USOppartment of the Army Field Manual 63—3J. Combat Service Support Operations. Corps (Washington, DC US Government Printing Office 12 Audust 1985) 3-20

<sup>4</sup> fbid 2-7 5 lbid 1 5

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## Operational Level of Support: In SEARCH of DOCTRINE



This article discusses echelons above corps (EAC) operations and support issues that must be resolved before future EAC combat service support (CSS) doctrine can be written. EAC CSS doctrine is defined and the joint and combined CSS operating environments are discussed, to include campaign planning. Other issues facing EAC CSS planners are addressed to clarify what doctrine should be.

N THE lexicon of professional military officers today, the term "operational level of war" carries with it a host of perceptions. Among these is the thought that Air-Land Battle, as described in US Army Field Manual (FM) 100—5, Operations, defines operational-level war-fighting doctrine. Opponents to this view believe Air-Land Battle is a tactical doctrine only, descriptive of a method of warfighting at corps level and below.

While this article is not to debate this issue, I believe AirLand Battle doctrine applies primarily to corps level and below. Even the preface to FM 100—5 admits that AirLand Battle "... applies to Army forces worldwide, but must be adapted to the spe-

cific strategic and operational requirements of each theater." In my opinion, at these levels, something other than AirLand Battle doctrine applies. But, what is our doctrine for these echelons above corps (EAC)? Does an EAC doctrine even exist?

We say that corps and armies will fight as part of unified "joint" commands and combined "allied" commands; however, there exists very little, if any, war-fighting doctrine at those levels. We have Joint Chiefs of Staff (JCS) Publication 2, *Unified Action Armed Forces*, governing the exercise of command by unified commanders and outlining guidance on organization and command relationships. Still, these writings are little more than listings of responsibilities

—they do not delineate the methods and principles underlying the operational-level fight.

In the absence of an EAC "operations" doctrine, the Army has published four FMs. all or part of which attempt to describe EAC "support" doctrine: FM 63-4, Combat Service Support Operations, Theater Army Area Command (September 1984), FM 63-5. Combat Service Support Operations-Theater Army (22 February 1985), FM 100--10, Combat Service Support (March 1983. currently under revision) and FM 100-16, Support Operations: Echelons Above Corps (April 1985). All of these evolved from the US Army Training and Doctrine Command's EAC study, published in August 1980. A quick review reveals these manuals generically describe "how to support," but do not adequately address the underlying principles of support at EAC.

There is little discussion of the joint and combined war-fighting environments. The sticky issues of command and control outside of the Army component commander are all but ignored. These manuals do not address the support considerations for campaign planning or the underlying principles for development and sustainment of combat power in the theater of operations.

Thus, a doctrinal void exists for support operations at EAC. Joint and combined commands lack an EAC air-land campaign doctrine that parallels and complements tactical AirLand Battle doctrine. Moreover, the lack of an operations doctrine at the joint and combined command levels paralyzes the further development of EAC support doctrine. What EAC combat service support (CSS) doctrine we currently have was written in a vacuum, not fully knowing the nature of the operations doctrine.

What is EAC CSS Doctrine? EAC has been defined as inclusive of joint and combined headquarters. CSS is that portion of logistics associated with the establishment and sustainment of military forces in the field. Now, what is meant by doctrine?'

Doctrine, in the military sense, is officially approved teaching that, by experience, has been shown to work Doctrine evolves

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from concepts proven in practice. Doctrine rests on underlying principles that do not change; the principles of war, science and economics are examples. Principles are self-evident truths.<sup>3</sup>

The synthesis of these three definitions results in my definition: EAC CSS doctrine is officially approved, tried and tested methods of supporting forces up to the joint and combined command levels, based upon the underlying principles of war, science and economics.

## **Joint and Combined Operations**

Central to my definition of EAC CSS doctrine are joint and combined commands. Colonel John D. Stucky explains this linkage in his article titled "Echelons Above Corps," Parameters, December 1983:

"The dogma of joint operations by military forces is the very heart of US military strategy. This doctrine was implemented by the United States during World War II and has since been adopted as the only acceptable method of conducting warfare. It is embodied in the National Security Act of 1947.

... Because the dogma of joint operations is absolute, the EAC topic cannot be resolved by the US Army alone, but must be addressed in the broader context of joint (and combined) operations... The linkage of the EAC topic to unified commands is therefore evident: unified commands were created to conduct joint operations."

Within the joint and combined enviroments lie the rules and protocol of operational command and directive authority. Both of these significantly influence EAC CSS operations.

Operational command, as exercised by the unified or combined commander, allows him to coordinate logistic and administrative procedures. He does this through his component commanders who are responsible for logistic and administrative support to their service elements.<sup>6</sup>

Conflicts can occur in the fact that the service component commanders may or may not be in the operational chain of command. This is the case in Europe where US Army, Europe (USAREUR), the Army component of US European Command, is not in the wartime operational command of NATO's Allied Forces, Central Europe. In the Pacific Command (PACOM), there are three Army commands: Western Command, Eighth Army and US Army, Japan. The question is, which command is the Army component command for PACOM? Add in the Marine Corps forces in the Pacific and one might ask who is PACOM's ground component commander? This question also remains unanswered in US Central Command where, again: Army and Marine Corps forces are certain to operate.

No doubt, this operational morass has the potential to seriously disrupt CSS. Our unified commands today are far from unified in the CSS business, and the problem lies in unity of effort. Admiral William J. Crowe Jr., JCS chairman, experienced frustration over support problems while serving as the

commander in chief, PACOM. In answering the Senate Defense Authorization Committee in 1984. Crowe said:

"On occasion the results of major service decisions, not previously coordinated with me, have affected my ability to execute | my command's strategy.... In the field of logistics, except for the influence I am able to exercise in the development of service program priorities, I am dependent on my component commanders not only to compete successfully for sustainment resources within their service [plans] but also to represent me in balancing and distributing stocks, ammo, petroleum, etc., in locations and ways that support my theater strategy. Therefore, until the [unified commanders] have a greater input into general logistical matters, the unified command's plans and strategy remain largely dependent upon the degree of service chief support my component commanders and I are able to obtain."6

The confusion over EAC support is not limited to the Pacific theater. This story of uncoordinated medical support between the Army and Air Force in Europe was told by US Senator Sam Nunn:

"In another example, we learned that the Air Force was planning to evacuate a particular hospital in Europe in the event of war because it believed the hospital would be destroyed almost immediately. At the same time, the Army was planning to move in and use the same hospital after the Air Force left. Now, Mr. President, who is in charge over there anyway? There is no excuse for this type of situation."

EAC support problems in the unified commands were used to argue for the Department of Defense (DOD) Reorganization Act of 1986. We, the armed services, brought on this legislation by our failure to define support doctrine in the joint arena. Apparently, we did not heed the advice of Rear Admiral (Retired) Henry E. Eccles, who foretold of these problems in his 1959 book, Logistics



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in the National Defense:

"Without a unified command, combat forces and logistic resources may be frittered away on unimportant tasks...(1) Logistics is a responsibility of command; and (2) a commander must have control over his logistic operations comparable to that which he exercises overhis tactical operations."

Almost as perplexing is the issue of directive authority for logistics. JCS Publication 2 gives the unified commander authority to:
"... exercise directive authority within his command in the field of logistics to in-

sure effectiveness and economy in operations and the prevention or elimination of unnecessary duplication of facilities and overlapping of functions among the Service components of his command.... He will exercise such coordination as is appropriate through the commanders of the Service components and the commanders of other subordinate commands."

Given this directive authority, what will be the role of the J4 (logistics) officer of the unified command? Will he issue movement orders to CSS units in the name of the commander? Can he reallocate supplies between services (or between nations in the case of a combined command)?'

What will be the role of the J1 (personnel) officer? Will he be able to direct the transfer of personnel? All of these questions, and there are certainly many more, must be answered in future EAC CSS doctrine. To fight effectively at the operational level, we must possess a clear, unambiguous view of EAC support coordination in combined commands. General Jacob L. Devers, commanding general of Army Ground Forces in World War II, makes it clear that the challenges in this arena are significant:

"It has been said by many great leaders that they always took at least five looks to their rear for every look to their front. It may well be said that a Combined Theater Commander may well take five looks to the logistics of each of the armed services of each of the allied powers under command for each look he takes to the front. . . . While in the

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main the difference in tactical concepts can always be adjusted between the various armed services locally, the opposite is true of administrative and logistical concepts. No two powers entered the last war with the same logistical and administrative doctrines...[However] The allocation of available supplies, regardless of source, is, of

course, a prerogative of the Theater Commander.... It is the technical implementation of these decisons that presents a serious problem to the Theater Commander, because of the various methods employed by the various armed services." 10

Every war in our 20th century experience has been fought alongside allies. There is no doubt this trend will continue. US military strategy is based upon seven defense agreements for the protection of more than 40 countries. To keep these alliances strong and for the collective military powers to be an effective deterrent, we must possess cohesive doctrine for CSS operations across national lines.

## The Link to Campaign Planning

The campaign plan is the vehicle by which the unified or combined commander announces his intent. The plan focuses on actions necessary to expose and destroy the enemy's center of gravity. Logistics wields great power in campaign planning. Unfortunately, nowhere in our current EAC CSS manuals do we find a discussion of the logistical aspects of campaign planning. Coloned John F. Meehan III, director of Theater Operations, US Army War College, says:

"It is difficult to overstate the importance of logistics at the operational level. At this level, especially in modern wars, logistics often will be the key consideration of all plans. To a large degree, logistics defines operations at the operational level. A campaign plan that cannot be logistically supported is not a plan at all, but simply an expression of fanciful wishes. The campaign plan, and the phasing of that plan, must allow for logistical restrictions as they exist and provide the time and resources for the logistical structure to be emplaced."

Using the campaign plan, the J4 coordinates the creation and sustainment of combat power. To do this, he must fully grasp the unified commander's operational-level

intent, define clear, logistical objectives and keep his plans simple, yet flexible. Stocks must be built up as insurance against the interdiction of the lines of communication (LOCs). Also, the flow of supplies must have a forward impetus based on maximum throughput. The J4's job is arguably the most important of any officer on the joint staff—without the creation and sustainment of forces, there can be no warfare. Our future doctrinal manuals for EAC CSS must address these vital logistical principles as they relate to campaign planning.

## CS\$ Force Development and Deployment

Our EAC CSS manuals repeatedly emphasize that CSS organizations must be tailored to the force they are to support. Nowhere, however, are there any principles to guide this tailoring process. Even in a world where strategic lift is limited and in theaters in which ceilings are placed on the number of troops that can be employed, CSS forces cannot be ignored. Someone must determine the appropriate tooth-to-tail ratio of combat and combat support forces to CSS forces. Likewise, host-nation support, if available, may prove invaluable during the initial phases of the campaign, and interservice support agreements should be used to the maximum extent.

Once the force structure is identified, CSS units must be integrated into the Time Phased Force Deployment List so that arriving combat forces will be supported while adequate sustainment supplies are built up to support operations. Our future EAC CSS doctrine cannot ignore these force development and deployment issues.

## Operational Sustainment

In an attempt to address the operationallevel sustainment issue, FM 100—5 briefly discusses interior versus exterior LOCs, staging, sustainment priorities and force expansion. All of these concepts, and oth-



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ers, are vitally important. They deserve indepth treatment in future EAC CSS doctrine.

To be successful logistically, campaigns must develop along adequate LOCs. This maxim has been demonstrated repeatedly throughout history and will again be proved in chaotic, nonlinear campaigns of the future. Ground LOCs will be altered, not only in terms of position, but also by the substitution of air and sea LOCs. Flexibility rules.

Staging of logistical bases will be paramount to operational success. Again, history is replete with examples. Alhed advances across France and Belgium halted in mid-September 1944, because of a lack of fuel and ammunition—the result of planned support bases not opening in time to keep up with the accelerated pursuit. The concept of staging is an operational-level support imperative.

All the way back to the aerial or sea ports of debarkation, CSS planners must actin accordance with the commander's priorities. The captain of the port must know priorities, by commodity, so he can queue cargo



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ships and oilers for unloading. Shifts in priorities may result in relocation of supplies or services. Transportation assets, the life blood of the logistics system, must also be prioritized by the unified or combined commander. Obviously, there can be no hoarding of transportation assets by just one service or nation—all must share.

Trained soldiers, sailors, airmen and Marines are a resource to be managed with the utmost frugality. In war, medical systems can be a bigger source of trained replacements than the personnel system. Joint and combined commanders must have adequate medical planning and coordinating staffs. Austere field hospitalization resources and the shortage of health care professionals, especially nurses, require all services and nations work as a team. Aeromedical and ground evacuation systems must be synchronized with the available care facilities, and both must be able to surge.

Finally, the reconstituation of forces portends to be the biggest factor in sustaining the fight at the operational level. While FM 100—16 addresses reconstitution, it does so by stating that corps will normally reconstitute its own units with assets coming from EAC units. Recent exercises in USAREUR'S V Corps have proved differently. The corps support command cannot even reconstitute a bridgade-size force without severely degrading support elsewhere. We must look to EAC support organizations as the managers and operators of reconstitution efforts.

EAC CSS doctrine was developed by the Army without the benefit of an operational-level war-fighting doctrine. As a result, the current doctrine is inadequate for operations in the joint and combined war-fighting environments. Furthermore, the concepts of operational command and directive authority create frictions rather than enhance sup-

port to unified and combined commands. What the unified commander needs is control over his support resources comparable to the control he has over his operational elements

Joint and combined commands orchestrate the operational-level fight through campaign plans. Campaigns that cannot be supported logistically are doomed to fail. The sound campaign plan allows for the creation and sustainment of combat power. Support planning begins with a clear logistical objective in terms of supply and services. The plan must be simple, yet flexible, since the rate of force and logistical build-up may well set the time for initiation of combat operations.

Given the importance of logistics in campaign planning, it follows that the structuring and deployment of CSS forces need special attention in the execution of plans. Likewise, operational sustainment issues will loom as critical decisions at the operational level of warfighting. In every joint or combined theater, the development of adequate LOCs, the timely staging of logistical bases, prioritizing support, coordinating medical resources, the continual tailoring of the CSS organization and the reconstitution of combat forces deserve special consideration.

I recommend that the Army, in conjunction with the other services, the JCS and allies, move rapidly to define operationallevel war-fighting doctrine. Certainly, the DOD Reorganization Act of 1986 has added impetus to the effort. Already, JCS Publication 2 is undergoing massive revision.

Next, the dichotomy inherent in operational command must be eliminated, and the rules of directive authority must be clarified. There can be no ambiguity or service parochialism. Joint and combined commands should not have to lobby the services. for adequate logisitcal support.14

The Army already has the "how to support" framework for EAC CSS. With welldefined operational-level doctrine, this framework can be expanded, through the application of principles, to form a cohesive EAC CSS doctrine. Then, and only then, will we have an adequate doctrinal basis upon which to support the operational-level fight. ™⊨

### NOTES

cember 1983) 47

4 Stuckey, 43

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<sup>1</sup> US Department of the Army Field Manual (FM) 100-5, Operations (Washington DC US Government Printing Office, 5 May 1986), i 2 Colonel John D Stuckey, "Echelons Above Corps," Parameters (De

<sup>3</sup> See Major General I B Holley Jr., US Air Force Reserve, Retired, Concepts, Doctrine, Principles, Are You Sure You Understand These Terms?," Air University Review (July-August 1984) 90-93

<sup>5</sup> US Joint Chiefs of Staff (JCS) Publication 2. Unified Action Armed Forces (UNAAF) (Washington, DC US Government Printing Office: October 1974) par 30227, 30228, 30231 and 30232.

<sup>6</sup> Senator Sam Nunn quotes Admiral William J Crowe Jr (then commander in chief of the Pacific Command) in a speech to the Senate titled. "The Joint Chiefs of Staff and the Unified Commands." Congressional Record. vol. 131 no 127 (Washington DC US Government Printing Office, 3 October 1985), S12535-12536

<sup>7</sup> fluid S12436 (This report is not attributed to Admiral Crowe or anyone in particular, it is simply recounted by Senator Sam Nunn in his speech.)

<sup>8</sup> Rear Admir al Henry E. Eccles, US Navy, Retired, Logistics in the National Defense (Harnsburg, PA. The Stackpole Company, 1959), 237 and 251

<sup>9</sup> US JCS Pub 2, 84

<sup>9</sup> OS JUSPUB 2, 644
10 General Jacob L Devers, Major Problems Confronting a Theater
Commander in Combined Operations, "Military Review (October 1947) 6-7
11 Colonel John F Meehan III The Operational Trilogy, Parameters (Autumn 1986) 16

<sup>12</sup> FM 100-5, 65-71

<sup>13</sup> Major Charles W. Horner, "Reconstituting a Combat Force," Army Logistician (July-August 1986) 2-5 (a discussion of V Corps reconstitution exercise conducted during the 1985 Reforger exercise

<sup>14</sup> This recommendation is further explained by Stuckey, 47

# Battlefield DAINAGE

## Assessment and Repair

John de S. Coutinho

When combat equipment is damaged on the battlefield, what can be done to fix it? Evacuating to the rear or bringing the maintenance people forward to make repairs is not always the answer. This article examines a dynamic new program that may enable soldiers to repair their own equipment on the battlefield and continue the fight.

S MODERN weapon systems become more sophisticated, it takes fewer of them to achieve the same or far greater effects than could be achieved by their predecessors. However, losses in combat are inevitable, and the loss of a modern weapons system represents a far greater reduction in combat capability than was the case with older, less-effective weapons. As a result, military doctrine must change to mitigate the loss of weapons on the battlefield. Every effort must be made to avoid abandoning damaged weapons and to restore some useful operational capability quickly so that weapons can be returned to the fight where they can help win the ongoing battle.

The complexity of modern weapon systems has added a new dimension to our supply problems. Since they take so much longer to build, it will take longer to mobilize industry. Hence, in the first phase of a future war, we must fight with what we have, £nd the side that can more quickly restore and return damaged weapons to battle will gain a significant advantage over its opponent.

NATO has recognized the problem, and

the European Logistics Organization (EUROLOG) has organized a "Battle Damage Repair Working Group" to coordinate NATO nations' programs that vary because of differences in cultures, missions, operating environments and equipment. In view of the geographical and logistic disadvantages NATO faces with respect to the Warsaw Pact, Battlefield Damage Assessment and Repair (BDAR) offers a powerful force multiplier that can help tip the scales in NATO's favor.

In June 1982, the US Army Materiel Command (AMC) established a BDAR program, administered by the AMC deputy chief of staff for supply, maintenance and transportation. The US Navy, concerned with saving and salvaging damaged ships at sea, has had a "damage control" program for many years; however, recently it established an office for Aircraft Battle Damage Repair (ABDR) at the Naval Air Systems Command. The US Air Force has an Active and a Reserve Combat Logistics Support centers. These CLSSs consist of noncommissioned officers who train full.

time in ABDR techniques and are available for immediate worldwide deployment whenever needed.

## Peacetime versus Battlefield Maintenance

The mission of peacetime maintenance is to maximize equipment readiness and service life. Three main functions are involved: servicing equipment includes such tasks as refueling, resupply of consumables, lubrication, adjustments, tuning, rigging, cleaning, testing and other tasks required to keep equipment in a fully mission-capable condition; repair of damaged equipment to restore it to full mission-capable condition; overhaul, modification and rebuilding of worn or obsolescent equipment to enhance mission capability and extend service life. These functions are carefully controlled to ensure their effectiveness. Only authorized materials, tests, methods and skill levels may be used. The time required to accomplish maintenance tasks is a secondary consideration—as much administrative and hands-on time as necessary is allotted to perform a satisfactory job.

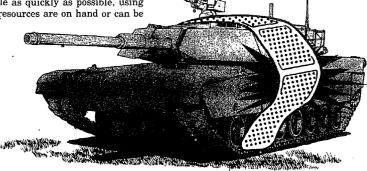
The mission of battlefield maintenance is to help win the battle. A different set of priorities apply, with time being the major consideration. When equipment becomes inoperable on the battlefield, for whatever reason, it is imperative to restore it immediately. It must be returned to action in the ongoing battle as quickly as possible, using whatever resources are on hand or can be

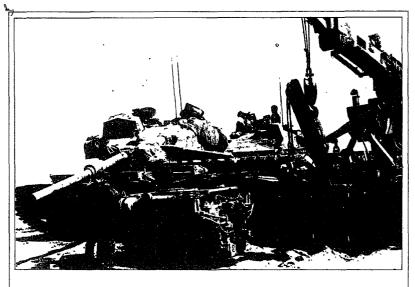
"scrounged." By the very nature of the circumstances, battlefield maintenance is different from peacetime maintenance. Time is especially important in a defensive scenario when it may be a matter of only hours

Since [modern weapon systems]
take so much longer to build, it will take
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gain a significant advantage.

before the repair site is attacked.

There are many historical examples where the skilled application of BDAR has turned the tide of battle. During the 1973 Arab-Israeli War, 3 tank breakdowns during the first 18 hours of combat were heavy (fig. 1). The Israelis had an effective BDAR program and several logistic advantages, including a small theater and the opportunity to return heavily damaged tanks to repair depots by rail. Nevertheless, the bulk of Israeli repair was of an expedient nature performed near the front lines.





| Battle zone   | Brigades | Available tanks |                 |                 |
|---------------|----------|-----------------|-----------------|-----------------|
|               | -        |                 | 1400 hrs, 6 Oct | 0800 hrs. 7 Oct |
| Golan Heights | 2        | •               | 160             | 52              |
| Sinai         | 3        |                 | 290             | 52              |
|               |          | Totale          | 450             | 104             |

75% of Israeli tanks incapacitated in first 18 hrs

Approximately 80% of incapacitated tanks restored to combat in 24 hrs

Some tanks restored to battle 4-5 times

Figure 1-1973 Arab Isfaet War Tank Breakdowns-First 18 hours

More than 75 percent of the Israeli tanks were incapacitated in the first 18 hours of combat. However, approximately 80 percent of the incapacitated tanks were returned to the fight in less than 24 hours. Some tanks were damaged and repaired four or five times.

The most dramatic instance occurred toward the end of the battle for the Golan
Heights when 15 tanks were returned to
battle and helped the Israelis mount an unexpected counterattack to secure the
heights. The Israelis readily admit their

BDAR program was an essential factor in winning the war.

Figure 2 is representative of a large-scale Federal Republic of Germany (FRG) simulation involving several combat divisions. The solid black line shows that almost the entire force is incapacitated within about two days. This result agrees with the Israeli experience.

The dashed curve shows the availability of tanks when BDAR is implemented and irrepairable tanks are replaced. It takes about one day before the BDAR program be-

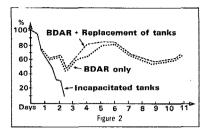
comes effective. The lower dotted curve shows the impact of BDAR only. Note that the additional increment gained by replacement is small. This is because there are not many tanks in this category. Not more than 25 to 40 percent of battlefield breakdowns are caused by enemy action, and only a few of these are irrepairable. Live-fire trials have shown that, except for these few irrepairable tanks, all critical battlefield damage can be repaired by BDAR methods at least to the extent that the tank can perform some useful functions and can be returned to battle.

BDAR has the effect of providing a replacement for almost every tank lost. Overall, with BDAR it is possible to keep a constant force level at some 70 percent over an extended period of time. Without BDAR the entire force would be lost in about two days. BDAR, when applied by skilled and well-supplied troops, is an incredible force multiplier. It is one of the most powerful ideas that have surfaced recently.

## **US Army BDAR Program**

The US Army BDAR program is oriented to battlefield conditions where equipment is dispersed over wide areas and personnel turbulence may be high. Logistic support is dependent on mobile facilities and supply lines that may extend for thousands of miles. Forward maintenance personnel must accomplish their mission with whatever resources are immediately available at their field locations.<sup>6</sup>

The **B** for "battlefield" in BDAR emphasizes where equipment breakdown occurs, not why. In addition to damage caused by enemy action, other causes of breakdown include: equipment malfunctions, operator error/accidents, wearout (hard usage) and logistics (unavailability of repair parts). These are the same causes of breakdown occurring in any intensive peacetime field exercise. The mission of the BDAR program is



to restore equipment to the ongoing battle as quickly as possible, regardless of how the damage was caused.

The A for "assessment" in BDAR is an extremely important job which must be done quickly, on the battlefield and often on site, generally without any automated test equipment or other sophisticated instrumentation. The assessment consists of at least:

- Isolating the damage with whatever tools or instruments are available.
- Determining the effect of the damage and proposed BDAR, if any, on mission capability.
- Developing a plan to include actions such as: defer repair—use equipment in a degraded mode; fix on site as required for one more mission; recover for BDAR or standard repair to the most responsive maintenance collection point available; evacuate; or other disposition—damaged weapons are almost always salvageable and should, whenever possible, never be abandoned or, if they must be abandoned, all usable components should be salvaged and the rest destroyed.

The R in BDAR is for quick, expedient "repair" to be accomplished in less than 24 hours, otherwise the opportunity to return the weapon to the ongoing battle will be lost. Weapons which cannot be fixed and returned to use within 24 hours generally should be evacuated. The objective of BDAR



The US Army BDAR program is oriented to battlefield conditions where equipment is dispersed over wide areas and personnel turbulence may be high. Logistic support is dependent on mobile facilities and supply lines that may extend for thousands of miles. Forward maintenance personnel must accomplish their mission with whatever resources are immediately available at their field locations.

is to restore damaged equipment, on site if possible, to a level of operational capability needed in the ongoing fight.

BDAR makes use of whatever tools, methods, material, personnel and other resources that are readily available. These include shortcuts, substitutions, interchanging/cannibalizing parts, by-passing components or subsystems, jury rigging, on-site fabrication and so forth. In the Arab-Israeli War, the Israelis were very skillful in the expedi-

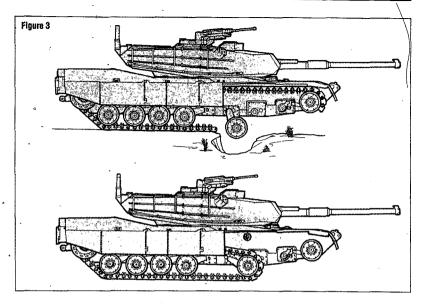
ent restoration of captured enemy weapon systems.

Most BDAR procedures are expedients and are not authorized in peacetime. These procedures may only be performed on the battlefield at the discretion of the commander. They should be replaced by standard procedures as soon as feasible after completion of the immediate mission to restore the equipment to a full mission-capable status.

The current US Army BDAR program is being implemented by technical manuals (TMs), special kits, special tools, special instruments, supplies, training, research, doctrine and institutionalization. The Army has emphasized TMs because of its special operating environment. The Army's weapons are widely dispersed on a battle-field, its logistic supply lines stretch over thousands of miles of ocean and considerable turbulence can be expected among maintenance personnel. An initial goal of the BDAR program was to place information as close as possible to the people who might need it.

Throughout the ages, individual soldiers in trouble have used imaginative expedient repairs to restore their damaged weapons to a usable condition. Most experienced soldiers know a few of those tricks, and some know different sets of tricks. No one knows them all. BDAR TMs systematically attempt to collect as many of these procedures as possible and make them common knowledge. In addition, contractors who understand how the system works can be very helpful, especially in devising expedient assessment, by-passing and substitution procedures.

For the convenience of soldiers in the field, BDAR TMs contain some doctrine normally included in a field manual (FM). To provide for this deviation from normal publications policy, BDAR TMs are prepared in accordance with a new specification.



BDAR TMs do not prescribe maintenance or skill levels; anyone on location who knows how may do the work. This is expressed by the BD designator in the TM number, replacing the maintenance level designator. The BDAR TMs all have distinctive covers so that they are easily recognizable.

Figure 3 illustrates the short-tracking procedure included in TM9-2350-255-BD for an M1 Abrams tank damaged by a mine. The two front roadwheels, Nos. 1 and 2, are removed. A large hole is made in the ground, and the tank is driven over it so the No. 3 roadwheel hangs free, relieving the stress on the torsion bar. The roadwheel, roadwheel arm and torsion bar are removed, and the torsion bar is reinstalled in the reverse position—that is left bar end on vehicle right side. The roadwheel is reinstalled with the wheel in the forward position so

that the roadwheel arm pivots about the torsion bar in a forward arc. The tank is then driven onto level ground and a shortened track installed as shown.

This procedure can be performed by three soldiers in about three hours. Although the mobility of the tank is degraded, it can still perform many combat missions. Special training is required for short tracking because heavy components are involved and, if not handled properly, soldiers may be hurt.

## **BDAR Live-Firing Tests**

Quick, expedient battle damage repair is unique in that it depends, to a great extent, on the initiative and imagination of the individual; however, it has been demonstrated that without prior training, soldiers cannot be expected to perform BDAR tasks.

For the past six years, the Bundeswehr has been conducting annual BDAR live-

firing tests at Meppen Proving Ground, FRG, with some excellent results. These trials were initially run with old equipment, but the results proved to be so valuable they are now being conducted with new equipment. Because of the interest in these tests, the Bundeswehr invited the US Army to participate in the spring of 1986. When US soldiers first confronted equipment damaged by the firings, they decided the damage was not repairable. However, after observing German soldiers applying BDAR techniques, the US troops decided they had better give it a try.

As the trials continued, US troops became quite proficient. Supervisors were especially surprised at the skills US troops developed in welding, brazing and soldering. BDÅR requires a can-do frame of mind.

The US Army participated in seven joint tests with an array of two or three vehicles. Each test consisted of firing a static 155mm projectile located at "ground zero." Target vehicle emplacements were measured by the distance from ground zero and the angle from the 0-degree baseline. The target vehicles were rotated to change their orientation to the projectile.

The distance of the target vehicles to the projectile was calculated to result in substantial, but not catastrophic damage. After the test, all vehicles were overhauled and returned to the war reserves inventory.

A number of test objectives were established in the test plan:<sup>8</sup>

- Validate BDAR TMs, tools and supplies.
- Identify requirements for new BDAR techniques, tools, supplies and kits.
- Obtain hands-on experience for US troops.
- Obtain vulnerability data to correlate with predictive models.
  - Evaluate survivability expedients.
- Identify design improvements for ease of repair.

- Produce a videotape training film.
- Obtain experience to expand BDAR training and doctrine.
  - Encourage US/FRG interoperability.

All stated test objectives were met, and the results recorded in a report.9 Some notable observations were made including one that showed military equipment is not designed for quick expedient repair when incapacitated on the battlefield. A new concept was formulated called "combat resilience," a characteristic permitting equipment, when damaged in combat, to be quickly restored to some immediately useful level of combat capability. It differs from the technical term survivability in that emphasis is on partial restoration as may be required by the immediate tactical situation and on quick total turnaround time. Other observations made included:

- Firing tests currently are the most reliable way to validate combat resilience design requirements.
- Soldiers need special training to perform BDAR effectively—proficiency increased with experience.
- The BDAR TM for wheeled and tracked vehicles have onlyminor deficiencies: assessment procedures and forms need improvement, and the BDAR data collection system should be computerized (the Bundeswehr has an automated BDAR data collection system).
- All critical damage was repaired by BDAR procedures.
- US/FRG cooperation was excellent, and language was no barrier (many FRG soldiers spoke English).

Advantage was taken of the tests to evaluate the effectiveness of a number of survivability expedients. The most important of these were: ballistic blankets—53 percent effective; urethane-filled tires (six on a 2.5-ton truck)—all tires were hit many times and four tires survived all tests, while the filler broke up after 10 minutes of driving on-

two tires; ballistic goggles (worn by mannequins)—stopped fragments.

## **BDAR Training**

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Since not all US troops can be exposed to live-firing trials, the Army is still developing methods for effective training. The use of Air Force-type CLSS units, continuously training in ABDR, does not appear suitable for the Army field environment. Efforts to date have, therefore, concentrated on the assembly and recording of verified procedures in BDAR TMs and kits, but the Army still faces a monumental task in establishing effective training procedures for its soldiers.

A number of BDAR kits are under development. They often include special tools and materials to facilitate BDAR repairs. The most successful kit, to date, has been the aircraft electrical wiring repair kit which includes a new wire splice in addition to the tools and materials needed for the quick repair of damaged electrical cables. The prototype kits have been extensively evaluated and, at this writing, the Army is preparing to issue an invitation to bid on a production contract.

A UH-60, Black Hawk helicopter was returned from Grenada so badly shot up that it was to be scrapped. Before disposing of it, it was decided to test the BDAR kit and try to repair the maze of broken cables. After the wiring was repaired, it was possible to test the systems and pinpoint the extent of the damage. A new evaluation led to the decision that it would be economically feasible to restore it. The aircraft was fully restored and returned to service.

Another proposed kit is for quick tire repairs. Some 30 percent of the damage to tactical wheeled vehicles on a battlefield involves tires. The US Army TACOM is studying a number of schemes. In one, the proposed kit contains a needle-tipped canister. The damaged tire is jacked up to clear the ground, and the needle is used to inject a

foam. This fills the tire and seals holes and gashes. Vehicles can travel up to 30 miles at moderate speeds before the foam breaks down. Other kits in development include hydraulics, armor, fuel cells and aircraft structural repair.

BDAR TMs have appendixes of special materials, tools and substitutions which can

Quick, expedient battle damage repair is unique in that it depends, to a great extent, on the initiative and imagination of the individual; however, it has been demonstrated that without prior training, soldiers cannot be expected to perform BDAR tasks.

facilitate expedient field repairs. The lists include materials available in the Army inventory and commercially. Foreign and enemy equipment is also listed whenever it can be substituted for US equipment, although sometimes it must be modified. From these lists, field units can assemble kits as may be required for their special needs.

One technique, appearing to be very useful, consists of the use of epoxy-bonded fiberglass patches; however, the resins have a limited shelf life. The Army plans to buy large numbers of BDAR kits to store for contingency purposes and has ruled out the inclusion of any materials with a limited shelf life. The resins, however, are listed in the appendixes of the appropriate BDAR TMs.

The development of kits is one area in which civilian industry could be particularly helpful. The Army welcomes proposals for kits that would facilitate the rapid emergency repair of battle-damaged weapon systems.

## Doctrine

The tactical vehicle BDAR TMs were developed in close cooperation with the US

Army Ordnance Center and School, Aberdeen Proving Ground, Maryland, which provided a doctrinal framework to support the manuals. Similar doctrine is needed for other classes of weapons, and the Army needs additional doctrine on how best to train soldiers for BDAR, how to provide special kits and materials and, particularly, how to involve all levels of command.

Over the past decades, the Army has emphasized survivability of weapon systems, so systems returned for repair will be more heavily damaged than earlier generation systems. This will have a severe impact on support and logistic requirements.

If combat capability can be maintained over longer periods of time, the entire nature of combat will change. BDAR can provide the commander with resources not previously available. Battles will continue longer, and breakthroughs must be aggressively supported to maintain momentum. The books on tactics and logistics will need to be revised.

Experience and live-fire testing with various vehicles of the BDAR program lead to several conclusions. BDAR is a powerful force multiplier. Short of a direct hit and cat-

astrophic damage, practically all other critical damage can be repaired by BDAR techniques, and the weapons returned to the ongoing battle.

Military equipment designers must become more aware that equipment will break down or be damaged on the battlefield. They must make a greater effort to design equipment so that it can be fixed quickly and restored to battle. Existing reliability and maintainability technology should be expanded to embrace the concept of combat resilience.

- A "Design for Combat Resilience" program should be undertaken to include:
  - Design and test specifications.
- Engineering design handbooks (a primer on design for BDAR has been published...).
- Institutionalization: inclusion in contracts; funding; design control; and demonstration testing.

New doctrine must be developed to institutionalize BDAR and combat resilience and provide the Army with the capability to take full advantage of this powerful force multiplier. Experience, analysis and livefiring trials show that BDAR works!

## NOTES

- 1 J J Kennedy "U.S Naval Forces Aitcraft Battle Damage Repair Proceedings of the Annual Reliability and Maintainability Symposium (RAMS) (Piscataway, NJ Institute of Electrical and Electronic Engineers, 1987)
- 2 J D Hull, "U.S. Air Force Aircraft Battle Damage Repair (ABDR) Program," Proceedings, RAMS (1987)
- 3 Brigadier General B J Stalcup. The Need for Combat Resilience Proceedings RAMS (1986) 4 Ibid
- 5 H Clay McDowell, "U.S. Army Battlefield Damage Assessment and Repair [BDAR] Program—Manuals and Kits." Proceedings, RAMS (1986)
- 6 Technical Manual (TM) MIL—M-63003, Military Specification, Technical Manuals Battleheld Damage Assessment and Repair Preparation of (15 May 1985). The following BDAR TMs have been published and disholuted to the organizational level throughout the Army TM9—2350—255—BD.
- M1 Tanks TM9—2350—273—3D M48:M60 Series Tanks, TM9—2350—7 274—8D, M109 Series Howitzers, TM9—2350—275—8D, M113 Family Armored Personnel Camers, TM9—2350—276—8D, Common Subsystems— Combat Vehicles, TM9—1425—1586—9D, w C1, M48A1:A2 Chaparia Weapon System
- 7 H Člay McDowell, Meppen BDAR Fring Trials, *Proceedings*, RAMS (1987) 8 lbrd
- 9 L Kruse, L Winter R Thompson, J Mason and R Astor, "Results of the Meppen (BDAR) Firing Trials," Army Materiel Systems Analysis Activity (AMSAA) Special Publication no. 43 (March 1987)
- 10 J Coultino, BDAR and the Need for Combat Resilience, (Amencan Institute of Aeronautics and Astronautics, May 1985), A1AA-86-1147 11 Date E Woomert, Primer on Design for Battlefield Pamage Assess
- 11 Date E Woomert, Primer on Design for Battlefield Damage Assement and Repair, AMSAA Special Publication no. 40 (April 1986).

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## Task Force Smith: A Study in (Un)Preparedness

## and (Ir) Responsibility

Major Michael Cannon, US Army

The author writes, This article tells the story of Task Force (TF) Smith, the first US ground combat unit to meet the North Koreans in battle during the Korean War. It is not a story based on original research and has no new material concerning the experiences of the men involved. It is instead a compilation of material discussing several aspects of the deployment of a force to a combat zone from a peacetime mission. This particular manner of presentation was developed in an attempt to provide cadets at the US Military Academy with a historical situation that would not only interest them, but demonstrate that history has an immediate relevancy to the professional officer.

The circumstances that surround TF Smith's deployment and activities provide a vehicle that allows a wide range of issues to be discussed, ranging from the role and responsibility of junior officers and small-unit leaders, to problems faced by military systems in peacetime. It could be adapted with a little effort into an officers' professional development class and provide a means to discuss real-life problems using a historical situation as a guide. In this era, as in Smith's, the line between peacetime and combat can be rapidly crossed.

T 0400 on 25 June 1950, the thunder of guns woke South Korean soldiers stationed along the frontier with their northern neighbor. Almost immediately, troops dressed in mustard-colored uniforms crossed the border at numerous points and headed south accompanied by scores of fastmoving, evil-looking T-34 tanks. The blow was unexpected. The South Koreans had their forces spread thinly along their defenses. By the fourth day of the invasion, Seoul had fallen, and resistance was rapidly collapsing throughout the peninsula.

On 30 June, several hundred miles away, Lieutenant Colonel Charles B. Smith, a commander in the 24th Infantry Division (ID), wearily undressed and collapsed on a bed in his quarters at Camp Wood, Japan. His battalion had been on alert the night before, and it was not until 2100 that Smith was able to seek the solitude of sleep.

Almost immediately, it seemed, his wife was shaking him awake, saying, "Colonel Stephens is on the phone and wants to talk with you!" Staggering to the phone, Smith heard his regimental commander bark, "The lid has blown off! Get on your clothes and report to the CP [command post]!" Still groggy, but with adrenalin now beginning to surge through-his system, Smith looked at his watch. Less than an hour and a half after he had gone to sleep, he was about to take his battalion to war.

The need to report in spread rapidly throughout the battalion, although with a lack of urgency that was surprising. Sergeant Bill Meninger recalls that night very well:

"When the invasion came, of course everyone was interested, but it never occurred to us that we Americans serving in Japan in the Army of Occupation would ever get involved. For me, it was a typical Sunday night in Japan. I was at home with my family. It had rained all day. My wife was giving the kids a bath prior to putting them to bed

and I was reading a book and nursing a drink when the call came for me to report to headquarters! The wife wanted to know what the call was about. 'Something must be wrong with next week's schedule,' I answered. Til be back as soon as I can.' (Which happened to be eleven months later.)"

Stephens contacted the other commanders in the regiment and made arrangements to fill the gaps in the officer ranks of Smith's battalion by "loaning" him lieutenants. By 0300 on 1 July, the first elements of Task Force (TF) Smith loaded on trucks and headed for the airfield where they were to be moved to Korea. Major General William F. Dean, commander of the division, was waiting for Smith. Taking him aside, Dean issued a brief operations order in the light rain.

"When you get to Pusan, head for Taejon. We want to stop the North Koreans as far from Pusan as we can. Block the main road as far north as possible. Contact [Brigadier] General [John H.] Church. If you can't locate him, go to Taejon and beyond if you can. Sorry I can't give you more information. That's all I've got. Good luck to you, and God bless you and your men." Although Smith, West Point class of 1939, had seen combat in the Pacific in World War II, the situation must have looked grim.

Elsewhere, others were also feverishly making preparations for war. Eighth Army transferred more than 2,100 men from the three other divisions in Japan to bring the 24th ID up to strength. Because of the rapid demobilization after World War II and budgetary problems, US units were at two-thirds of their authorized strength. In practice, this meant each regiment had only two of three battalions; each battalion, two of three companies and so on. This does not tell the whole story, however. Even though the organizational problems were a handicap, there were serious flaws in the existing foundation. The recollections of three indi-

viduals highlight the problems.

"Occupation duty was heaven. I was the troop information and education NCO [noncommissioned officer] at Sugamo Prison, where Japanese war criminals were held. My unit did very little military training. Life away from the prison consisted mostly of athletics, clubs, nightly dances, theater and Japanese girls. Although in those days alcohol made me sick, there was always plenty to drink. GI money and cigarettes went a long way on the black market." — Private First Class Leonard Korgie, L Co., 34th Infantry

"I had additional responsibilities which should never have been performed by a corporal. For example, the Regimental Combat Effectiveness Report was due every three months. Regiment would hold a quarterly conference on how to complete the report. I was detailed to attend these conferences. Afterwards I would report to my CO [commmanding officer] and try to explain the report to him. His instructions were always the same: 'Make surethe medical company looks combat effective.' I would then prepare the lengthy report and the CO would sign without reading it."—Corporal Lacey Barnett

"The enlisted men left something to be desired. Enlistees, I learned, were not a very bright bunch of guys. The two smartest men in my outfit, a company clerk and a supply clerk, were draftees, and when their tour ended a month before Korea began, they were shipped home. With most of the enlistees, we really did have disciplinary problems, everything from VD to fighting, disobeying orders to showing up late, going AWOL [absent without leave] to drinking too much.

"Just before Korea started one of my jobs as the company execlutive officer] was to try to get rid of the troublemakers. This wasn't easy because to bust out of the army reouired five court-martials. I finally got rid of five guys, all real bad customers. When they left . . . they left in handcuffs. When they reached the Yokohama stockade, they were to be sent back to the States. The war began just as soon as they arrived in Yokohama. You know what happened? Someone up

Because of the rapid demobilization after World War II and budgetary problems, US units were at two-thirds of their authorized strength. In practice, this meant each regiment had only two of three battalions; each battalion, two of three companies and so on.

there decided C Company could not do without these five thugs and they were shipped back to us."—1st Lieutenant Philip Day, C Co., 21st Infantry

As Smith prepared to board the aircraft for Korea, he mentally took stock of his force. Altogether he had 440 men in an understrength battalion. Each man carried 120 rounds of rifle ammunition and two days' worth of C-rations. Unfortunately, not even this modest force could be airlifted at once as only six C-54 transport planes were available. By 0845, 1 July, the first plane was airborne.

"We started loading some C-54s with gear and equipment. It's sort of funny, you takeall those courses on how to load airplanes with jeeps and cannons and so forth; then when you actually do it, you just sit and hole the jeep in place with your feet and hope it doesn't roll out of the airplane."—Day

Because of fog at the Korean airstrip, the landing of TF Smith was spread over the course of the day. Smith, who had taken off in one of the first aircraft, was forced, by the weather, to return to Japan and did not land in Korea until almost three and one-half

hours after his first elements had arrived. Fortunately, transport had been arranged, probably by the US Army Advisory Group Korea (KMAG), and there was a US guide available. The men arranged themselves on the odd assemblage of almost 100 vehicles commandeered to meet them and wound their way some 17 miles from the airport to the railroad station in Pusan. Everywhere they were met, with joy. Crowds lined the streets, and banners and flags decorated the route. Once at the station, however, a somber note injected itself into the carnival atmosphere.

"The city wasn't very big in those days. We got all our gear and climbed onto the flatcars. As we waited to pull out, a train from up north came in. It was covered with human beings-troops, officers, old men. women, children, and most important, at least to me, wounded. My God, I thought, maybe there was a real war going on! Hysteria and panic traveled with this train. I heard a gunshot. Someone learned that a South Korean army officer sitting in the train had committed suicide. We were told his family had been captured in Seoul. We didn't have time to think much about that because it was then that our train moved out of the station."

Once the train arrived at Taejon, Smith went searching for Church. He found the general at a meeting with several Republic of Korea (ROK) and US staff officers. Taking him aside, Church pointed to a place on the map and said, "We have a little action up here. All we need is some men up there who won't run when they see tanks. We're going to move you up to support the ROKs and give them moral support."

Smith asked that he be allowed to go forward to look over the ground, and Church gave him authorization. While the rest of TF Smith began to settle into their bivouac, their commander and his principal officers got into jeeps and drove the 80 horrendously

bumpy miles to their tentative position. Once there, Smith chose what he felt was a suitable defensive position and issued orders for the occupation.

The following day, the men of TF Smith had an interesting lesson in the awesome destructiveness and unique limitations of airpower. On three separate occasions, friendly aircraft made devastating runs on targets of opportunity. The first was a South Korean ammunition train that had pulled into the station at P'yongt'aek. Australian aircraft strafed the target, demolishing not only the train, but the station and a large part of the town as well. Ammunition exploded all night, and many of the residents of the town were injured or killed.

That afternoon, a South Korean truck column was attacked near one of the towns the Americans were occupying. ROK rifle fire damaged one of the planes and forced the pilot to land nearby. There, KMAG and ROK officers "captured" a highly embarrassed US pilot.

In the third incident, four friendly jets made strikes along the Suwön-Osan highway. On the road they attacked a South Korach truck column and burned some 30 trucks while killing more than 200 ROK soldiers.

After a restless night, the elements of TF Smith were moved to P'yongt'aek. Here they were joined by part of the 52d Field Artillery Battalion with six 105mm howitzers, 73 vehicles and 108 men. It was the Fourth of July.

"We celebrated the...[holiday]... with a bottle of cold beer someone found. Later that day we got back in our trucks and rejoined B Company at Pyongt'aek. Many of us took this opportunity to get rid of the gas masks and blankets that had begun to weigh us down."—Day

"The night had been awful. Without repellent, the mosquitoes ate us alive. On the 4th we held several conferences in the city.



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We had no maps and I had only a general idea of where in Korea Ansong was."—1st Lieutenant William Wyrick

"There were some prisoners kneeling on the ground, their hands behind their backs and tied to their ankles. They were beaten across their thighs with a bamboo stick. I was told these people were accused of being Communists. I heard later they'd been executed but I don't know that to be true."— Day

Around midnight on the 4th, Smith moved the unit out of the city. He had to commandeer Korean trucks and other vehicles. Americans drove because the South Koreans deserted when they found out where they were going. Although it was only 12 miles to the position chosen the previous day, it took more than two and one-half hours due to the crush of refugee traffic and having to drive under blackout conditions. Along the route, ROK engineers were preparing, for demolition, the bridges Smith's men were moving over. Although they were told the Americans following up

the task force (not to mention Smith's men, themselves) were going to be using the bridges, the ROKs refused to halt work in several spots. At one site, work was stopped only when the dynamite was thrown into the river by the Americans.

The official history claims that "the delaying force reached the position that Smith had previously selected [at about 0300]. The infantry units started setting up weapons and digging in at the predesignated places ... [the artillery] moved ... into positions behind the infantry... All units were in place, but not completely dug in, before daylight." Soldiers who were there do not remember an operation that went this smoothly.

"We moved at night, arriving around 3:00 A.M. Everyone was tired. Then it began to drizzle—a cold, wet, penetrating drizzle. The men began digging foxholes on the hill east of the highway. Guys went down to bring up ammunition and because of the conditions, the hill became muddy and slippery. Time went by. It was raining now. Everyone was tired, wet, cold, a little bit pissed

off. The feeling was, why not wait for daylight to do all this climbing and digging?"— Day

The position Smith had chosen was an excellent one. The task force set up along a ridge that ran perpendicular to the roads coming south out of Suwön. From foxholes that were 300 feet or more above the road, Smith's battalion could see clearly along the approximately eight-mile stretch of road and railroad leading into Suwön.

One platoon of B Company was stationed to the west of the highway on a high knob. The other platoons were dug in to the east of the road. C Company had two platoons to

The six HEAT rounds at the position were quickly expended and the HE (high explosive) rounds had little or no effect. The next tanks through knocked out the gun and wounded several of its crew. . . . The next group of tanks came up against a badly shaken group of soldiers. As the new wave came into view, the men within the artillery battery started to panic. Crew members took off as officers ordered the guns to open fire.

the right of B Company, extending the line to the railroad. The final platoon was placed along a finger ridge running generally north to south so as to refuse the battalion's right flank. One of the recoilless rifles was placed to the east of the highway, while the other was entrenched just west of the railroad to take any vehicular traffic on the road under fire from the flank. The heavy mortars were placed almost 400 meters to the rear of B Company. All in all, not counting the refused right flank, the defensive position was approximately one mile long.

Lieutenant Colonel Perry, commander of

the artillery unit attached to TF Smith, moved his guns into positions approximately one mile behind the ridge. One gun was placed along the road halfway between the battery and Smith's position to act as an antitank gun. The other four howitzers were individually pulled over a difficult trail into battery by a pair of jeeps acting in tandem (the sixth howitzer had to be left to the rear due to transportation problems). At the battery position there were 1,200 rounds of ammunition, only six of which were HEAT (high-explosive antitank). The ammunition officer had drawn all that was available from the depot in Japan and had provided Perry's detachment with one-third of the 18 rounds he drew. Volunteers from the headquarters and service batteries made up four .50-caliber machinegun and four bazooka teams and joined Smith's men in the forward positions.

As the day dawned, the infantrymen testfired their weapons and ate their C-rations in the rain. As Smith watched anxiously, he saw movement in the vicinity of Suwon beginning at around 0700. A half-hour later he could see tanks lumbering down the road towards his cold and soggy men. The soldiers noticed them too.

"Sergeant Loren Chambers yelled, 'Hey, look over there, Lieutenant. Can you believe?!' Looking down the road toward Suwön, I made out a column of tanks. Seems like there were eight of them. I couldn't believe my eyes. 'What are those?' I asked. Chambers answered, 'Those are T-34 tanks, Sir, and I don't think they're going to be very friendly toward us.' The company commander was called. Everybody got real excited about them. The day was beginning in earnest."—Day

Artillery rounds arched into the sky and began bursting along the tank column, but with little apparent effect. The first group of eight tanks was closely followed by others at short intervals, usually in groups of four. As the enemy tanks approached to within 700 meters, the recoilless rifles took them under fire. Day was with one of the teams.

"Let's see,' I shouted, 'if we can get one of those tanks.' We picked up the gun and moved it to where we could get a clean shot. I don't know if we were poorly trained, weren't thinking, or if it slipped our minds, but we set the gun on the forward slope of the hill. When we fired, the recoilless blast blew a hole in the hill which instantly covered us in mud and dirt. The effect wasn't nearly as bad on us as it was on the gun. It jammed and wouldn't fire until we'd cleaned the whole damn thing.

"When we were ready again, we moved the gun to a better position and began banging away. I swear we had some hits, but the tanks never slowed down. . . . More of the tanks began shooting at us. . . I don't know what happened to the other two guys with me, but one blast knocked me and the gun over backward. I began bleeding from my ears. I wasn't unconscious, just stunned."—Day

Ålthough a number of hits were scored, none of the tanks stopped or even appeared to be damaged. As they came even with the infantry positions, the bazooka teams began to get into the action. Lieutenant Ollie Connor grabbed one of the weapons and crawled down the slope into a ditch running alongside the road. He worked his way along the ditch until he reached the rear of one of the tanks where the armor was supposed to be the thinnest.

Steadying the rocket launcher at a range of only 15 meters, Connors fired. The first round burned out against the vehicle with no effect. Hurriedly, he loaded and fired again, with the same lack of effect. All in all, he fired 22 rounds against the T-34 without damaging it. Several of the rounds were so old they failed to explode properly on impact.

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zooka had been designed, it had not been given to the troops because the ammunition had not been perfected. Smith's men were forced to fight with equipment that was known to be outdated more than six years before.

By 0900, 33 tanks had moved through the American positions. Unfortunately, the first through had cut the communication wires leading back to the battery position. The radios Smith's men had were old and wet and functioned badly. Only a jeepmounted set continued to function. By 1100, this too had ceased to work.

Chambers, an assistant platoon sergeant, called back on the sound-powered telephone for some 60mm mortar fire on the enemy tanks. The answer was:

They won't reach that far.

Well, how about the 81mm mortars?
They didn't come over with us.
How about the 42s?
The 42s can't fire.
How about the artillery?
No communications.
What about the Air Force?
They don't know where we are.
Call the Navy.
They can't reach this far.

Well then, send me a camera. I want to take a picture of this.

Once past the infantry's positions, the lead tanks came under fire from the lone artillery piece stationed along the road. Two tanks were damaged and pulled off to open the route for their companions. One caught fire and began to burn furiously. Two of the crew members abandoned the tank with their hands up. A third jumped out with a submachinegun and fired into a US machinegun position before he was cut down. An assistant gunner thus earned the dubious honor of being the first American killed in ground combat with the enemy in the Korean War. The six HEAT rounds at the position were quickly expended and the HE (high explosive) rounds had little or no effect. The next tanks through knocked out the gun and wounded several of its crew.

The main battery position was having similar luck in its efforts to stop the progress of the tanks. Although they were firing at ranges of 150-300 yards, the sweating, swearing gunners appeared to do little more than jar the tanks. Once the first group had passed, two bazooka teams under the command of Perry and a sergeant moved out to knock out the remaining immobilized tank. Through an interpreter, Perry called on the crew of the tank to surrender and was promptly shot in the leg for his trouble. He then ordered the howitzers to destroy the tank. After three rounds had hit, two of the crew jumped out and were killed by a squad sent forward to deal with them.

The next group of tanks came up against a badly shaken group of soldiers. As the new wave came into view, the men within the artillery battery started to panic. Crew members took off as officers ordered the guns to open fire. Suddenly, the officers and NCOs found themselves in the unenviable position of having to man the guns.

While the officers handled ammunition, the NCOs laid and fired the guns. Round after round was directed against the onconing tanks, but once again with little effect. Fortunately for the battery, the tanks did not stop to return fire, but moved rapidly through the position. Perry, leaning against a tree and favoring his wounded leg, managed, along with one of his lieutenants, to talk the men into coming back to the guns. At this point, Perry had suffered only one casualty, other than himself, within the main battery area.

Of the 33 tanks that had moved through TF Smith's position in less than an hour, four had been immobilized or destroyed, and three slightly damaged. On the other hand, the tanks had killed or wounded 20 infantrymen, destroyed all the parked vehicles behind the infantry and artillery positions, and knocked out one of the howitzers.

Although antitank mines would have caused the advancing armor horrendous casualties, the task force fought without them. There were none in Korea. None of the other weapons on hand appeared to be able to halt the enemy armor either. As the rain continued to fall, the task force members dug deeper and waited for the next onslaught.

An hour later, movement could again be seen coming out of Suwon. As time passed, the advancing column grew in size until it filled 6 miles of road. While the Americans nervously waited out the hour it took the enemy to get within 1,000 meters, it became clear that the column was composed primarily of trucks and foot soldiers. When they had closed to within range, Smith ordered

his men to "throw the book at them." Mortar and machinegun fire rained down on an enemy that was caught unawares.

Slowly, order was created out of the chaos on the road. Three tanks with the road-bound force moved up to claw at the ridge with cannon and machinegun fire. Behind the destroyed lead vehicles, more than 1,000 enemy infantry dismounted and began to move against the US positions. Beyond them, uncounted hundreds waited. Had air power been available, it would have played havoc with the congestion on the road, but the weather was too bad for close air support to fly. Artillery would have devastated the enemy, but there was no communication with Perry's battery, and it was assumed to have been destroyed.

All efforts to overrun the position frontally were broken up by intense US fire. As the morning progressed, however, North Koreans began to work around the flanks. After artillery and mortar fire started to fall in increasing amounts and accuracy, Smith began to pull his men into a tighter defensive formation. At approximately 1430, it became obvious that the position would have to be abandoned, as the Americans were rapidly depleting their remaining supply of small arms ammunition.

Once Smith gave the order to withdraw, things slowly began to go to pieces. C Company withdrew first, followed by B Company—except for one platoon which had not received the order. This group only discovered that the battalion had pulled out when one of its runners went back to the CP and could find no one around. All crew-served weapons were abandoned, as well as all the dead and some 30 wounded litter cases. Confusion rapidly became rampant.

"Guys fell around me. Mortar rounds hit here and there. One of my young guys got it in the middle. My platoon sergeant, Harvey Vann, ran over to him. I followed. 'No way he's gonna live, Lieutenant.' Oh, Jesus, the

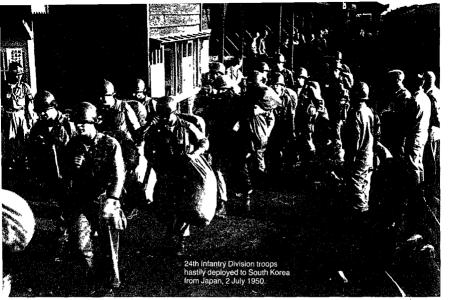


Only 185 men out of Smith's original 400 plus had made it back.

None of the artillerymen who had been put into ad hoc bazooka and machinegun crews ever returned. . . . "Designed to be an arrogant display of strength to bluff the enemy into halting his advance, [TF Smith] had delayed the Inmun Gun exactly seven hours."

guy was moaning and groaning. There wasn't much I could do but pat him on the head and say, 'Hang in there.' Another of the platoon sergeants got it in the throat. He began spitting blood. I thought sure . . for the rest of the day he held his throat together with his hand. He survived, too."—Day

It was at this point Smith left the battalion to find the artillery battery and tell Perry the infantry was withdrawing. Upon his arrival, he was amazed to find that the battery had suffered only comparatively light casualties. The artillerymen removed the sights and breechblocks from their guns and carried them, along with their aiming cir-



Units at two-thirds of their authorized strength, bazookas that were outdated by more than five years, old and worn communications equipment and scarcity of antitank ammunition all indicate an army underfunded for the missions that it may be required to undertake. . . . TF Smith was [also], quite frankly, neither physically nor mentally prepared for combat. The leadership at the cutting edge of the Army had failed to meet its responsibility to prepare US soldiers for this arduous undertaking.

cles, back to the outskirts of Osan, where they had left the trucks. Much to their surprise, only a few had been damaged by enemy fire. The truck column soon came upon groups of Smith's battalion struggling across the hills and rice paddies. Many had taken off their shoes to be able to run faster, and very few had personal weapons. About 100 of Smith's force were picked up by this group.

Upon arrival in Ansong, a headcount was taken. Only 185 men out of Smith's original 400 plus had made it back. None of the artillerymen who had been put into ad hoc bazooka and machinegun crews ever returned. Survivors continued to straggle in over the

next few days. A few had walked all the way to the Yellow Sea and the Sea of Japan and then came south. One man even floated into Pusan in a sampan. TF Smith, in the words of T. R. Fehrenbach, "designed to be an arrogant display of strength to bluff the enemy into halting his advance, had delayed the Inmun Gun exactly seven hours."

TF Smith failed to achieve its primary mission because it was not prepared to fight an experienced army. The traditional interpretation of why it failed stresses that senior military and civilian leaders were at fault because of the adoption of a bankrupt defensive policy. This, in turn, led to several critical organizational flaws that are high-

lighted by Smith's battalion. Units at twothirds of their authorized strength, bazookas that were outdated by more than five years, old and worn communications equipment and scarcity of antitank ammunition all indicate an army underfunded for the missions that it may be required to undertake. Fehrenbach eloquently states this aspect of liability in *This Kind of War*:

"There just hadn't been enough money for long-range bombers, nuclear bombs, aircraft carriers, and bazookas too. Now, painfully, at the cost of blood, the United States found that while long-range bombers and aircraft carriers are absolutely vital to its security, it had not understood in 1945 the shape of future warfare.

"To remain a great power, the United States had to provide the best in nuclear delivery systems. But to properly exercise that power with any effect in the world—short of blowing it up—the United States also had to provide the bread-and-butter weapons that would permit her ground troops to live in hattle.

"If it did not want to do so, it had no moral right to send its troops into battle."

Yet, there is another side to this coin of preparedness that should concern the military professional. It is one that many avoid discussing. TF *Smith* was, quite frankly, neither physically nor mentally prepared for combat. The leadership at the cutting edge of the Army had failed to meet its responsibility to prepare US soldiers for this arduous undertaking. Weaknesses that can be attributed to this are evident in a number of areas.

Training prior to the deployment was poorly conducted. Although there were severe limitations on maneuver areas and those items required for large-scale maneuvers, a peacetime mind-set manifesting itself as a fixation on readiness reports and after-duty activities is obvious. In addition, lower-level leaders failed to develop cohesion and a sense of urgency into the units under their command.

The difficulties encountered in the preparation of the initial defensive positions during adverse conditions, the rapid disintegration of the battery while in contact and the task force during the withdrawal point to critical weaknesses in morale that should have been identified prior to the firing of the first shot.

On the positive side, there were instances of courage and aggressiveness that all should seek to emulate. Connor's single-handed assault on a tank, Perry's attempts to destroy an immobilized enemy vehicle, and the number of men volunteering for ad hoc teams to employ crucial crew-served weapons all point to a level of personal bravery that is encouraging. What we must do is inculcate into ourselves and our subordinates exactly what our responsibilities are and ensure that such men are not wasted because of our failure to give them the expertise they need to defeat a competent and aggressive foe.

#### NOTES

Three works were used in preparing this article

- T R Fehrenbach, This Kind of War
- · Roy Appleman, South to the Yaktong. North to the Yalu
- · Donald Knox. The Korean War An Oral History

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Major Karl W. Eikenberry US Army

Although Asian military history is perhaps not as well known to Westerners as European history, a knowledge of that history can aid in understanding contemporary situations. The Imjin War, initiated by Japan against Korea and China, provides examples of military operations and leadership in Asia. This conflict is sonamed because the Koreans, in accordance with the Chinese cyclical system for naming years, designated 1592 as imjin. Repercussions from this war are still felt today.

S THE foreign invader seizes P'yōng-yang and continues to march north towards the Yalu River, Beijing issues ominous warnings hinting at massive intervention. China's words go unheeded and, in the dead of winter, its armies strike suddenly, quickly capturing Seoul. Its enemy regroups and a stalemate sets in on the battlefield. Years of difficult armistice negotiations will pass before peace is restored on the Korean peninsula.

Few Westerners realize that this scenario first unfolded not in 1950, but in 1592. The foreign invader was Japan. The conflict was the bitterly contested Imjin War. Understanding this conflict is essential if one is to fully appreciate the historical perspective that shapes Korean, Chinese and Japanese attitudes towards the regional balance of power in Northeast Asia.

The decades preceding the Imjin War witnessed a steady decline in the vitality of Ming China and its tributary state, Korea. The growing incompetence of the Chinese bureaucracy, coupled with the related problem of decreasing tax revenues, limited Beijing's ability to cope with mounting threats along its borders.

By the 1550s, these threats were considerable. The Wako (Japanese pirates) ravaged the east coast, while the Mongol and Jurched tribes threatened China's northern frontiers. The Wako were repulsed only at a tremendous cost to the imperial court, while the northern barbarians were to continue to plague the Ming until its fall in 1644. The Yi dynasty of Korea suffered from a set of problems which paralleled, in nature and time, those of the Ming. However, although the Yi was generally successful in safeguarding its borders, by 1592 its government had been rendered largely ineffective by court factionalism.

Japan's fortunes were in sharp contrast to those of its neighbors. Viewed with cultural contempt by the Chinese and Koreans, the Japanese had remained isolated under varying degrees of disunity for more than 600 years, until Oda Nobunaga brought most of Honshu under his control between 1559 and 1582.2 Following Nobunaga's death, his former lieutenant, Hideyoshi Toyotomi, completed the reunification of Ja-

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pan with the subjugation of Kyushu in 1587 and the capture of Okawazra in 1590.3

With the domestic front secure and a large efficient army at his disposal, Hideyoshi entertained ambitions of an overseas empire. A number of factors drove him to pursue foreign adventures.

- He sought to eliminate Korean and Chinese restrictions on foreign trade.
- He was undoubtedly concerned about the ambitions and loyalties of the coalition of daimyos (feudal lords) under his control and viewed an overseas expedition as a means of exporting potential challenges to his authority.
- Perhaps most important, as he related to the Jesuit priest, Luis Frois, in 1586, he wanted to acquire more kingdoms"...solely [for] immortalizing (sic) himself with the name and fame of his power."

By 1587, Hideyoshi had decided to conquer China. He ordered the daimyo of Tsushima to dispatch an envoy to the Yi court in Seoul to demand tribute and hostages. King Sonjo (1568–1608) disingenuy



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ously replied that he could not comply since it was a long voyage to Japan, and Koreans were not good sailors. Unamused, Hideyoshi ordered the daimyo's envoy beheaded and sent a second one to Seoul. The Yi court responded by demanding that prior to the establishment of relations, a group of Koreans who had collaborated with Japanese pirates must be returned to Korea for punishment.

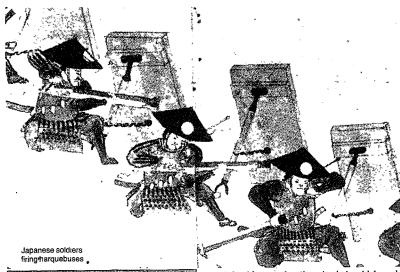
Hideyoshi delivered the Korean sailors, and in 1590 two ambassadors from the Yi court arrived in Japan. Hideyoshi emphasized that his objective was not Korea, but China. He wrote to the Korean king, "My wish is nothing other than that my name be known throughout the three countries [of Japan, China, and India]." However, the Yi

remained loyal to the Ming and refused to respond to two subsequent missions Hideyoshi sent to Seoul. In 1591, Hideyoshi, having lost patience with Korea's equivocation, ordered his daimyos to mass their forces and laid out plans for an expedition described as "the entry to China" (Karairi).

By March 1592, Hideyoshi had mustered, in the vicinity of Nagova, an expeditionary force of 158,700 soldiers organized into nine divisions. Another 118,000 were mobilized as a reserve force.10 For transport, he assembled a fleet of more than 700 ships manned by some 9,200 sailors.11 The tactics of the Japanese ground forces, perfected during the recent civil war, were sophisticated and effective. Combat units were comprised of bow, gun and spear teams, supported by heavy cavalry.12 Their use of the Portuguese harquebus and field cannon made them among the most formidable fighting men in the world. On the other hand, Japanese naval forces, inexperienced at operating outside their littoral waters and not equipped with cannon, were ill-prepared for an undertaking of such magnitude.

Hideyoshi's plan called for his armies to occupy the entire Korean peninsula as the first phase of his invasion of China. He planned to initially direct operations from his headquarters in Nagoya, with Ukita Hideie serving as commander in the field. Later he would move to Korea to personally direct the second phase of the expedition.

In Korea, the continuation of court factionalism hindered efforts to prepare the country's defenses. The Yi military system, borrowed from the Ming, was complex and cumbersome. The army consisted of a central force, the "Five Staffs" and regional forces which occupied fortresses and garrisons throughout the nation. During times of crisis, officers named by the king were to assume command of the regional units. The system effectively fractionalized power so the army could not challenge the crown. Un-



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fortunately, it also rendered it impotent when faced with a powerful enemy.

The court's measures to strengthen national defense mostly consisted of purging seasoned officers not aligned with the ruling faction, and land forces were poorly trained and lacked firearms. Korea was, however, relatively strong at sea. For centuries, Koreans had been regarded as the premier

shipbuilders and sailors in Asia. Although the court had allowed the fleet to decline somewhat during the 16th century, available ships were heavily armed, and the navy remained a potential threat to the Japanese.

On 14 April 1592, General Konishi Yukinaga led Hideyoshi's vanguard of 18,000 men into Pusan harbor. Two days later, Generals Kato Kiyomasa and Kuroda Nagomasa followed with 22,000 and 11,000 soldiers respectively. The Korean navy inexplicably failed to intervene, and the troop landings went unopposed.<sup>15</sup>

The Pusan garrison was quickly overwhelmed, and more than 8,000 Koreans were killed by the ruthless invaders. The Japanese rapidly advanced north towards Seoul along three axes with Kuroda moving on the left; Konishi, the center; and Kato, the right. Korean troops, led by hopelessly incompetent officers, were routed time and

The [Korean] court's measures to strengthen national defense mostly consisted of purging seasoned officers not aligned with the ruling faction, and land forces were poorly trained and lacked firearms. Korea was, however, relatively strong at sea.

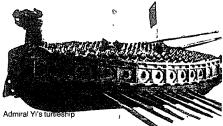
again. At Sangju, when a civilian reported the approach of Japanese forces, General Yi Il ordered him put to death for "spreading false rumors." He was surprised and crushed a short time later. At the Battle of Ch'ungju, General Shin Nip, unversed in the art of war, deployed his soldiers in a narrow valley with no escape. He was annihilated by the combined forces of Konishi and Kato."

With the fall of Seoul inevitable, King Sonjo and his court fled north. On 3 May, Japanese forces, having marched 275 miles in 20 days, occupied the city. Hideyoshi confidently predicted in a letter to his mother: "I shall take China about the ninth month [September 1592], and I shall receive [your gift of] formal clothing for the festival of the ninth month in the Chinese capital." 19

After organizing the occupation of Seoul, Konishi and Kato pursued the Koreans. Availing themselves of their enemy's tactical incompetence, the Japanese feigned retreat in front of the Korean's strong defensive line along the Imjin River. Predictably, the Koreans surged across the river to attack the Japanese only to plunge into a devastating ambush.<sup>20</sup> The road to China appeared open.

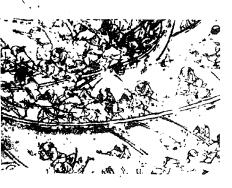
Konishi raced north and occupied P'yōngyang on 13 June. Kato marched to the northeast where he captured two royal princes and sent a detachment across the Tumen River into China.<sup>21</sup> It is here that serious differences between Hideyoshi's daimyos began to surface. Kato, a devout Buddhist, represented the traditional samurai. He strenuously pursued Hideyoshi's objective of conquering the Ming. On the other hand, Konishi was a faithful Catholic who remained dubious of the possibilities for Japanese success and attempted to curb Hideyoshi's ambitions.

As early as the summer of 1592, there were compelling reasons for Konishi to reappraise the strategic situation. As the Japanese expeditionary force fanned out to occupy Korea's provinces, its lines of communications became increasingly tenuous. Local gentry leaders organized guerrilla bands which harassed the invaders on land, while Admiral Yi Sunshin led the Korean navy to spectacular successes against the Japanese at sea. Yi, revered by Koreans as their nation's greatest hero, was the consummate military leader. Appointed as the fleet admiral for Cholla Province in February



ary 1591, he quickly organized and trained a small naval strike group. The backbone of this approximately 50-ship group was the revolutionary turtleship. Yi wrote of this warship:

"We can fire cannon through the mouth of the dragon [the bow] while we have the deck covered with iron spikes [to counter boarding parties]. Although our crew can look at the enemy from the ship, the enemy cannot see into it from outside. We can penetrate the enemy line of hundreds of ships and destroy them with superior firepower."<sup>22</sup> (Below) Japanese fleet under attack by Admiral Yi's forces. (Right) Admiral Yi Sunshin



A brilliant naval strategist who emphasized reconnaissance, surprise and the offensive, Yi was responsible for the destruction of more than 300 Japanese ships between May and September of 1592 in the coastal waters from Pusan to Yōsu.<sup>23</sup> With Yi blocking the sea lines of communication, Hideyoshi indefinitely postponed his plan to personally assume command in Korea, leaving his legions to fend for themselves.

Events in Korea had been closely followed by the Ming court in Beijing. In October 1592, the Chinese emperor sent a 5,000man force south from Manchuria to attack Pyöngyang. \*\* Konishi ambushed and routed the Chinese and continued to reconnoiter approaches to the Yalu. The emperor then dispatched a General Shen to ascertain the enemy's strength and gain time to raise a large army. Shen parleyed with Konishi north of Pyŏngyang. He blithely told Konishi that he had an army of one million Chinese soldiers north of the Yalu waiting for his order to attack.

Konishi, convinced his forces were too weak to continue the "entry to China," but unwilling to retreat and incur Hideyoshi's wrath, arranged a 50-day armistice with the Chinese, hoping that they would accept the status quo. In turn, Shen, on behalf of the emperor, offered Konishi a badge for each

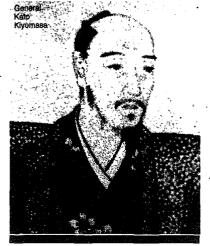


Japanese soldier in P'yöngyang, thus learning that the enemy force numbered approximately 20,000. By January 1593, the Chinese had assembled a 40,000-man expeditionary force under Li Rusong in Manchuria. Li crossed the frozen Yalu, surprised Konishi and drove him south of the Imjin River.

Li's advance was finally halted in a fiercely contested battle just north of Seoul at Pyokchegwan. 26 The Chinese army pulled back to P'yōngyang, while the Japanese withdrew their divisions from northern Korea and massed around Seoul. Ukita's failure to defeat a Korean army under General Kwon Yul at Haengju Fortress northwest of Seoul in February 1593 signalled the end of Japan's ascendancy. It was the beginning of a prolonged strategic stalemate. 27

In April 1593, armistice negotiations between China and Japan began. Hideyoshi ordered his divisions to withdraw and establish garrisons along the east and south coasts of Korea. Li moved south and occupied Seoul.<sup>28</sup> The armistice negotiations, which continued intermittently until 1596, were doomed from the outset. Both Hideyoshi and the Ming emperor were unwilling to relinquish their claims to hegemony over Korea.

Hideyoshi arrogantly outlined peace



After organizing the occupation of Seoul, Konishi and Kato pursued the Koreans. Availing themselves of their enemy's tactical incompetence, the Japanese feigned retreat in front of the Korean's strong defensive line along the Imjin River. Predictably, the Koreans surged across the river to attack the Japanese only to plunge into a devastating ambush.

terms that implied Japan had been victorious. At the other extreme, the Ming emperor condescendingly offered to enfeoff Hideyoshi as "king of Japan." Progress in the negotiations was hampered by the unwillingness of the envoys on both sides to insulf their sovereigns by accurately reporting their protagonist's bargaining positions.<sup>29</sup>

Time continued to work against the Japanese as Yi's blockade of the Korean coast disrupted their supply lines. The Jesuit priest, Gregorio de Cespedes, attested to the severity of the situation, writing from Konishi's garrison at Ungch'ön:

"Although Hidevoshi sends food, so little

reaches here that it is impossible to sustain all with it, and moreover the help that comes from Japan is insufficient and comes late. It is now months since ships have come and many craft were lost."30

At the same time, Korean army units, using guerrilla tactics, controlled the countryside, further isolating the Japanese. By the summer of 1596, it had become clear to Hideyoshi that China would not accede to his demands. Infuriated by the Ming's imperiousness and intransigence, he ordered a second invasion of Korea. Recognizing that he could not subjugate the Chinese, his objective was simply to punish his enemies. He raised an army of more than 140,000 under the command of Ukita. In January 1597, a Japanese vanguard led by Konishi and Kato, landed in Pusan. For the second time in five years they marched north.<sup>31</sup>

As in 1592, the Japanese were initially successful. Yi, falling victim to the widespread Yi court factionalism, was relieved from command. The Japanese annihilated the Korean fleet at the Chilchon Strait of Köje-do in July 1597, sinking more than 200 boats. With the sea lanes cleared, Kato and Konishi advanced and overwhelmed the garrison at Namwon in mid-August and continued to march towards Seoul. A combined Korean-Chinese army finally halted the Japanese at Chiksan (not far from Osan) in early September. It was the return of Yi, however, that heralded the beginning of the end of Hidevoshi's Korean adventure.

In July, 'Yi was reinstated as commander of the Korean fleet, by now reduced to 12 vessels. In one of the most daring attacks in naval history, Yi surprised and eliminated a 133-vessel Japanese armada on 16 September at Myongyang, near Mokp'o.<sup>33</sup> With his supply lines cut and faced with the onset of winter for which his men were ill-prepared, Ukita ordered a general withdrawal to fortresses along the south and southeast coast.

Beijing dispatched significant numbers of

reinforcements to Korea in a bid to completely drive the Japanese from the peninsula. Bitter, but indecisive battles were fought throughout in the early months of 1598 near Ulsan and Sanchon. Concurrently, the Ming sent Admiral Chen Lin with a flotilla to support Yi's operations. Unfortunately, Chen seemed to primarily excel at profligacy. The Korean hero proved himself an adept statesman by winning Chen's confidence and a free hand to employ his ships. With the Koreans and Chinese exerting strong pressure on land and sea, Hideyoshi recalled to Japan all but 60,000 men in the spring of 1598.

On 18 September 1598, Hideyoshi died, setting the stage for the abrupt conclusion of the Imjin War. Prior to his death, he had instructed several of his lieutenants to arrange for a termination of hostilities, thus the Japanese commanders were afforded a face-saving way out of the Korean quagmire. Still, their withdrawal was not without event. Yi ordered the allied fleet into the Noryangjin Strait on 19 November 1598, to teach the Japanese one final lesson. Yi was once again victorious, but, like Lord Horatio Nelson at Trafalgar, he was fatally wounded by a musket shot during his final engagement.

By 1601, the Ming armies had returned to China and in 1606, the Tokugawa shogunate in Japan reestablished diplomatic relations with Korea. Thus, the seven-year struggle ended in an inconclusive stalemate. Nevertheless, the Imjin War dramatically influenced subsequent developments in the domestic and external affairs of Japan, China and Korea.

In Japan, Tokugawa Ieyasu filled the void created by Hideyoshi's death and established a regime which survived until the Meiji restoration in the 19th century. As a result of Korea's naval prowess, Tokugawa and his successors recognized that sea power was vital to their country's military



Ukita's failure to defeat a Korean army under General Kwon Yul at Haengju Fortress northwest of Seoul in February 1593 signalled the end of Japan's ascendancy. It was the beginning of a prolonged strategic stalemate.

strength and shaped their policies accordingly. The More significantly, in the 19th and 20th centuries, Japan's expansionist military leaders, who revered Hideyoshi as the samurai exemplar, resurrected his spirit to justify their aggression.

The Ming suffered several hundred thousand casualties and depleted its treasuries to support the war effort. This left them vulnerable to the Manchu tribes, which went on to conquer China in 1644. 38 But the Ming

By the summer of 1596, it had become clear to Hidevoshi that China would not accede to his demands. Infuriated by the Mina's imperiousness and intransigence, he ordered a second invasion of Korea. Recognizing that he could not subjugate the Chinese, his objective was simply to punish his enemies.

had established a precedence for the leaders in Beijing to define Sino-security interests as extending into the Korean peninsula. Chinese leaders of all political colorations have agreed on this point, as the People's Republic of China demonstrated in 1950.

The Imiin War was most traumatic for the Korean people. The Yi dynasty never recovered from the disasterous conflict, and Korea was unable to prevent Japan's encroachments in the late 19th century. At the same time, the war foreshadowed the 20th century reality that the integrity of Korea is very much dependent upon the regional balance of power in Northeast Asia.

Finally, the Imjin War, together with Japan's colonization of Korea from 1910 until 1945, has filled the Korean people with a deep enmity towards Japan. Signs at virtually every cultural site in Korea stating that the original structure was destroyed during the "Hideyoshi Invasion," as well as ubiquitous statues of Yi, remind the Korean people daily of a war fought almost 400 years ago.

#### NOTES

- 1 Ki-Baik Lee, A New History of Korea, trans. Edward W. Wagner and Edward J Schultz, (Seoul, Irchokak Publishers, 1984), 189 The Yi dynasty of Korea, founded at the same time as the Ming in the late 14th century, adopted a policy known as "sadae" or "serving the great." Although the Yi performed such ritual tributary acts as sending embassies to Beging annually, it maintained a considerable degree of independence as a sovereign state
- 2 George Sansom. A History of Japan, 1334-1615 (Stanford Stanford University Press, 1961), 274
  - 3 fbid, 312
- 4 Wanne J. Joe. Traditional Korea. A Cultural History (Seoul. Chung.ang. University Press, 1981), 359
- 5 James Murdoch, A History of Japan, vol 2, (New York Frederick Ungar Publishing Co., 1964), 305 fbid, 307
   Mary E. Berry, Hideyoshi (Cambridge, MA. Harvard University Press,
- 1982), 208
  - 8 Ibid 9 lbid , 209
- 10 Republic of Korea Joint Chiefs of Staff, History of Korea's Wars (Hanguk Chonsa), trans Kim Ki Joon, (Seouf Kyohaksa, 1984) 99
- Yune-Hee Park, Admiral Yi Sun-Shin and His Turtieboat Armada (Seoul: Hanjin Publishing Company, 1978), 63
  - 12 Republic of Korea Joint Chiefs of Staff 101
  - 13. Ibid., 100
  - 14 Ibid . 102 4
- 15 Sansom, 354 Sansom adds that the Korean court had not sent orders to Yi alerting him of the invasion

- 16 Homer B Hulbert, Hulbert's History of Korea, vol. 1, ed. Clarence N. Weams (New York, Hillary House Publishers, 1962) 357
- 17 Park 103-4
- 18 Sansom, 354 19 Berry, 209
- 20 Hulbert 379-82
- 21 Joe, 362-63
  - 22 Park, 72 23 Republic of Korea Joint Chiefs of Staff, 118–26
- 24 Murdoch 341
- 25 Hulbert, Hulbert's History of Korea, 2,2,
- 26 Takashi Hatada, A History of Korea, trans. Warren W Smith Jr. and Benjamin H. Hazard, (Santa Barbara, CA. Clio Press, 1969), 76
- 27 Han Woo-Keun, The History of Korea, trans. Lee Kyung-shik, (Honolulu East West Center Press, 1971), 271
  - 28. Park, 181
- 29 Hatada, 76
- 30 Park. 184
- 31 Berry 233
- 32 Park 196
- 33 Ibid , 212
- 34 Murdoch, 859
- 35 lb d , 358
- 36 Lee 214
- 37 Sansom, 361
- 38 Morris Rossabi, China and Inner Asia. From 1368 to the Present Day (New York Pica Press. 1975), 89

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# CHTS

#### Clausewitz, FM 100—5, and the Center of Gravity

One of the key concepts of operational design contained in appendix B, US Army Field Manual (FM) 100-5, Operations, is that of a center of gravity. The premise, undoubtedly correct, on which this concept is based, is the idea that any armed combatant-from nation state to tactical formation-contains in itself "some components . . . more vital than others to the smooth and reliable operation of the whole." These are important because "their loss unbalances the entire structure, producing a cascading deterioration in cohesion and effectiveness. . . . "These sources of strength or balance are called centers of gravity.

FM 100-5 legitimizes the concept with a definition from Carl von Clausewitz: "the hub of all nower and movement on which everything depends." Further, the manual notes that a center of gravity can be a characteristic, capability or locality. What, however, did Clausewitz really say

about this subject?

First of all, he stated explicitly that the center of gravity is an analogy used to illustrate the proposition that "... the blow from which the broadest and most favorable repercussions can be expected will be aimed against that area where the greatest concentration of enemy troops can be found. . . . "This is in chapter 27 of book VI of On War [Howard and Paret], titled "Defense of a Theater of Operations."

Clausewitz leaves no doubt that in a theater of war, and within fighting forces themselves. "centers of gravity will be found wherever the forces are most concentrated." The sphere of effectiveness associated with any center of gravity is a function of the cohesion of the whole. Indeed, the related concept of a theater of war is based on the presence of "the sort of unity in which a single center of gravity can be identified." Moreover, in chapter 28, Clausewitz says, "A major battle in the theater of war is the collision of two centers of gravity. . . . " (Eine Hauptschlacht auf dem Kriegstheater ist der Stoss des Schwerpunktes gegen den Schwerpunkt. . . . [Werner Hahlweg]).

The legitimizing quotation used in FM 100-5 comes from book VIII of On War and refers to the characteristics of belligerents in a war. The examples treat dynastic states, alliances and nations beset by domestic strife and popular uprisings. In short, they deal with strategic, not operational objectives. Clausewitz also said "... no matter what the central features of the enemy's power may be . . . the defeat and destruction of his fighting forces remain the best way to begnn. . . .

One further point-of no small significance especially for operations short of war-is that Clausewitz maintained, "It is the decision that changes the centers of gravity on each side . . . into active agents. If one drops the idea of a decision, the centers of gravity are neutralized. . .

The purpose of this comparison is twofold. First, I want to point out that, in spite of an outof-context quotation, the two concepts of center of gravity are fundamentally different in terms of content. In FM 100-5, the concept is an extensive elaboration of what was, for Clausewitz, a fairly simple analogy. Our doctrinal construct, I believe, approaches the level of metaphysics by offering the possibility that even a boundary between major combat formations can serve as a center of gravity. For Clausewitz, the major concentration of enemy forces was central.

As written in FM 100—5, the defining feature of a center of gravity is the "cascading deteriora-. tion" produced by the loss of some specific installation, terrain feature, unit or psychology. Although selective examples may be produced, normally out of context, to demonstrate the possibility of such effects, this is indeed a very thin reed upon which to base most campaign

plans. This is my second point.

Clearly, we must recognize that there are targets of enhanced value in any hostile array. However, we must also guard against becoming fascinated by the possibility of finding a magic key that allows us to avoid the requirement of defeating, in battle, the enemy forces opposing us.

> COL Richard M. Swain. USA. CAC. Fort Leavenworth, Kansas

# ™ SUMMARIES

### Airland Battle-2000 Applications in the Indian Context

By Major G. D. Bakshi
U.S.I. Journal, July-September 1986

Characterizing the US Army's development of the AirLand Battle 2000 concept as a "creative and original quantum jump in military thought," Major G. D. Bakshi argues in India's U.S.I. Journal that "it is imperative that we study this new doctrine and examine what implications it has for us on the subcontinent."

He says India missed the industrial revolution of the 19th century and "paid the price for it by loosing (sic) our freedom." Now the electronic revolution is in progress, according to Bakshi, who says, "We can not afford to miss this revolu-

tion and lag behind once more."

Why is AirLand Battle 2000 so important to the Indian military? Because, as Bakshi notes, the situation confronted by Indian forces is "surprisingly, quite similar" to that faced by NATO forces in Europe. He describes AirLand Battle doctrine in some detail and points out that it resulted from "numerous outside pressures," not the least of which was getting US commanders "out of the defensive minded rut" of the post-Vietnam War period.

But there is more to it than that. Bakshi writes: "What is most significant . . . is the fact that the AirLand Battle 2000 doctrine is a conceptual blue print of how American soldiers will be employed and equipped for combat during the

year 1995 through 2015."

It is thinking and acting precisely in this manner that will save India from missing another revolution, as Bakshi puts it. No longer will technology-drive tactics. The author says AirLand Battle doctrine "has replaced this haphazard process" with a concept-based requirements system and "stopped the 'tail wagging the dog'."

AirLand Battle 2000 contains a number of relevant lessons for India, Bakshi asserts. He writes that it is worth emulating because, in the case of the United States, the concept represents an attempt to restore maneuver to an army "that had become overly dependant (sic) on attrition, fire power and fixed defences."

The doctrine is also noteworthy, in Bakshi's view, because it relies on a concept-based requirements system, it considers future technology, and it establishes the operational art as an intermediate level of war between tactics and stratery.

Arguing that India "can not afford to be shocked by the future," Bakshi says the study of AirLand Battle 2000 "therefore acquires greater pertinence today than even (sic) before." He concludes that the weapons environment in any future war on the Indian subcontinent will be characterized by a high degree of complexity and lethality. "We must prepare today," he writes, "for that awesome tomorrow."—ELH

#### **NATO's Collection of Forces**

By Thomas A. Callaghan Jr. Journal of Defense & Dipfornacy, July 1987

By calling forth a collective security mechanism for Europe, but failing to provide a collective defense industrial effort to support a conventional defense, the North Atlantic Treaty, "for all its virtues, is fatally flawed," according to Thomas A. Callaghan Jr.

The superiority of the Warsaw Pact's conventional force, moreover, never loomed larger thanwhen the Soviet Union agreed to the West's offer to remove all US and Soviet land-based intermediate-range nuclear missiles from Eu-

rope.

That move highlighted the debate surrounding "NATO's conventional force weakness visatis the Warsaw Pact," writes Callaghan in this article for the Journal of Defense & Diplomacy. But the more important issue for the author is not that the weakness exists, but why it exists. Why, he asks, should NATO still be a "plenty of nothin' alliance" four decades after it was created, and why does deterrence have only a nuclear dimension, especially when NATO's 16 nations together have "one-and-a-half times as many people as the Warsaw Pact; two-and-a-half times the gross national product of the Pact nations; and have been spending more on conven-

tional forces than the Pact?"

Callaghan says two events in 1954 "doomed the efforts to raise balanced, collective forces for Europe's defense"—the defeat of the proposed European Defense Community (EDC) and the doctrine of massive nuclear retaliation. The first made the collective defense of Europe "structurally impossible," Callaghan writes; the second made it "conceptually unnecessary."

EDC would have created, Callaghan says, common European military requirements, a central defense procurement agency and a defense industrial base to provide "weapon inventories at reasonable cost and without duplication of effort."

These objectives became moot, according to the author, when the United States put forth its doctrine of massive nuclear retailation. Claiming this was never a "valid war-fighting strategy for the defense of Europe," Callaghan says nuclear deterrence meant that "except for a trip wire, the conventional defense of Europe" was no longer necessary. There would now be peace and prosperity for all NATO nations "under the U.S. nuclear umbrella."

Today, Callaghan sees NATO as a "collection of forces purporting to be an alliance." NATO's integrated military commands "command almost nothing that is integrated," he adds. For example, each of the 15 defense ministries and 44 armed services determines on its own what to buy, when, in what quantity and for what purpose. Seven allied governments are developing and deploying six new tactical communications systems, the author claims, and none "can communicate with one another" or with the NATO integrated system.

Callaghan quotes NATO's secretary general,
Lord Carrington, who said, "The only thing common in NATO is the air in the tires."

Considering that limited resources and small defense expenditures buy the Warsaw Pact a massive, standardized, collective force, NATO's problem is that more resources and larger defense expenditures buy for NATO a "destandardized and noninteroperable collection of forces, qualitatively uneven, quantitatively inferior and unable to fight for the same period of time at the same munitions expenditure rates."

The conventional force buildup by the Warsaw Pact is not the problem, Callaghan writes, "it is NATO's self-inflicted wounds. The Soviets are not 10 feet tall. They just seem that way because U.S. and allied governments have cut themselves off at the knees."

So what can be done? Callaghan advocates a cessation of US bilateral dealings with European governments. Deal with them collectively or not at all, he says. These bilateral deals, when coupled with the use of memoranda of understanding, only "encourage governments and industries to work harder to cooperate with the United States than with one another," Callaghan writes.

The Pentagon should announce, he says, that henceforth most-favored-nation access to the US defense market will only be granted to "Euro-NATO nations offering similar access to every other European member of NATO and to European governments willing to transfer their bilateral" memoranda of understanding to a centralized European group.

Such cooperation would demonstrate to the Soviets that US and allied forces "could (and would) together mount a robust conventional defense if the Warsaw Pact ever attacked," concludes Callaghan. This cooperation would also put an end to Soviet hopes of separating Europeans from one another and Europe from North America. This aspect, says the author, is "perhaps the most important of all."—ELH

### The Doctrine of "Competitive Strategies"

By Jon Englund Strategic Review, Summer 1987

A new defense doctrine that "has thus far atal tracted little attention within the U.S. defense establishment," according to Jon Englund in the Summer 1987 edition of Strategic Review, "has the potential of becoming an enduring legacy of the Reagan Administration, providing a beacon for U.S. strategic policy through the 1990s and beyond."

That doctrine is called competitive strategies. It holds that, in casting its force posture, technological strategy and procurement policies, the United States "should hew to clear and explicit criteria of capitalizing on relative advantages and areas of strength, while exploiting the disadvantages and weaknesses of the Soviet Bloc," writes Englund.

Although he suggests there is no real novelty to this idea, Englund points out that, nonetheless, since the and of World War II, there has been no explicit or consistent guide to US strategic and technological planning. "In fact," the author says, "it can be posited that, overall, U.S. defense planning has been remarkable for its inattention to the criteria of relative advantage . . . in the competition with the Soviet Union."

He thinks the reasons for this are clear. First, America has reaped the benefits of the technological revolution in meeting its defense needs. Second, procurement decisions and programs are merely shopping lists submitted by the services, blended by the Defense Department and modified by Congress. Third, arms control negotiations have enhanced the attractiveness of stable and equal relationships between the superpowers and have ignored talk of advantages and disadvantages. Finally, there has always been money to do the things we needed to do.

But now, with budget reduction the law, greater selectivity in defense programs is necessary. In addition, the huge advantage the United States held over the Soviets in technology is shrinking. As a result, Englund sees a shift toward competitive strategies in defense procurement. This shift, he writes, "heralds the emergence of a strategy that is long overdue in the shaping of America's military framework."

Englund cautions, however, against allowing the strategy to degenerate into a "damaging short-term lobbying effort for specific weapons systems and technologies." He says for the concept to work, defense industry must take a more active role in "not only exploring technological horizons, but also understanding—and articulating—the relationship of various R&D options to the goals of Competitive Strategies."

Institutionalize competitive strategies, Englund urges, as a means toward a consensus with respect to high-priority defense programs. He notes that the secretary of defense has already taken several key steps in this direction, but more are needed. To further the objective of competitive strategies, Englund advocates:

 Assigning the National Security Council a greater role in articulating national security policy and budget levels.

Establishing a Pentagon interdepartmental
 Separation on this subject

working group on this subject.

Tying strategic justification to specific, high-priority programs and considering it in the

normal budget process.

Devising a supplemental competitive strategies budget.

Having NATO consider competitive strategies that affect the West as a whole.

Englund admits this concept "is no panacea." But it can provide the link between "grand military strategy and the specific weapons and technologies to carry it out." Also, Englund believes the concept can move the West "beyond an abstract idea of priorities . . . to one that uses resources more efficiently by pitting them against the structural weaknesses in the Soviet Union's posture."—ELH

### MELIATINES

#### Warriors or Wimps?

While reading the October 1987 issue of Mulitary Review, I noticed a commentary in the "Letters" section bemoaning an editorial written by Colonel James A. Rye in the June 1987 issue. As I finished reading the letter, I was taken aback by the fact that it was authored by a certain Colone Griffin N. Dodge, USA; Retired. Dodge took great exception to Rye's editorial assertion that "warfighting is the essence of our profession," and he stated that Rye's recorded thoughts imply "... that he openly encourages the prospect of future combat operations involving US military forces." After reviewing Rye's piece, it quickly became obvious to me that Dodge missed the

whole point of Rye's contribution to our journal. Even so, the issue raised by Dodge is so significant that I feel compelled, if not driven, to address it.

Dodge chose, with little subtlety, to imply that Rye's thoughts were supportive of military adventurism. To bolster this implication, he quoted out of context General Bernard Rogers and General Robert E. Lee, and made two references to the motto of the US Army War College: "Not to promote war, but to preserve peace." Dodge implies that the development of war-fighting skills runs contrary to the preservation of peace, yet he asserts a recognition of the importance of readiness in its complete spectrum.

There is a touch of semantic acrobatics in

Dodge's words. He paints a picture of a military. that provides security for this nation by projecting a perception of power to our potential adversaries. Of course, he also asserts that the US military should be capable of reacting to danger with "overwhelming military violence" and that it should have the "will" to use this violence. These ideas do not balance favorably with his objections to Rye's statements. Perhaps Dodge finds fault with a mentality that uses a term like "warfighting." If this is the case, then is it possible that men are not "killed" in war? Instead, would they just become "inoperative"? His style is somewhat reminiscent of the men described by Henry Kissinger in Colonel Harry G. Summers Jr.'s classic book, On Strategy: The Vietnam War in Context:

"A new breed of military officer emerged: men who had learned the new jargon, who could present the systems analysis arguments so much in vogue, more articulate than the older generation and more skillful in bureaucratic maneuvering."

Dodge implies that Rye and men like him must be careful in the way they express themselves lest they underscore a "popular" view "... that ours is an arrogant, 'militant' society... "There is nothing "arrogant" about American military preparedness, and there is nothing new in the existence of certain antimilitary elements in our society. American society remains in flux and evolves under the aegs of the Constitution, yet there are some things which must never change. General Douglas MacArthur said it best in his farewell address to the Corps of Cadets at West Point.

"And through all this welter of change and development, your mission remains fixed, determined, inviolable—it is to win our wars. Everything else in your professional career is but corollary to this vital dedication. All other public purposes, all other public projects, all other public needs, great or small, will find others for their accomplishment; but you are the ones who are trained to fight, yours is the profession of arms—the will to win. . . ."

It is important that more than lip service is paid to MacArthur's emphasis on the realities of fighting and winning. Carl von Clausewitz said that "the end for which a soldier is recruited, clothed, armed, and trained, the whole object of his sleeping, eating, drinking, and marching is simply that he should fight at the right place and the right time." To fight and to win in war is the only legitimate reason for the existence of the US

military. Our place is not simply ceremonial. We are warriors. This does not imply that we are warmongers. As MacArthur told the Corps of Cadets, ". . the soldier, above all other people, prays for peace, for he must suffer and bear the deepest wounds and scars of war."

Readiness for war does not grow out of sugarcoated terms. Soldiers, sailors, airmen and Marines deserve more than downplayed dialogue from their leaders. At the heart of this practice is the inculcation of the warrior spirit in leaders and followers alike. Part of this warrior spirit is a way of thinking and a code of behavior. It is a recognition that some things are not negotiable—things such as honor, courage and truth. If the truth negatively arouses some people, so be it

> CPT Buddy K. Moore, USA, US Air Force Academy, Colorado Springs, Colorado

#### SNAFU Recalled

I found Colonel James G. Van Straten and Captain Lynn W. Kaufman's May 1987 article, "Lessons From Team SNAFU," most interesting and provocative. I certainly agree with the authors' contention that Colonel William L. Roberts, commander of Combat Command B (CCB), 10th Armored Division, was, to a degree, responsible for the gathering and subsequent effective employment of Team SNAFU. However, the article does not mention that the implementation of this policy was given to, and successfully applied by, the remaining staff members of CCR, 9th Armor Division: Major Bagley, Captains Mewer and Hardwick, and myself (then a major in the 52d Armor Infantry Battalion (AIB), 95th Armor Division).

The thrust of the article, that effective use of "stragglers," as the authors call them, can and should be organized and utilized to the fullest effect, is pertinent. However, I do take some exception to the authors' contention that many, if not most, SNAFU soldiers were ineffective and tended to "huddle in cellars" as soon as they came under fire—although certainly this was true of a small minority of these tired, scared and hungry soldiers. I commanded about 250–300 SNAFU soldiers, as part of Task Force (TF) Watts, who fought effectively and bravely under the operational command of Colonel Harper, commander, 327th Glider Infantry Regiment.

TF Watts had a company of glider infantry,

8-10 tanks from Team Pyle plus about 250 SNA-FU soldiers (mostly from 52d AIB and about 75 from the 28th and 106th Infantry Divisions). Later, we received limited tank destroyer and engineer support. Our mission was to defend the perimeter in and around Senonchamps, where much of the artillery in Bastogne was positioned. The time period was 21-24 December, and this was the general area where the Germans sent the truce team demanding the surrender of Bastogne. Later, TF Watts was attached to Lieutenant Colonel Browne, commander, 4209th FA (Field Artillery) Battalion, 10th Armor Division. Browne was killed on Christmas Day. During the period of 21-27 December, TF Watts assisted in repulsing many tank-supported attacks in this sector. We lost 60 to 70 percent casualties.

It is my truthful and most sincere opinion that the members of SNAFU with whom I was associated were the equal of the airborne troops, to which we were attached, in every conceivable manner. They treated us as equals, and I am convinced that we responded as such. I certainly do agree that the contribution of SNAFU to the defense of Bastogne was considerable. I suggest that perhaps many of the SNAFU people were the toughest and strongest of the overwhelmed US forces in the 28th, 106th and CCR of 9th Armor Division. The easy thing to do was to surrender in the face of terrific odds-as thousands of US soldiers did. I am not suggesting that many brave soldiers were not among the prisoners, but these were unusual and dire circumstances.

The inept employment of CCR, 9th Armor Division, by Major General Middleton (commander, VII Corps) defies belief. Instead of employing the combat command as a unit or even in battalion-size groups, he personally ordered company-size units to man roadblocks to try and delay the 2d Panzer Division, Germany's last division equipped with night-firing infrared tank sights. These units were ordered by Middleton to fight to the last man, and any recommendation to consolidate these small units was refused. Naturally, they were quickly and completely overrun by an entire division.

An example of the ferocity of this fighting is the fact that of the nine field grade officers in the three combat battalions of CCR, eight were either killed, wounded or captured. Only one of these eight casualties was captured unhurt—four were killed and three were wounded. I was the only field grade survivor of these nine. I consider myself to be a SNAFU soldier and perhaps

this is why it may appear that I am sensitive to some of the authors' statements. Certainly, I also agree that organized units or even remnants of those squads and platoons had better morale and at least initially were more proficient than the individual stragglers, but I was impressed by the caliber and efficiency of the SNAFU soldiers sent to me. One must remember that many of these soldiers spent three to six days behind enemy lines with little or no food and had only the clothing on their backs. The fact that, after 24 hours of rest and a chance to eat, these people were able to effectively perform in units unfamiliar to them seems to buttress my position that most of these SNAFU men were tough and flexible soldiers.

About 175 men of the 52d AIB ultimately retreated into Bastogne, some in partial squad and platoon groupings, others in small groups of 8–10 men. Since I had been a member of this fine battalion since its activation and knew most of the men, the majority of the 52d survivors were sent to me. To this extent, we did have some measure of unit configuration. Most of these 175 survived Bastogne and fought well for the remainder of World War II. The 52d AIB received two presidential unit citations. Not a single member of our unit in Bastogne (TF Watts) fled the battlefield or hid in cellars. At least no one ever reported to methat any of this took place, and I know I would have known had this been a problem.

On balance, I heartily agree with the authors' conclusions and believe they should be part of our doctrine in troop and Army schools training. It is my considered opinion that at least 75 percent of all the "stragglers" into Bastogne conducted themselves in soldierly fashion and that they did materially contribute to keeping Bastogne from being captured. Perhaps someone should write a book or film a move about SNAFU.

COL Eugene A. Watts, USA, Retired, Southern Pines, North Carolina

#### MSE Has Far to Go

It was with great disappointment that I read Major Fred E. Dierksmeier's article, "The Impact of MSE" (Multiple Subscriber Equipment), in your August issue. The article resembles a manufacturer's press release and perpetuates the myth that MSE has solved our serious command and control problems. On the contrary, unless major corrective actions are taken immediately, MSE will cripple the commander's ability to fight and win the AirLand Battle.

Success in the AirLand Battle lies in the precise synchronization of all elements of combat power-maneuver forces, fire support, combat service support, air defense, and intelligence and electronic warfare. Each of these functional areas plays a vitar role in accomplishing the Army's mission. Through the synchronization of these elements, the commander will be able to concentrate his forces at the critical time and place—enabling him to fight outnumbered and win.

The Army's current war-fighting doctrine is based on the assumption that this synchronization of power can be achieved. The complexity of modern warfare dictates that the interoperability of all five functional areas be heavily dependent on automation. The Army's realization of this fact has led to the development of the Army Command and Control System (ACCS). The basic purpose of the program is to provide a common suite of nondevelopmental hardware and software and common system interfaces at all echelons. When fully developed, the five subsets of ACCS will provide a command and control network stretching from the theater level to the foxhole.

An effective communications system capable of speedy and accurate data distribution is needed to make the ACCS system function. It must serve as the infrastructure for the transfer of data between highly automated, mobile and survivable units and command posts. Without such a communications system, each element of combat power is forced to operate in a tactical vacuum without the benefit of a common picture of the battlefield.

Readers of Dierksmeier's article may be led to believe that such a system is on the verge of being fielded. Unfortunately, the Army did not see fit to make MSE-ACCS interoperability a "contract requirement" In fact, interoperability with MSE is only possible by redesigning systems to MSE specifications. Should it now be assumed that the Army must strive to create a combat force capable of supporting its communications system? In its haste to purchase an "off the shelf" system, the Army has failed to take into account the many hidden costs and consequences that exist. As these hidden costs are uncovered, we can expect to see the cost of MSE to the Army spiral upward as the rest of the ACCS community struggles to adapt to and accommodate the new communications environment.

Of all the ACCS nodes, the intelligence and electronic warfare (IEW) community is the hardest hit. The All Source Analysis System (ASAS)

is the automated processor planned for the IEW functional area. This system, soon to undergo field trials at Fort Hood, Texas, will correlate information from every echelon and every source and fuse it into a near real time picture of the battlefield. Intelligence, however, can be no better than the compunications that support it. The unprecedented ability to "see" the battlefield afforded by ASAS will be negated if MSE cannot receive and disseminate the information in a timely manner.

Unfortunately, MSE was designed with little consideration for the unique requirements of the IEW functional area. For example, MSE can only pass data classified up to the secret level, yet much of the IEW data falls within the broader realm of Sensitive Compartmented Information (SCI). Thus, to initiate an SCI transmission over MSE will require end-to-end voice coordination and manual encryption for every message sent.

Another impact of MSE will be the removal of the AN/TYC39 message switch from the corps. Intelligence messages that must be passed to multiple consumers must, therefore, be dialed up individually rather than sending one message to the AN/TYC39 for delivery as necessary.

Lastly, the highly sophisticated intelligence sensors now deployed have the ability to collect and report huge volumes of data ASAS has been designed to use computers to replace the current manual methods of processing data. The development of these sensors and processors will be completely negated if the system is forced to operate at a fraction of its capacity. This will be precisely the case since the number of messages per hour in a high-intensity environment exceeds the entire flood search capacity of MSE

There are those who maintain that MSE was never intended to provide data service to the ACCS community and that this capability will be provided by the Enhanced Position Locating and Reporting System (EPLRS). Why then will EPLRS not be fielded to divisions until four years or more after MSE? As a Reserve officer, I find it particularly unsettling that while the Reserve Components are to receive MSE, they will not receive EPLRS. This fact further exacerbates the interoperability problem between Active and Reserve Components

The need for a system like MSE is unquestioned, and the speed with which it is moving toward fielding is most welcome. Yet, fielding a system while denying the requirement to support its users is hardly a laudable achievement.

CPT William T. Kelly, USAR, Arlington, Virginia

### MENEWS

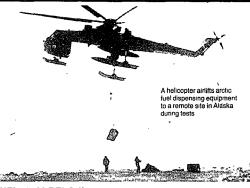
#### SMELLING BY LASER

A laser sensor that detects the presence of chemical agents at distances up to 3 miles has been developed for the US Army by Hughes Aircraft Company of El Segundo, California. The sensor, called the remote active spectrometer or AAS, is designed to help troops avoid areas contaminated both by persistent chemicals—those that linger on the ground—and by nonpersistant chemicals—those in gaseous forms.

Four carbon dioxide laser beams used by the RAS detect the infrared light absorption patterns inherent in the chemicals. The RAS analyzes the returning energy reflected by the chemicals and thereby determines the type, quantity and location of the contaminants.

Field testing of the RAS has been completed, and efforts are under way to make it lighter and smaller. Currently, the Army uses chemical detectors that are carried by soldiers and activated only after contact with toxic chemicals has been made.

Hughes hopes to be able to produce some 4,000 of the advanced version of the RAS for the Army in the mid-1990s.



#### **FUEL AT 60 BELOW**

The US Army is developing a technical data package for Arctic fuel dispensing equipment that can operate at temperatures as low as minus 60 degrees Fahrenheit Presently, no Army system can store or dispense military petroleum fuels at temperatures lower than minus 25 degrees Fahrenheit.

There are two systems involved in the dispensing equipment program. The Arctic forward area refueling equipment, which will be deployed by helicopter, will refuel helicopters and ground combat vehicles in forward battlefield areas. This equipment is the equipment of the system of t

ment includes a turbine engine-powered pump, filter separator, hoses, gaskets and 500-gallon collapsible fabric drums

The turbine engine from this system will drive the electromagnetic clutch pump in the second system, known as the Arctic fuel system supply point. This one will have a bulk fuel storage and supply mission

Engineers from the Belvoir Research, Development & Engineering Center, who are overseeing preparation of the technical data package for these systems, expect them to be fielded in mid-1990.

#### 1ST LINK IN AIR DEFENSE CHAIN

The US Army has selected Boeing Aerospace to provide an air defense system based on the Stinger missile—the first element to be decided upon in the five-part, \$11 billion forward area air defense system or FAADS.

The US Army Missile Command at Redstone Arsenal, Alabama, awarded Boeing a firm, fixed-price contract of \$16.2 million for a first option to buy 20 pedestal-mounted Stinger systems. The contract has options

for a total of 273 fire units over five years and provides for training devices, operator and maintenance manuals and depot-level maintenance support. The contract has a potential value of \$189.7 million.

The pedestal-mounted Stinger will provide air defense coverage for vital rear areas of Army divisions and is known under the FAADS concept as the line-of-sight-rear component. The Stinger system consists of eight Stinger missiles and a 50-caliber

machinegun, integrated with sensors and an advanced fire control system, on the Army's high-mobility, multipurpose wheeled vehicle.

Prior to selecting Boeing, all potential candidates in this portion of the FAADS competition were tested and evaluated in New Mexico against fixed wing aircraft and helicopters. Environmental, safety and mobility tests were also performed along with live firings at night and while on the move.

## MEBOOK REVIEWS

THE SOVIET PROPAGANDA MACHINE by Martin Ebon. 471 pages. McGraw-Hill, New York. 1987. \$22.95.

Martin Ebon, a prolific author of more than 60 books, offers his views on the production and goals of Soviet propaganda in this lengthy and somewhat disorganized study. The primary purpose of Soviet news and cultural efforts is judged to be the enhancement of the Soviet image abroad. The book's organization combines historical, biographical and analytical approaches, although the absence of footnotes and the author's apparent inability to read Russian raise some doubts as to the completeness of the topics discussed. From the initial appearance of the party newspaper Pravda, through efforts in the 1920s to enlist international aid for the new "Workers State," to the most recent Soviet accounts of the Chernobyl nuclear accident. Soviet undertakings to project a favorable image abroad are described and analyzed.

Among the more interesting and important sections of the book are four brief biographical chapters sketching the lives and exploits of Soviet propagandists well-known in the West. The career of current Soviet ambassador to London, Leonid Zamyatin, is traced from his early days in the Soviet foreign ministry under Khrushchev and his stewardship as director general of the Soviet news agency Tass a decade later, to his subsequent appointment to the International Information Department of the Central Committee. The activities of Vladimir Posner, familiar to American television audiences as the Soviet citizen with the New York accent, are discussed, as are those of Georgi Arbatov and suspected KGB "journalist," Victor Louie. Unfortunately, no attempt is made to discern a common pattern in the professional undertakings of these individuals aside from their mutual efforts to present the USSR in the best light possible.

While an individual acquainted with Soviet history and with recent world events will find some interesting information in this book, the average reader most likely will find the going tedious and dull. If the author's goal is to convince the reader that the various Soviet media frequently transmit propaganda, he succeeds admi-

rably. But in the fourth decade of the Cold War, this is likely to be less than fresh news to most Americans. Had the author discovered previously unrecognized examples of Soviet propaganda, or had he used Soviet sources to give a fuller account of propaganda efforts already known, the book's value would have been enhanced. But as it stands, this work by and large is a rehash of information already available.

Michael M. Boll, San Jose State University

PRAVDA: Inside the Soviet News Machine by Angus Roxburgh. 285 pages George Braziller, Inc., New York. 1987. \$19.95.

"The rest of the Soviet press takes its cue from Prawda, and the rest of the world studies it—not only as the official voice of the Kremlin, but as a fascinating mirror in which Soviet life is reflected, and at times distorted. . . "Thus opens' Angus Roxburgh's examination of what is possibly the world's most important newspaper.

With a daily circulation of 11.3 million, Pravda, as the organ of the Central Committee of the Communist Party, is certainly the most influential of the 8,327 daily and weekly newspapers published in the Soviet Union. Roxburgh's book opens Pravda, along with the entire Soviet communications and propaganda empire, to Western inspection.

The first half of the book examines the newspaper itself, beginning with a publishing history that traces it and its editors from 1912 to the present. Pravda is also compared and studied in relation to all of the other major Soviet journals. such as Izvestiva (News) or the daily defense paper, Krasnaya zvezda (Red Star). Included are Pravda's day-to-day editorial operation schedules as well as a dissection of standard article format, length and content. The book shows a few of Pravda's lies. For example, while every issue credits Lenin with founding the paper on 5 May 1912, he did not even send in his first two articles until issues 13 and 63. The reader also sees a basic Pravda paradox; namely, while the paper routinely attacks and denounces all Western press, "it regularly quotes from it to lend credibility to its own reporting."

The second half of the book contains translations of several Pravda articles. While the reading is a bit more difficult than the first section, it sheds additional light on the workings of this publishing giant.

Pravda is an intriguing examination of the entire Soviet propaganda industry. As the author states. ". . . a fascinating mirror in which Soviet life is reflected, and at times distorted.'

CPT Scott R. Gourley, USAR, Arcata, California

DEEP BATTLE: The Genius of Marshal Tukhachevskii by Professor J. Erickson and Brigadier R. E. Simpkin. 250 pages, Pergamon Press, Elmsford, NY, 1987. \$37.50.

Brigadier (Retired) Richard Simpkin is a name well-known on both sides of the Atlantic to students of the military art. His previous writings on mechanized and armored warfare (most recently Red Armour and Race to the Swift) have exerted significant influence on military thinkers during the 1970s and 80s. Unfortunately, Deep Battle, Simpkin's latest, and sadly his last book-he passed away in November 1986-is not worthy of a place on the same bookshelf as his earlier works.

Simpkin's stated purpose in writing Deep Battle is to explore the development of the theory of deep operations in the Soviet Union, primarily through a focus on the writings of Marshal Tukhachevskii and an analysis of the 1936 Red Army Field Service Regulations. The book is divided into five parts, each one significantly

flawed.

Part 1 is a short biographical note on Tukhachevskii. The author intentionally keeps this section brief; he really cannot afford the space to discuss Tukhachevskii's life in detail. Even so, he fails to convey significant facts to the reader, such as how strongly Tukhachevskii's ideas on maneuver and deep battle were influenced by his unusual combat experiences as an army and front commander in the Russian Civil War and Polish-Soviet War of 1920.

Simpkin repeats this error in part 2, a survey of the evolution of Soviet doctrine regarding deep battle and deep operations. This section should have comprised the centerpiece of the book, but it is by far the most unsatisfactory section, complete with typical Simpkinesque (irrelevant) digressions. He all but ignores the influence of Soviet operational experience on the development of doctrine. There is not a single campaign map, not a single comprehensive discussion of a Soviet operation. The Battle of Khalkin-Gol (Nomonhan). the Soviet-Finnish Winter War and the Manchurian Campaign are not mentioned at all. Moreover, the author virtually ignores the last two years of World War II, the so-called "third period of war," during which the Red Army perfected its operational art and mounted numerous, monumental operational-level campaigns of great depth.

Perhaps an even greater fault, however, is Simpkin's failure to draw the strong connection in the interwar period between the evolution of Soviet doctrine and the concomitant evolution of the army's force structure. He never demonstrates how consistently that Soviet doctrine advanced beyond actual capability, for example, beyond the force structure in being, yet at the same time established the technical and organizational requirements for the future development of military industry and military formations. Simpkin writes as if doctrine developed in a vacuum, when, in fact, a troika existed-doctrine, force structure and actual combat experience-with doctrine leading the way.

Part 3 is a collection of translations of Tukhachevskii's actual writings. Of the seven articles selected, however, only three are of material

interest to the subject at hand.

In part 4, Simpkin devotes 70 pages of text to an edited version of his own translation of the 1936 field regulations. Such an extravagance was hardly necessary, at least for American readers, since an English version of the regulations has been available at the USAWC and USACGSC for several years. At points, Simpkin's translations show his own bias toward desanty, for example, air-mechanized forces, and he ascribes to the Soviets a sophistication and prescience about deep operations which probably did not exist at the time to the degree stated.

Readers would have been better served had Simpkin compared and contrasted the language of several of the Soviet ustav's (1929, 1933, 1936, 1941. and 1944), rather than devote so much time to a single document, albeit an important one. Furthermore, the critique of the regulations is spotty. For instance, he does not note how slow the Soviets were to appreciate the several ways in which air forces can participate in all phases of deep battle.

The author's hidden agenda, a restatement of his previously published views, comes to the fore in part 5, "The Lessons of Deep Operation Theory." There is nothing new here.

Overall, Deep Battle has an unbecoming, patchwork, cut-and-paste quality to it, as if it had been thrown together without much thought. Readers will quickly grow tired of Simpkin's familiar expressions, his unhelpful diagrams and the all-too-frequent references to Red Armour and Race to the Swift. He fails to achieve his stated goal, an exposition of the evolution of Soviet doctrine regarding deep battle. Far better treatment of this subject already exists in print, particularly the writings of Colonel David Glantz.

This book should not have been published. Readers of Military Review should neither buy it nor read it. Let Brigadier Simpkin be remembered for his previous writings.

MAJ Scott R. McMichael, USA, US Army Russian Institute

ANTHONY EDEN: A Biography by Robert Rhodes James. 665 pages. McGraw-Hill Book Company, New York, 1986, \$22.95.

Robert Rhodes James presents a sympathetic, but critical and fair, portrait of Anthony Eden. Often overshadowed by his contemporaries, and frequently obscured and misinterpreted, Eden is a fitting subject for snalysis and speculation. This book is a study of the milieu in which the statesman matured and served as a politician-diplomat.

James carefully traces Eden's life from childhood through the evolution of his political career to the waning days of his life. By examining Eden's role and participation in major European events from the 1930s to the 1950s, James helps the reader acquire an understanding of Eden's politics and influence which empowered him to become prime minister. This is not a history of World War II, but rather Eden's role in it. The author brings to life a man whose personal tragedies and traumas form a compelling account.

Regarded by many as the "golden boy" of British politics in the 1930s, Eden became, in 1935, the youngest foreign secretary since the 18th century. Major differences with Prime Minister Neville Chamberlain over how to meet the threat of Hitler and Mussolini led to his resignation in 1938. Eden thought his political career was over; however, he was recalled to office when World War II began, serving as war minister, foreign secretary and unofficial leader of the oposition. Finally, in 1955, he succeeded Winston Churchill as prime minister only to have his

achievements overshadowed by the fateful events of the Suez crisis of 1956. Poor health, bad luck and adverse political factors forced his resignation the following year.

James' Anthony Eden: A Biography is more complete than either of the biographies written by Sidney Aster or David Carlton. The author used published materials and documents, as well as Eden's copious public and private papers, and British Cabinet records which had never been available for study. The materials give new insight into this century's most crucial events.

James was born in India and educated at Sedbergh School and Oxford. He is a member of Parliament and has a formidable reputation as a historian and biographer. His works include: Lord Randolph Churchill, Gallipoli, Churchill: A Study in Failure, The British Revolution, and Prince Albert. His current work is well written and well organized; however, it overemphasizes Eden's role in some events, such as his part in organizing the Teheran Conference. Nevertheless, the book makes fascinating reading and is recommended for the general reader, the historian, the political scientist or the professional soldier interested in biography or diplomatic history.

LTC John P. Fart, USAR, Retired, Chattanooga, Tennessee

#### INTELLIGENCE AND STRATEGIC SURPRISES by Ariel Levite. 220 pages. Columbia University Press, New York. 1987, \$27.50

Political scientists and historians have a long-standing preoccupation with the problem of strategic surprise. The German attack on the Soviet Union, the Japanese raid on Pearl Harbor and the 1973 Syrian-Egyptian assault on Israel have all been studied exhaustively to determine why the defender was surprised and whether that surprise could have been avoided. The majority of these studies conclude that ample indicators of enemy attack existed, but that the defenders did not assemble these indicators into a coherent pattern for two reasons: the difficulty of separating true indicators from irrelevant events and the unwillingness of the defenders to believe that the enemy intended to attack.

Ariel Levite, an Israeli defense analyst, does not join this huddle of "Monday morning quarterbacks." Instead, he systematically compares a failure of intelligence warning at Pearl Harbor with a successful warning, under similar conditions, of the Japanese attack on Midway six months later. In the process, he has to dispose of the obvious objection that the two cases are fundamentally different because the United States knew it was at war with Japan when the Midway offensive began. Still, the results of this unusual study justify the unorthodox choice of examples for comparison.

To begin with, Levite contends that the United States could not have predicted that Japan would attack it at any set time or place in December 1941. All indicators suggested a rapidly deteriorating relationship with Japan, but not even the famous US decryption of Japanese diplomatic correspondence indicated anything beyond a failure of negotiations and probable severing of diplomatic ties. US intelligence sources did identify a general danger of future conflict, a danger which prompted the government to issue-general attack warnings to its Pacific commanders. In short, Levite believes that the US government made remarkably good use of poor indicators to conclude that hostilities were imminent, but cannot be seriously faulted for failing to identify the precise time and place of attack.

If anything, the author believes that US intelligence had greater obstacles to overcome in predicting the Midway attack than it had at Pearl Harbor. The US Navy's ability to read Japanese operational codes allowed it to develop a complete estimate of the Japanese Midway plan at least 10 days prior to the battle, but the very wealth of such signals intelligence suggested a Japanese deception. This, plus the poor reputation of US intelligence agencies as a result of Pearl Harbor and the critical shortage of naval assets available for defense, made the Navy's early and accurate commitment of those assets to the Midway area a remarkable success of strate-

gic intelligence.

This book has some flaws, notably Levite's confusing use of political science jargon and his repetitious anticipation of the reader's objections. However, the study has significant value for soldiers because it highlights the problems of ensuring that decision makers use intelligence in a sophisticated manner. For example, one of Levite's principal hypotheses is that the more familiar a commander is with the sources and methods used to obtain intelligence data, the more confident that commander will be in the resulting intelligerice. In other words, commanders cannot treat intelligence as an afterthought or a realm for specialists. Similarly, Levite notes that decision makers frequently insist intelligence services provide predictions of absolute certainty, when the actual situation is inherently uncertain. Considerations such as these, in addition to the basic subject of strategic surprise, make Intelligence and Strategic Surprises well worth the time of any professional soldier.

MAJ Jonathan M. House, USA, 102d MI Battalion, Republic of Korea

EXTENDED DETERRENCE: The United States and NA-TO Europe by Stephen J. Cimbala. 244 pages. Lexington Books, Lexington, MA. 1987, \$32,00.

Extended Deterrence is one of the top books of the year. Author Stephen J. Cimbala, a professor of political science, surveys the nature of strategic forces in Europe, Soviet and NATO opportunities and risks, the search for strategic flexibility and restraint, and prospects for improvement of extended deterrence. His conclusions are important to any field grade or general officer interested in the cybernetics of international warfare.

Cimbala's complex thesis challenges assumptions popular in the United States about rigid Soviet command and control at strategic, operational and tactical levels. Cimbala traces Soviet developments since 1971 to the conclusion that Soviets plan flexible transitions in the scope and nature of theater-strategic war, rapid movement from peacetime to warfare, and a degree of decentralization in the implementation of strategic concepts. This leaves Cimbala and other scholars wondering whether "NATO may be thinking too small"

The book contrasts Western and Soviet ways of thinking in support of Cimbala's views of NATO and Soviet strategy. Some of these views may, at first, seem alien to orthodox military thinking in the United States, but ultimately they may resolve some of the seeming contradictions implicit in Marxist ideology and Soviet military training. Soviet strategists, cognizant of the broader geopolitical picture that includes China as a concurrent threat, logically look upon NATO with the mixed views that Cimbala describes; as an opportunity and as a risk. Cimbala does not advocate moves in Europe the military would traditionally view as unfavorable to our defense posture: rather, he promotes a comprehensive way of understanding the dynamics of both NATO and Soviet strategies of deterrence that is vitally important to military planners and political strategists.

While Cimbala's provocative interpretations

and questions may well require extended deliberation, we can profit immediately from his brilliant analyses of cybernetic theories of planning, strategic devolution, alliance cohesion, air-landsea strategy and real defense. The book's chapters progress in an orderly way from the basics of deterrence to the complex combinations that every "purple suiter" needs to grasp.

Cimbala is a widely published expert, but he offers chapters that have a nuts-and-bolts ring of truth. Whether his description of the status quo has more truth than his recommendations for change is a question that will be fought on several fronts. Meanwhile, he is planning his next book on strategic war termination, conflict termination and US strategic defense.

MAJ Glen E. Lich. USAR

WAR GAMES by Thomas B. Allen 402 pages McGraw-Hill Book Company, New York. 1987. \$19.95.

War Games is an excellent book covering the secret world of current and past war games. Thomas B. Allen assembled the information through the freedom of information act. The book gives a historical review of war games dating back to their "roots in Viking Lore, 17th century military chess, and [their] American debut in 1889 at the Naval War College..."

The operational research analyst can review the origins of that field and review what impacts it has had on history. Allen covers the evolution of operational research from its simple mathematical beginning to its current sophisticated computer modeling methodologies.

The scenarios discussed are controversial but realistic. Allen discusses the impact the games have on national policy and the people who play them. Many of the scenarios push policy makers to the edge. The author reveals in the book that Senator Muskie suffered a heart attack after playing a war game.

The historical perspective on war games is a real eye-opener. Allen provides some revealing insight into how war games predicted the actual outcome of battles such as Midway and Pearl Harbor, for example. The author also examines the reliability of modeling war games. He gives a superb example drawn from Col. Harry G. Summer's book. On Strategy:

"When the Nixon Administration took over in 1969, all the data on North Vietnam and the United States was fed into a Pentagon computer—population, gross national product, manufacturing capability, number of tanks, ships and aircraft, size of the armed forces, and the like.

"The computer was then asked. When will we win?"

"It took only a moment to give the answer: 'You won in 1964!' "

This book should be mandatory reading for the operational research analyst. Additionally, it would make good reading for any officer dealing with war games. With the predominance of our plans and policy making decisions being based on computer output, this book puts that output in its proper perspective. The book is easy to read and full of revealing facts on current issues. I highly recommend War Games.

CPT Frank J. Grand III, USA, Combined Arms Integration Directorate, USACACDA •

#### **BOOKS RECEIVED**

This list of recently published professional books is for your information. These books are not for sale through the *Military Review*.

REVOLUTION AND FOREIGN POLICY IN NICARAGUA by Mary +B. Vanderlaan. 404 pages. Westview Press, Boulder, CO 1986. \$29 95

THE SOCIAL HISTORY OF THE MACHINE GUN by John Elis. 192 pages Johns Hopkins University Press, Baltimore, MD 1986 \$8 95

UNDER THE CLOUD: The Decades of Nuclear Testing by Richard L. Miller 547 pages. Free Press, New York 1986

UNDERSTANDING NUCLEAR WEAPONS AND ARMS CONTROL: A Guide to the Issues. by Teena Karsa Mayers 121

pages Pergamon Press, Eimsford, NY 1986, \$16.95 cloth-bound, \$9.95 paperbound.

UTOPIA IN POWER: A History of the Soviet Union from 1917 to the Present by Mikhail Heller and Aleksandr Nekrich. Translated from the Russian by Phyllis B. Carlos. 879 pages Summit Books, New York 1986 824 95

THE AGENCY: The Rise and Decline of the CIA by John Ranelagh. 847 pages. Simon & Schuster, New York 1986 \$22 95. ARMS PRODUCTION IN JAPAN: The Military Applications of Civilian Technology by Reinhard Drifte 134 pages Westview Press, Boulder. CO 1986 \$19.50