Clear

Hold

Build

HARMON

ARMOR

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Features

Professional Review

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FROM *ARMOR's* BOOKSHELF

To Fight or Not to Fight? Organizational and Doctrinal Trends in Mounted Maneuver Reconnaissance from the Interwar Years to Operation Iraqi Freedom by Dr. Robert S. Cameron, Combat Studies Institute Press, U.S. Army Combined Arms Center, Fort Leavenworth, KS, 2010, 631 pp.

In June, the Combat Studies Institute at Fort Leavenworth, Kansas, published *To Fight or Not to Fight? Organizational and Doctrinal Trends in Mounted Maneuver Reconnaissance from the Interwar Years to Operation Iraqi Freedom.* Written by the Armor branch historian, this book offers a comprehensive trend analysis that addresses key issues, major developments in materiel, organizational evolution, doctrine development, and related training activities. It traces the transition from horse to vehicular reconnaissance; the emergence of armored cavalry; the development of air cavalry; the rise of reconnaissance, surveillance, and target acquisition (RSTA) and intelligence, surveillance, and reconnaissance (ISR) concepts; and more recent emphasis on unmanned systems and sensors.

Unlike other publications that address a particular unit, platform, or conflict, this study provides an overview of reconnaissance trends and developments throughout an 80-year period. It is a single source reference for understanding the evolution of mounted reconnaissance organizations in the U.S. Army during peace, war, and counterinsurgency. Its pages chronicle the Army's efforts to address the deceptively simple question that has surrounded mounted reconnaissance throughout the period studied: does it serve merely to observe and report or does it aggressively seek information even if combat results? The answer drives materiel, doctrine, organization, and training developments. It is central to any effort to define the mission of mounted reconnaissance. In *To Fight or Not to Fight?,* the author charts the Army's response to this and related issues amid changing operational environments, evolving threats, and shifting national defense policies.

This book is timely, given the fundamental changes occurring within the mounted maneuver community. The realignment of the Armor School into the Maneuver Center of Excellence, the disappearance of the division cavalry squadron, the transition of the last heavy armored cavalry regiment into a Stryker brigade combat team, the fielding of a brigade reconnaissance squadron, and the work-in-progress nature of the battlefield surveillance brigade underscore the value of understanding past developments. Such comprehension is critical to making enlightened decisions about the nature and purpose of mounted reconnaissance on tomorrow's battlefields. Hence, the last Armor Center commander noted: "*To Fight or Not to Fight?* is a must read for those responsible for designing reconnaissance organizations, writing the related doctrine, establishing the materiel requirements, and training scouts."
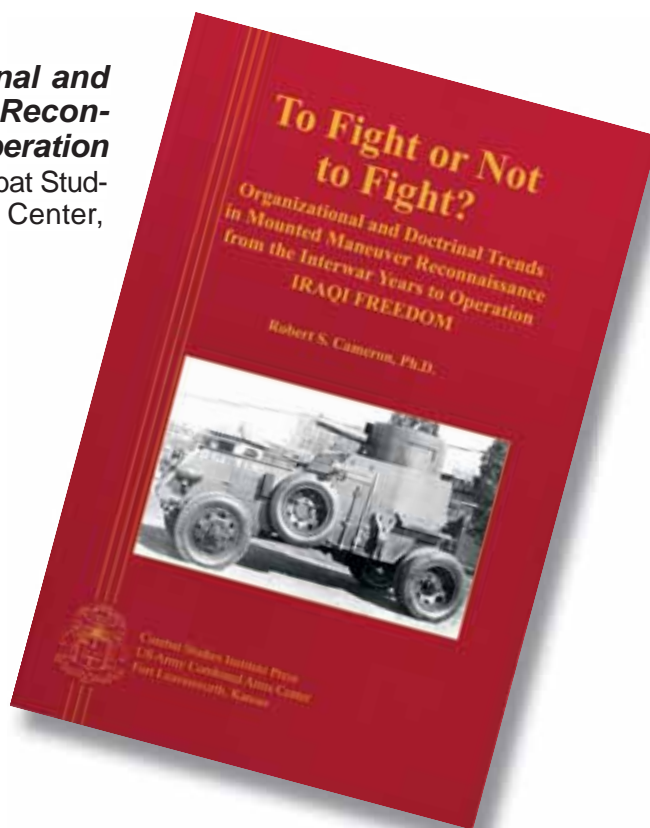
Copies of this book may be ordered direct from the Combat Studies Institute at 913-684-2138 or by e-mail at: *leav-r&ponline@conus.army.mil.*

Mobility, Shock, and Firepower: The Emergence of the U.S. Army's Armor Branch, 1917-1945 by Dr. Robert S. Cameron, U.S. Army Center of Military History, Washington DC, 2008.

For those interested in the institutional history of the Armor Branch, *Mobility, Shock, and Firepower: The Emergence of the U.S. Army's Armor Branch, 1917-1945* chronicles the evolution of the American armored force from a platform-centric tank corps in World War I into a powerful capability that remains the essence of the Armor Branch today. Particular emphasis is placed on the key personalities, the debates surrounding armored doctrine and organization, the defining influence of the 7th Cavalry Brigade (Mechanized) in the interwar years, and the impact of combat operations in World War II. Secondary themes chart the evolution of mounted reconnaissance, tank destroyers, and the separate tank battalions — the enablers of successful mounted operations. This book offers a case study in the adoption of new technology by a military organization. It is as much a narrative of how armor development occurred as it is a tool for understanding how the Army exploits emerging technology, concepts, and missions. Such insight is timely, given the ongoing transformation of the Army today.
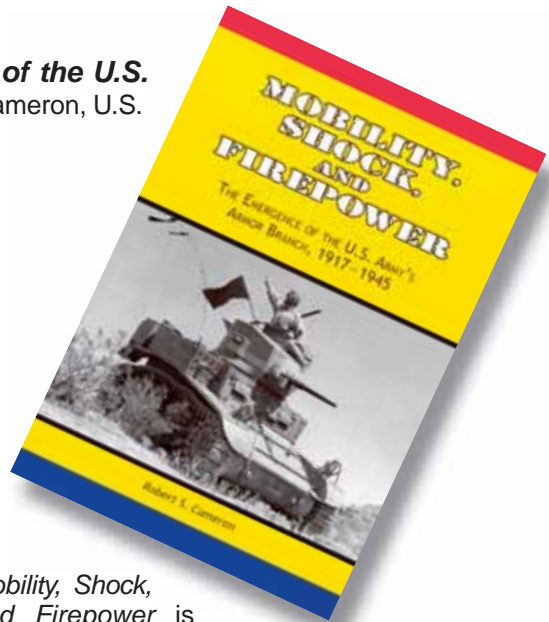
Mobility, Shock, and Firepower is available for public sale at the U.S. Government Printing Office's online bookstore at *http://bookstore.gpo.gov.* Within the Army community, this work is available at no cost to Army Publishing Directorate accountholders online at *www.apd.army.mil.* Customer service is accessible at 314-592-0910.

Militant Islamist Ideology: Understanding the Global Threat by Commander Youssef H. Aboul-Enein; Foreword by Admiral James Stavridis, Naval Institute Press, Annapolis, MD, June 2010, 272 pp., $37.95 (hardback)

"Terrorist organizations use a narrow and irreligious ideology to recruit undereducated and disenfranchised people to their cause. Understanding terrorist ideology is the first and may also be the most important step in ensuring national and international security against the threat these organizations pose. Youssef Aboul-Enein's book is an excellent starting point in that connection…"

— Brigadier General H.R. McMaster

In *Militant Islamist Ideology,* Commander Aboul-Enein, a top adviser, Joint Task Force for Combating Terrorism, argues that winning the war against militant Islamists requires a more nuanced understanding of their ideology. His book is among the first attempts to destruct and marginalize al-Qaeda ideology using Islamic-based argument. By clearly defining the differences between Islam, Islamist, and militant Islamist, Aboul-Enein highlights how militant Islamist ideology takes fragments of Islamic history and theology and weaves them into a narrow, pseudo-intellectual ideology to justify their violence against Muslims and non-Muslims alike.

By offering a comprehensive explanation of how militant Islamists have hijacked the Islamic religion,
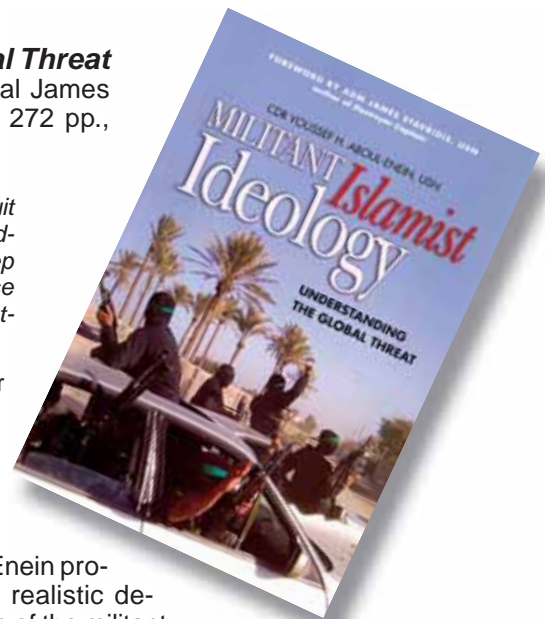
Aboul-Enein provides a realistic description of the militant threat, which is quite different and distinct from Islamist political discourse and the wider religion of Islam.

Militant Islamist Ideology: Understanding the Global Threat is available at Naval Institute Press online or direct at Customer Service, Naval Press Institute, 291 Wilson Road, Annapolis, MD, 21402 (800-233-8762/410-268-6110); *www.nip.org,* $37.95.

SAB' AL BOR, THE CITY OF PEACE:
Using the Principles of Clear, Hold, Build to

by Lieutenant Colonel Thomas H. Mackey, Major Leonard Lira, and Captain Chad Fitzgerald

"We should do a case study on Sab' al Bor to resolve why it's working there. We need to know what conditions allowed it to work there.... Might be some lessons learned we can apply elsewhere."[1]

— General Ray Odierno

General Odierno saw the city of Sab' al Bor at its worst during sectarian fighting in 2006-2007. As the population of the urban area was driven out, the city became a ghost town as extremist groups targeted the civilian populace, murdering hundreds and terrorizing thousands.[2] Throughout 2008, things changed as security was reestablished and the local government began delivering services to the people. Displaced families returned to Sab' al Bor by the tens of thousands.

On his return to the city in late 2008, General Odierno saw a completely different environment from that of 2006-2007: a growing population, a thriving market economy, a low number of violent attacks, children attending overpopulated schools, a functioning local government, public services supporting the population, and hope for the future. It was easy to see what changed, but the question was "how?"

In the summer of 2006, Sab' al Bor was the largest urbanized community in the al Taji area just north of Baghdad. It was a secure city and appeared to be the model of success for stability in a post-conflict operational environment. Less than 3 months later, that thriving, nonsectarian example deteriorated into a cauldron of sectarian violence, resulting in the mass exodus of nearly all its residents.

The explanation for reversing this upheaval resides in the manner in which coalition forces implemented the principle of "clear, hold, and build" and how they successfully "isolated" the enemy as a precondition to conducting operations designed along that model. Coalition forces carried out these measures using the network-targeting application: simultaneously massing effects against enemy networks through the erosion of resources, dislocation of support, and disintegration of capabilities, while enabling friendly networks by supplying resources, associating support, and integrating capabilities.

This case study uses Sab' al Bor as an example of how the principles of isolate, clear, hold, and build led to concrete security gains and allowed government initiative, Iraqi Security Forces (ISF) development, and essential services delivery. It also demonstrates how coalition forces have the ability to adapt to environmental challenges and accomplish their missions at battalion, company, and platoon levels.

Sab' al Bor's History and Significance

Although Sab' al Bor is located in the fertile farm basins north of Baghdad, the name Sab' al Bor stands for "seven infertile fields," due to high salt contents in the land on which the city was built. Prior to Operation Iraqi Freedom (OIF), Sab' al Bor was a diversified city with a population of more than 65,000 people. Saddam Hussein used the city as a retirement community for former Iraqi army (IA) officers. The city was not heavily tribal due to its beginnings as a housing community of Iraqi army veterans and retirees. In fact, Sab' al Bor bears the hallmarks of a planned city with an interlocking grid system of roads that divide it into 16 distinct residential areas.

From 2003 through 2007, as extremists sought to control key areas in Baghdad, create sectarian enclaves, divert economic resources, and impose their political and religious agendas, Sab' al Bor became a support zone for al Qaeda in Iraq (AQI) to plan and launch attacks against Baghdad. Historical reporting indicated that Sab' al Bor suffered some of the highest attack levels throughout the Baghdad metropolitan area in 2006 due to enemy activity. The violence that resulted from AQI's use of Sab' al Bor as a launch pad for attacks in Baghdad drove the residents from Sab' al Bor and turned it into a virtual ghost town. By 2007, the population of Sab' al Bor was reduced to just 2,000 people, which was a 95 percent reduction in the overall population when compared to pre-war levels.

Initial Assessment of Sab' al Bor

Task force 2d Squadron, 14th Cavalry (TF 2-14), inherited the city of Sab' al Bor in the

"On his return to the city in late 2008, General Odierno saw a completely different environment from that of 2006-2007: a growing population, a thriving market economy, a low number of violent attacks, children attending overpopulated schools, a functioning local government, public services supporting the population, and hope for the future. It was easy to see what changed, but the question was 'how?'"

A Case Study
Reverse Insurgency

Clear

Hold
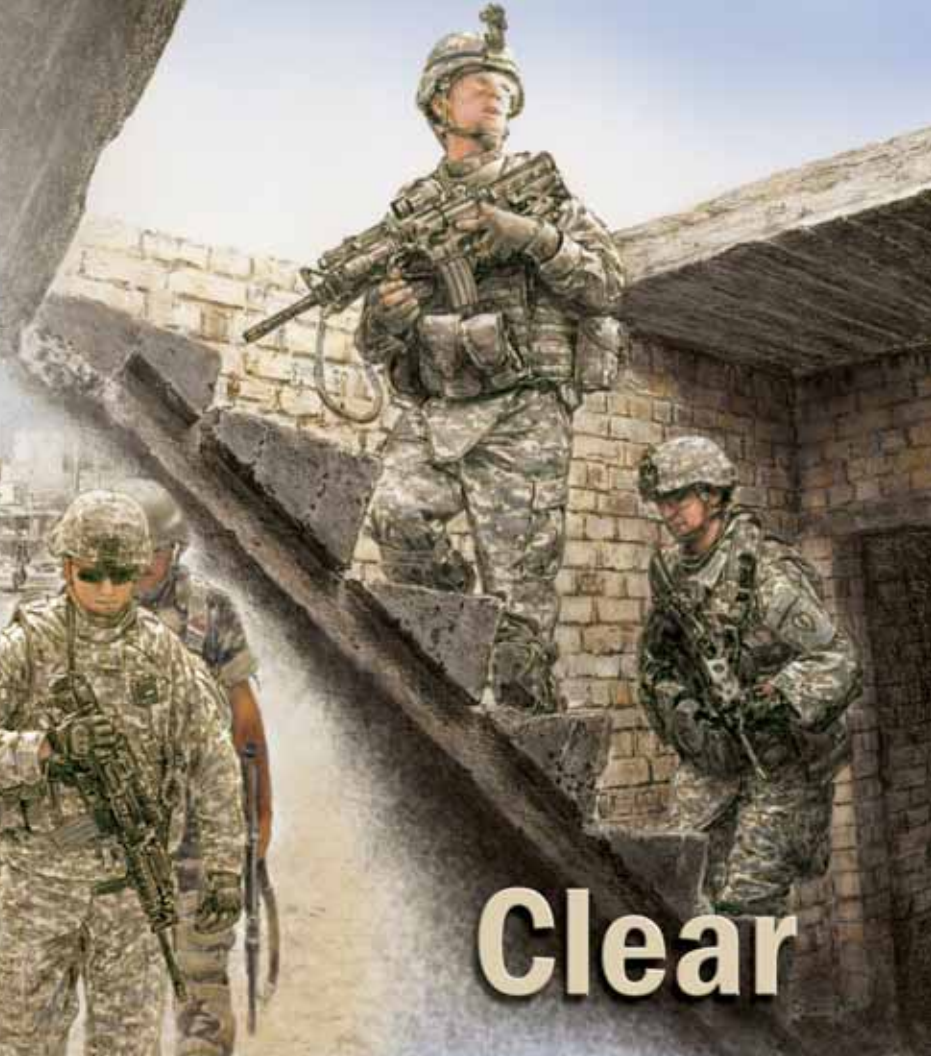
Build

"Task force 2d Squadron, 14th Cavalry (TF 2-14), inherited the city of Sab' al Bor in the winter of 2007 as part of the operational environment (OE) for 2d Battalion, 25th Stryker Brigade Combat Team (SBCT)."

winter of 2007 as part of the operational environment (OE) for 2d Battalion, 25th Stryker Brigade Combat Team (SBCT). The city's population, along with its existing infrastructure, was just emerging from a viscous conflagration of sectarian hate. Indirect fire attacks, launched from AQI-controlled areas outside of the city into Shia populated areas, killed hundreds of civilians. The AQI offensive resulted in the Jayshe-al Medhi (JAM) coming to Sab' al Bor to protect the Shia population from sectarian onslaught. Local city leaders felt they had no choice but to accept militias for the safety of the local populace. This choice later proved detrimental to the population as JAM militia turned on the population and began extorting them for resources in late 2007.

Previous coalition forces, Task Force 7th Squadron, 10th Cavalry (TF 7-10 CAV), and Task Force 1st Squadron, 7th Cavalry (TF 1-7 CAV), specifically conducted lethal targeting against AQI, indirect fire cells, and vehicle-borne improvised explosive device (VBIED) networks that built VBIEDs in Sab' al Bor and launched them toward Baghdad. The lethal targeting conducted by TF 7-10 and TF 1-7 CAV, and later the events created by the Sunni tribal "awakening," which was embodied in the creation of the Sons of Iraq (SOI), eventually stopped much of the AQI violence in Sab' al Bor.[3] However, other Sunni extremist groups (SEGs) continued efforts to offset JAM activities, target coalition forces, and make Sab' al Bor ungovernable.

Simultaneously, JAM continued its intimidation of Sunni families who stayed in Sab' al Bor. JAM intended to physically remove Sunnis from their houses and replace them with Shia families who AQI and other SEG forced out of Baghdad. The attempted redistribution of homes by JAM and the continued activity of the SEG caused the housing blocks in Sab' al Bor to polarize along sectarian lines, which enforced a strong belief that Sunnis and Shia could not coexist inside of the city.

Along with continued extremist subversive actions, essential services in the city turned abysmal. The city received less than 3 hours of power a day, suffered from a lack of potable water, and open sewage flowed in the streets. The Iraqi police (IP) were viewed as corrupt agents of JAM. The IA battalion responsible for Sab' al Bor, which had multiple checkpoint responsibilities outside of Sab' al Bor on Highway 1, could only post a company-minus sized element for joint security operations with coalition forces. The local government, while operational in concept, still lacked the resources or organization to take effective control.

Within 48 hours into its relief mission with TF 1-7 CAV, TF 2-14 CAV incurred its first attack. On the second day of the relief in place, a joint patrol from both task forces sustained an attack initiated by an explosively formed projectile and followed by direct fire. The squadrons' intelligence staffs correctly concluded that JAM had formed a battalion-type organization in the city. This JAM battalion became the primary enemy order of battle encountered by TF 2-14 CAV during its first 6 months in the city.

TF 2-14 CAV quickly began planning several synergistic operations across multiple lines of effort as part of a full-spectrum operation that would deny extremist networks access to Sab' al Bor and set conditions to restore the city. The task force staff developed a template of problem sets in the city through the application of network targeting. For example, JAM and SEGs were prevalent in population centers and they intimidated and threatened the populace with criminal operations. Second, essential services, most notably water and electricity, were substandard and nearly nonexistent. Finally, governance was lacking; the only source of order came from existing tribal sheiks of the area. The population did not consider the local government legitimate because it lacked the capacity to establish and improve essential services. Additionally, the population was still deeply resentful of the sectarian divide that existed and viewed any restoration of services as favoritism of one sect over the other, thus effectively neutralizing local government attempts to act.

The local government's ability to communicate with its populace was nonexistent, so it could not effectively counter this view. Organizationally, the local government could not manage, plan, or execute budget priorities, which enabled delivery of services to the people. What the people needed from their government was security, essential services, economic opportunity, and the rule of law. The staff recognized that the legitimacy of the Sab' al Bor city government was directly linked to its ability to deliver services to its people.

What resulted from this analysis was a problem set situational template, which outlined a tailored network of issues that affected the security and stabilization of Sab' al Bor. The creation of this tool allowed the staff to plan and synchronize operations across all lines of operations to achieve its end state. See Figure 1.

Once the problem was clearly defined, the commander instructed the staff to build a plan for Sab' al Bor, which would first isolate the city from extremist groups, allowing the task force to effectively clear remaining extremists from the city. The plan would then focus on sustaining security gains by increasing local security forces' capacity to conduct operations and local government's capacity to govern. In addition, the task force would provide an infusion of microgrants and other economic stimuli. The infusion of microgrants would supplement restoration of essential-services initiatives, focusing on electricity and water availability for residents as they began returning to the city.

During initial operations, the task force isolated Sab' al Bor from insurgent networks, and then cleared remaining extremists from the town. The task force commander charged security responsibility to the task force's B Troop, which was supported by other task force elements outside the city. The first operation was a framework operation, Operation Strykehorse Sentinel, and the second was a surge operation, Operation Ku Lanakila Kūè [stand victorious in opposition].[4] Before the disintegration of JAM elements inside the city began, the task force had to ensure the isolation of Sab' al Bor. Operation Strykehorse Sentinel accomplished this effort for the task force. This framework operation secured our internal lines of communications by providing increased fixed-site protection for coalition forces and ISF at key checkpoints along major avenues of approach into the city and throughout the major lines of communications within the task force's area of operations. In addition, the operation hardened the main entry point and all surrounding access points into the city of Sab' al Bor with joint ISF and SOI checkpoints created from concrete barriers and triple-strand concertina wire. B Troop conducted day-to-day compliance checks to spot-check ISF and teach proper checkpoint procedures and vehicle search techniques. Once extremists were cleared from the city, the task force isolated the city, making it extremely difficult for extremists to return.

Inside the city of Sab' al Bor, Strykehorse Sentinel called for the establishment of joint Sunni and Shia SOI checkpoints. The task force used these checkpoints as key aspects of its information operations. The checkpoints increased the perception of healing between the Sunni and Shia tribes by sending visible messages

Sab' al Bor Nahia Tailored Network

Sewer
ISSUE: No current sewage system, other than personal septic systems, exists.
GOI: JRPC FY09 has approved the proposal to run sewer networks throughout the city.
CF: Support MMPW and GOI endeavors with the reduction of personal drainage canals.

Water
ISSUE: Water networks continue to be a problem for the southern portion of the city.
GOI: GOI & IA removal of illegal taps.
CF: Completion of 11KV, 33KV, and substation will increase power to pumping capabilities.

Electricity
ISSUE: Average power for the entirety of the city is 6-8 hours per day.
GOI: GOI & IA removal of illegal taps.
CF: Completion of 11KV, 33KV, and substation will increase power to pumping capabilities.

Academic
ISSUE: School supplies (desks) and teacher certifications for official MoEd salaries.
GOI: Establish a teacher academy to save the cost of going to school in Baghdad.
CF: School refurbishments / CERP supply projects.

Trash
ISSUE: The local populace does not have the necessary containers centrally locate trash.
GOI: MMPW 250 employee trash collection program has begun, plan to further establish more permanent dumpsite.
CF: Potential CERP project for collection bins.

Health
ISSUE: Clinics 1 and 2 are in need of refurbishments for doctors.
GOI: Nahia and qada are pushing for 200-bed hospital in Sab' al Bor JRPC strategic plan.
CF: Submit CERP project for Clinic 1 and 2 refurbishments to support town until 200-bed hospital comes.

Oversee CWTU manning and PS1 repairs

PROPOSED FIRE STATION

Facilitate manning and chlorine for SaB CWTUs

ICDD SaB fire station w/MoI for hiring orders approval

Completion of substation and electricity network

PROPOSED HOSTPITAL

PROPOSED CWTU

PROPOSED DUMP SITE

Plan for future CERP education refurbishment and supply projects

Confirm security plan covers high pilfer construction sites

Support BWD checks on water network, ID breaks and shortages

Enhance public perception of the GOI by associating the completion of large projects with GOI successes.

LEGEND
ASR
SS Electrical Sub Station
G Generator Supplemental
Water Line
Water Line (Proposed)
Water Reservoir/Storage
CWTU
CWTU in progress
IA HQ
S Lift Station
Trash Project
Landfill/Trash Issues
School Facility
Markets
Fire Station
Hospital/PHC
IP Station

Sab' al Bor Network Campaign Primary Tasks

OCTOBER	NOVMEMBER	DECEMBER	JANUARY	FEBRUARY
Sab' al Bor proposed projects presented to JRPC	33KV network feeders are complete, substation fully commissioned	CWTUs are fully staffed by BDW	I-CERP funds Fire station project and recruitment begins	Primary water line from Taji reservoir complete
		Land deeds obtained, project approved		
	Sab al Bor dump site is approved for use			Ground breaking begins for sewage system
		MMPW rehires 250 workers for 4-month extension		

BDW: Baghdad Directorate of Water Resources
CERP: Commander's Emergency Response Program
CF: Coalition Forces
CWTU: Compact Water Treatment Unit
GOI: Government of Iraq
ICDD: Iraqi Civil Defense Directorate
I-CERP: Iraqi CERP
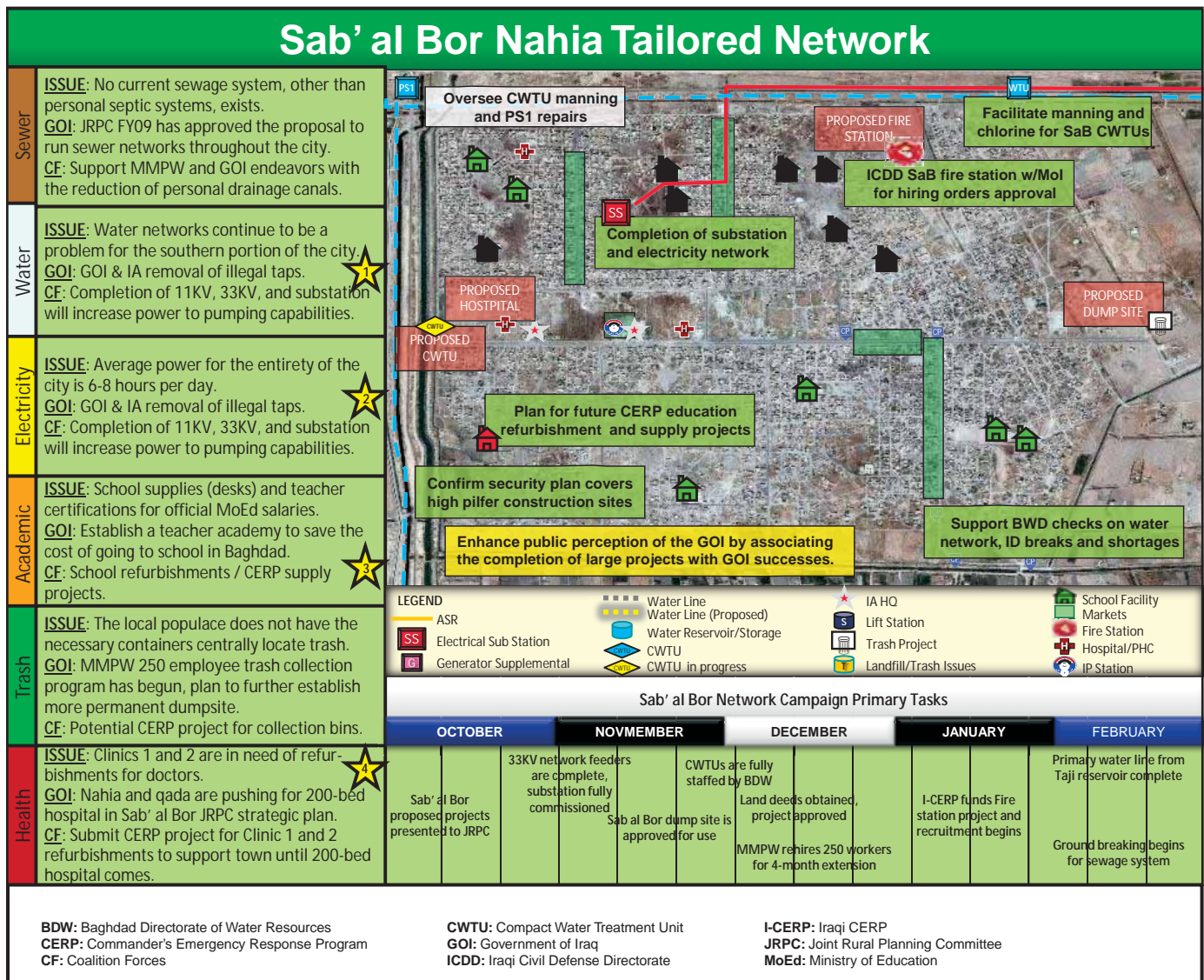**JRPC:** Joint Rural Planning Committee
MoEd: Ministry of Education

Figure 1

"…governance was lacking; the only source of order came from existing tribal sheiks of the area. The population did not consider the local government legitimate because it lacked the capacity to establish and improve essential services. Additionally, the population was still deeply resentful of the sectarian divide that existed and viewed any restoration of services as favoritism of one sect over the other, thus effectively neutralizing local government attempts to act."

in the area. From that ledger, the task force accumulated a wealth of intelligence that led to the rapid disintegration of JAM in the city. The task force established the JAM hierarchy and order of battle. When combined with additional HUMINT and signal intelligence (SIGINT) confirmation, the task force developed a clear situational template of the JAM organizations in the task force area of responsibility and areas of interest. The task force expedited the out-of-sector target handoff by passing targets to the Iraqi special operations forces (ISOF) through the U.S. Special Forces Detachment that was advising them. The task force discovered that ISOF was effective in offensive operations aimed at capturing JAM targets. This type of target handoff seriously disrupted communications between Sab' al Bor JAM cells and their chain of command in Northern Baghdad, which contributed to their isolation.

Reducing Enemy Presence (Clear)

While Operation Strykehorse Sentinel helped establish conditions necessary to facilitate the isolation of Sab' al Bor JAM elements, it was the effective targeted clearance operations from Operation Ku Lanakila Kūè that eventually led to JAM's tactical defeat. This operation, which was executed throughout the task force's OE, consisted of a series of precision-targeted engagements carried out by B Troop and the ISF in Sab' al Bor to reduce JAM's presence. The operation's overall success was apparent in March 2008 during JAM's uprising in Sadr City. Despite increased significant activities (SIGACTs) within Baghdad proper, the people of Sab' al Bor saw little to no increased violence from known JAM elements in their neighborhood. Offensive operations from February to July 2008 resulted in the detention of 45 JAM members, several of which were key leaders. The overwhelming capacity of offensive targeting and key detainments effectively neutralized Shia extremist groups in the city.

Consolidating Security Gains in Sab' al Bor (Hold)

To consolidate gains made by security operations in Sab' al Bor, the task force quickly began executing several nonlethal operations across multiple lines of effort. Initially, the task force executed partnership operations and conducted transition of tactical security tasks to the IA and IP in the city. These partnership operations became known as "Operation Strykehorse Ohana [family]" and focused on training the ISF on critical security skill sets associated with operations in Sab' al Bor. The ISF trained on military tasks, such as patrolling, checkpoint procedures, reaction to contact, and small unit targeting and planning; and police tasks such as evidence collection, reporting procedures, emergency management, and detainee handling. The task force worked daily on these skills with the IA and IP to increase their abilities in specific areas.[5]

The task force aided ISF's recruiting efforts through processing and identifying potential ISF recruits during recruiting drives held at joint service stations. The task force also assisted the ISF in negotiations with local representatives of the Ministry of Interior (MOI) to hire IP from the ranks of SOI members. Eventually, the IP grew in number and capacity. The increased recruiting of Sunnis, along with the joint security skills training, eventually led to the ISF conducting targeting and security operations unilaterally with good effect. TF 2-14 CAV built on this success

of harmony between the two, which also allowed both groups to "keep each other honest." Before long, locals began referring to Sab' al Bor as the "city of peace" on their own.

Joint checkpoints were essential to decreasing the sectarian tension that had held in the city. As respite of normalcy began returning, residents who had remained became more willing to share information with the ISF and the task force's tactical human intelligence (HUMINT) collection teams. Reinforcing the information operations (IO) theme and the "city of peace" message helped eliminate the insurgents' freedom of maneuver, which they had previously enjoyed, to get in, out, and around the city. These conditions made JAM members ripe for the surge operation that would target and clear them from the town.

That surge came with Operation Ku Lanakila Kūè, during which TF 2-14 CAV continued to conduct precision targeting set in motion by 1-7 CAV against SEGs. However, the operation's objectives expanded beyond targeting AQI and SEG operating around town to JAM high-value individuals operating inside the town.

Initially, a low number of HUMINT sources were available because of JAM intimidating the population. Nonetheless, the bits and pieces of HUMINT that did materialize gave the task force enough intelligence to conduct targeted cordon and searches of areas in town for caches and houses suspected to be hideouts for extremists. This methodical targeting initially proved slow, as not much turned up, and the population continued its passive existence, content to allow extremists to hide in its midst. However, with the constant application of IO themes and messages by troop and task force commanders at key leader engagements, through security meetings with the SOI, and the continued development of a human source network, successful penetration finally occurred. The tipping point came after the assassination of an influential and moderate Sunni community leader and an SOI contractor, Abbas Jassim.

Abbas Jassim's assassination by magnetic IED led to multiple tips on caches and safe houses. One tip led to B Troop's attached Estonian infantry platoon, during a clear and search mission on a suspected insurgent safe house, finding a pivotal piece of intelligence — a financial ledger for the JAM battalion operating

and turned the Sab' al Bor Joint Coordination Center (JCC), previously operating in name only, into an effective JCC that could better coordinate, track, and enable both IA and IP actions within the town. The JCC was a 24-hour operations center manned by coalition forces, IA, IP, and SOI representation, which provided quick response to security situations and civil policing matters within the city.

The effect of this operation enabled B Troop to hold joint security meetings, which included SOI leaders, ISF leaders, and local governance officials, and fostered a sense of responsibility and ownership among city leaders. They also created a hierarchy, with the local government on top, and a sense of responsibility to that hierarchy to which SOI leaders felt compelled to answer if an attack occurred in their area of responsibility. Furthermore, the enforcers of this concept were the IA, not the task force.

"To consolidate gains made by security operations in Sab' al Bor, the task force quickly began executing several nonlethal operations across multiple lines of effort. Initially, the task force executed partnership operations and conducted transition of tactical security tasks to the IA and IP in the city. These partnership operations became known as 'Operation Strykehorse Ohana [family]' and focused on training the ISF on critical security skill sets associated with operations in Sab' al Bor."

Task Force 2-14 CAV then launched the first named nonlethal operation that did not directly work any aspect of security. Operation Kala Nalu (money wave) was a 21-day operation designed to initiate key infrastructure reconstruction and enhance the local government's ability to provide services. We used funds from the commander's emergency response program (CERP) and the Iraqi CERP (I-CERP).[6] The operation's concept was to coordinate project proposals with the local government in a public forum, which would allow the people to see their government reviewing and approving projects. The troop collected raw data on project proposals at the nahia level, and then sent them to the task force's fires and effects coordination cell (FECC) where they were developed into a detailed scope of work projects in line with government of Iraq (GOI) specifications. The task force then interfaced with the next level of government to ensure Sab' al Bor's issues received attention.[7]

The FECC would obtain authorization from the local government before submitting the project to higher echelons. Projects that required operational and maintenance budgets after completion were coordinated through the appropriate ministry for approval before the project started. The FECC aided the project development process by providing teams to conduct training sessions with platoon leaders and troop fire support officers on the proper procedures of project submission under CERP and I-CERP guidelines.

Due to the timely process of requesting and obtaining approval, a delay of up to 6 weeks could occur before projects began. The task force used microgrants during the lag time, along with targeted economic revitalization, to inject capital to small businesses throughout markets in the city. As projects were approved and builders began to "turn dirt," the task force capitalized on the gains through more IO, such as posting signs that announced the project was produced by the GOI. In addition, the task force worked with local media to publish articles and stories about improved services. However, the most effective means of IO was face-to-face engagements between the local populace and local government leaders at opening ceremonies for key projects. In the eyes of the populace, Operation Kala Nalu increased legitimacy of both the Taji qada and Sab' al Bor

nahia governments. Planning for projects with local and ministerial levels of government also increased legitimacy because these efforts ensured economic opportunity crossed sectarian boundaries and created an equal distribution of benefits. It also verified that coalition force efforts were not undermining GOI activities in an attempt to provide the services themselves.

By the summer of 2008, TF 2-14 CAV had consolidated security gains in Sab' al Bor and influenced the populace to support its government. Coupled with the partnership efforts of Operation Ohana, Operation Kala Nalu, along with its mass expenditure of funds inside the city, successfully denied passive support for local extremist groups who had been isolated and cleared from the city. The continued massing of nonlethal effects in terms of economic gains and provided services, along with the physical isolation of the city by checkpoints, made the city inhospitable to extremists.

Building Sustainable Security in Sab' al Bor

By early fall, the task force shifted its focus to maintaining sustainable security in Sab' al Bor. The task force staff understood that sustainable security would have to come from the increased capacity of the local government. The staff assessed that to achieve increased governance capacity the task force would have to establish and nurture linkages between Sab' al Bor's government and the next higher levels in the GOI.[8]

Government connections ran both vertical and horizontal. Strengthening the vertical linkages with Baghdad province would ensure that the deputy ministries at the provincial level understood the requirements and were actively working to get services to the city. Strengthening horizontal linkages required the city council and office of the city manager to provide local governance and coordination with the Belaydiya (ministerial) representative, who carried out provisions for ministerial services among the local population.

Even with connections made, the local government still needed the ability to administer the GOI budgetary process to improve and maintain essential services. In response, the task force launched a major education effort, which worked with the local government to help it understand the GOI budgetary process.

"Task Force 2-14 CAV then launched the first named nonlethal operation that did not directly work any aspect of security. Operation Kala Nalu (money wave) was a 21-day operation designed to initiate key infrastructure reconstruction and enhance the local government's ability to provide services."

To accomplish this, TF 2-14 CAV launched two more named nonlethal operations, Kala Nalu II and Operation Kau Inoa (to build a nation). Whereas, Kala Nalu I focused on project planning, project nomination, and scope of work development, Kala Nalu II's overall purpose was to solidify the horizontal connections between local legislative, executive, and ministerial government bodies. This required the task force to dedicate combat power for quality control and quality checks on projects implemented during Kalu Nalu I, and ensure the presence of all three governing bodies.

The intent of Operation Kau Inoa was to further solidify the vertical link between Sab' al Bor and the ministries in Baghdad by helping the local government understand and manage its budgetary process. The process required outlying districts (qadas) to submit proposals for funding, which would be reviewed for approval by the Baghdad provincial government during its joint rural planning committee (JRPC) meetings. The proposals, if approved, were then included in the provincial government's budget plan.

The operation's concept required B Troop commander to mentor and coach Sab' al Bor's city manager and legislative council chairman on budgetary processes of the GOI. The troop commander ensured that the city council and city services committee held meetings on a regular basis and could correctly identify issues that residents of the city were facing. The task force executive officer and staff primarily mentored and coached the qada-level government on budgetary processes and sent representatives to city-level meetings to mentor and assist the local government with construction budgets. These representatives included the task force executive officer, technical experts from the task force FECC, and a government specialist from the embedded provincial reconstruction team, which was headquartered at the brigade. The task force also monitored the local nahia government as it identified and prioritized issues at its level and submitted funding requests to the next level of government.

The task force staff attended every qada meeting to ensure issues identified by the Sab' al Bor city council not only made it to the qada, but were aptly addressed by the qada. Even if the qada decided not to request resources for a particular issue, the task force considered it a quantifiable success when the connection occurred. The task force staff assisted the Taji qada with talking points, helped refine the draft brief, and prepare to brief

their requests to the provincial-level government prior to the JRPC conference.

It is important to note that while the coalition forces representative attended all city- and qada-level meetings, they did not run them. The majority of the task force's work with the local government occurred during conversation either before or after formal meeting sessions and sometimes during late-night phone calls. For the actual meetings themselves, the coalition representation always took a "back seat."

The 2008 JRPC was significant success. The meeting resulted in more than 30 projects planned for Sab' al Bor.[9] More importantly, the work accomplished through collaboration of coalition forces and city council members resulted in Sab' al Bor's essential services committee authorizing management of the national-level funds that were budgeted for the 30 projects, and the JRPC released the funds early for project initiation.

The first sign of the local government's success occurred during the winter months when the Baghdad governor, key officials from Baghdad ministries, leaders from the Taji qada, and council members from Sab' al Bor celebrated the grand opening of the Sab' al Bor electric substation with local residents. The opening of the substation brought an increase of nearly 22 hours of electricity to the city. A week later, the local government, along with coalition forces, organized a grand opening of the GOI-built compact water treatment unit (CWTU), located north of Sab' al Bor. The CWTU produced potable water for the city. The increased power and potable water resulted in second-order effects, which included increasing the ability for small businesses to thrive, improving local schools, and providing better irrigation for outlying agrarian communities.

The local population now had substantial examples of the local government's ability to meet its expectations. They readily observed improved security in the city and soon realized the local government could effectively coordinate with the provincial government for services. This provided a third-order effect — an influx of approximately 25,000 internally displaced residents, both Sunni and Shia, returned home to Sab' al Bor as word spread throughout central Iraq that security and services had increased in Sab' al Bor and it was safe to return.

Lessons Learned

Remarkably, TF 2-14 CAV's experiences in Sab' al Bor created an in-depth understanding of the tools necessary to win decisively in the counterinsurgency fight. First and foremost, it is essential to disrupt the enemy with effective isolation. Isolation can be physical and based on terrain; however, more importantly, it should be psychological. Isolation should also include separating extremists and their ideology from the population through visual indications of life returning to normal. As the population gains confidence in local security forces and receipt of services in its area, due to local government actions, it realizes how much it stands to lose by having extremists in its midst. Thus, true isolation of the enemy occurs when the population denies passive support for extremist networks, which allows aggressive precision targeting. Once the task force gained the support of the local population, it was able to penetrate extremist groups operating in the city. Once that initial penetration occurred, tips from the local population, combined with other intelligence resources, allowed us to aggressively pursue and tactically defeat the enemy.

The task force also learned that targeted resource expenditure during nonlethal operations is necessary to sustain security gains. The best way to gain these resources is to name nonlethal operations just as lethal operations are named. The name resonates with higher echelons and makes it easier to obtain required resources, which is usually money, but can also include time. By using the concept of operations (CONOP) format used in theater for lethal operations, the task force nominated nonlethal targets for task force execution or higher echelon to resource and action. Markets, essential service initiatives, checkpoint improvements, and government coordination are just a few of the type of targets identified as nonlethal operations. For example, increased agriculture capability was a desired result for the task force. The task force achieved this desired result by engaging in actions that addressed the problems that plagued the electrical network, which affected the irrigation pump stations, thus increasing the crop yield in the area. Such actions included facilitating interaction with key leaders from various interests related to the issue such as the local government, essential services committee members, tribal leaders, and the ISF.

The squadron's most valuable lesson learned in Sab' al Bor was the reality of reorganizing its staff and elements to meet requirements in the new environment. To account for nonlethal efforts, the staff and maneuver elements of the task force needed to reorganize to manage cultural settings, both tribal and between the institutes of the state; manage the economics of the reconstruction programs that were being implemented; and oversee the processes of negotiations and expected outcomes. This was not something the unit arrived prepared to do; in fact, the unit was more prepared to engage in lethal operations. However, due to the adaptability of leaders and members of the organization, every Task Force Strykehorse soldier saw the bigger picture and how it fit with the higher headquarter's campaign plan, which made it easier to adjust our thinking and actions to succeed.

In summary, the primary variable that brought stability in Sab' al Bor was security. Security resulted from the effective isolation of the enemy, which was followed by a deliberate clearance operation. However, it was the additional "hold and build" operations that proved decisive and allowed the task force to truly solidify security and ultimately achieve stability. The task force effectively isolated enemy networks in Sab' al Bor through improved site security and checkpoint operations, and an effective information campaign convinced the population to trust its local government and police more than insurgents.

The squadron then stood up a targeted clearance operation of viable insurgent targets and held on to these security gains by developing the security skills of the ISF and governance skills of local government. Finally, TF 2-14 CAV developed sustainable security through targeted civil capacity initiatives, which legitimized the local government through critical infrastructure project completion and contributions to the local population. Once the local government was back in operation and in control of local security forces, there was no turning back. These successful operations resulted in life returning to normal for citizens of the city — tens of thousands of displaced persons returned, services from the local government kept pace, and local security forces managed civil matters in such a manner that no violent attacks on the population occurred in the city for the remainder of TF 2-14 CAV's assignment.

Isolate, clear, hold, build, in conjunction with precision targeting of both friendly and enemy networks, proved effective in this defined problem set. The task force executed variables of concepts and lessons learned from Sab' al Bor in other areas of TF 2-14 CAV's operating environment with degrees of success. However, when task force soldiers, local Iraqis, and GOI institutions worked together toward the same objectives, they were able to mass effects that effectively put extremists out of business.

Notes

[1]After his visit to Sab' al Bor in December 2008, General Ray Odierno ordered his staff to conduct a case study of the counterinsurgency (COIN) practices used by TF 2-14 CAV in the city and capture what was working to bridge a large sectarian divide in the population and forward stability and security. A staff member from the COIN academy at Camp Taji embedded with TF 2-14 CAV's staff and Bravo Troop for a few weeks to capture best practices and lessons learned. This resulted in the development of a case study, which has since been taught to leaders of incoming brigade combat teams at the COIN academy, as well as the Battle Command Training Program to teach division and brigade combat team leaders.

[2]Thomas Ricks, *The Gamble: General Petraeus and the American Military Adventure in Iraq,* Penguin Press, 2009, p. 170.

[3]The creation of the Sons of Iraq led to the legitimizing of both Sunni and Shia militia groups. It was the physical symbol of reconciliation and became the centerpiece of Multinational Force-Iraq's (MNF-I) reconciliation line of effort.

[4]See Peter R. Mansoor, *Baghdad at Sunrise,* Yale University Press, 2008, p. 34, for a good description of framework and surge operations in a COIN environment.

[5]This is where being a task force, paid off; we conducted partnership operations in tandem with the police and military transition teams, both of which did not have a specified command or support relationship to the squadron, other than to conduct their missions "in coordination with."

[6]I-CERP and CERP were one in the same, except I-CERP used money from the Iraqi treasury, instead of the U.S. treasury.

[7]The government levels that affected Sab' al Bor started at the local (nahia level), then went through the district (qada) level, and ended with the Baghdad provincial government (state-level government).

[8]Due to the multiple layers of district, provincial, and national government that effected the local government, Sab' al Bor had three connections to its higher government. The first, the legislative connection, ran from its council chairman, through the qada legislative body, to the provincial council, and on to the council of representatives at the national level. The second was the executive connections that ran from its city manager (the mudeer), at the nahia level, through the district level executive head at the qada, called the Qa'im Makam, to the governor of the province. The third connection was through the technical experts on the essential services committee that connected through the qada essential services committee to the provincial ministries and on to the Iraqi national ministries.

[9]Projects, such as the completion of the 11KV and 33KV electric networks, the refurbishment of the Sab' al Bor 11KV substation, the refurbishment of the Taji power plant, the restoration of several transformers throughout the city, and the dedicated electrical line feeders to critical service sites, such as major potable water distribution pump stations and irrigation pump stations, were incorporated into the GOI rural service budget plan.

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DEPLOYMENT TRAINING:
The Battalion S3 Perspective

by Major Brian E. McCarthy

"If I had the chance to do it again, I certainly would do a few things differently." Over the past 2 years, I've collected an assortment of observations and lessons learned associated with our unit's deployment. As a battalion S3 managing a unit move, reset, new equipment training, train-up for deployment, and subsequent deployment to Iraq, I learned a number of things. However, this article focuses primarily on training and staff development, with a few final thoughts on time and personnel management. We made mistakes, we learned lessons, and we pressed on; however, this article shares my humble opinions to generate thought and discussion. While I may refer to doctrine occasionally, this article is simply based on opinion and illustrates "one way" to do things.*

Training Management

Training for combat is the critical business we conduct every day and our soldiers deserve the world-class training our Army is capable of delivering. In his guest blog, "Training Full Spectrum — Less is More," General Peter W. Chiarelli, Vice Chief of Staff of the Army, states that "Good leaders understand that they cannot train on everything; therefore, they focus on training the most important tasks. Leaders do not accept substandard performance in order to complete all the tasks on the training schedule. Training a few tasks to standard is preferable to training more tasks below the standard."[1] This statement illustrates that the Army understands that it is impossible to train every task on a unit's mission essential task list (METL) to optimal proficiency, and that doctrine is written to empower lead-

ers. Leaders must first understand and accept, then identify, the training aimpoint, which makes it possible to provide clear tasks, purposes, directions, and resourcing to subordinates.

To successfully execute this process, three vital elements are required: a road to war, a long-range training calendar (LRTC), and training guidance. The road to war oftentimes is a single slide, which depicts the glide path from a start point (where you are now) to an objective or end point (deployment/rotation), and lays out the sequential steps along the way. The LRTC speaks for itself, but the annual and quarterly training guidance (A/QTG) binds the plan together. The training guidance must be usable and understandable at the lowest level. To achieve this, it must be clear, succinct, and manageable, but most of all, it must be feasible. As we adhere to the Army's seven principles of training outlined in U.S. Army Field Manual (FM) 7-0, *Training for Full Spectrum Operations*, we must provide subordinates clear guidance without stifling their initiative.[2] This is especially important given the type of warfare in which we are engaged today.

Leaders at brigade, battalion, and company echelons must identify critical events and establish priorities at all levels, noting that their priorities must, of course, also include the commander's priorities. Training guidance should not be held at the company commander and first sergeant level; it should be pushed down to platoon and squad leaders (and hopefully individual soldiers). Therefore, our QTG was written in an operations order (OPORD) format and every effort was made to keep the core material in the base order and refrain from using annexes because small-unit annexes are often read as an afterthought, if read at all.

It is often said that a company can do only one thing well each week and commanders must set priorities to ensure their training guidance and schedules reflect this approach. Training guidance and schedules should be synchronized across all staffs to ensure time and resources are not conflicted, which guarantees a company's success. For example, a unit examines existing multiple training requirements, which include Army training/leader development regulatory training, as well as theater-specific training require-

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ments. These multiple requirements must be balanced against each other and prioritized in accordance with training guidance. As a result, throughout the course of our train up for deployment, there were a multitude of competing directives the battalion had to manage to prepare for full-spectrum operations and deployment. Writing guidance in the OPORD format provides the commander's intent, written in familiar format, to which our leaders, *staff*, and soldiers could refer for guidance.

It's no secret that time is our most precious training commodity and it must be closely guarded. Yet, all too often, leaders are abruptly forced into "react to contact" mode to field a request for information (RFI) or execute a directive from higher headquarters. This often results when units fail to schedule support/prep time, which is required to conduct training events; synchronizing efforts saves valuable time. With the current Army Force Generation (ARFORGEN) cycles and systems, it is equally, if not more, important to ensure logistics events, such as equipment issue, scheduled maintenance services, and new equipment training, are all included in the planning process. Writing the QTG as an OPORD also provides an opportunity to conduct a military decisionmaking process (MDMP) exercise for the staff. QTG, calendar, and schedule development must involve all warfighting functions at every echelon; using the orders drill method to create training guidance is an excellent opportunity to ensure all functions are included in QTG, calendars, and schedules.

Core Competency Training

The Army has identified the need to maintain full-spectrum operations proficiency to remain competitive for current conflicts (counterinsurgency), as well as for any future contingencies (high-intensity conflict or otherwise.) To be successful across the full spectrum of operations, each soldier must first be a trained rifleman (able to shoot, move, and communicate on the ground) and then trained for any complex tasks and situations they might encounter. For soldiers, these requirements are primarily core competencies and often highly technical perishable skills; for leaders, they are often counterinsurgency operations with decentralization and ambiguity. For example, during training, a mechanized infantryman conducts a cross-country movement to attack an enemy position while integrating direct and indirect fires, breaches an obstacle with the aid of attached engineers, and then assaults the objective using Bradleys and tanks in support-by-fire positions while rifle squads clear and secure buildings. If he can perform these tasks to standard, it is safe to assume that he is trained in a wide range of skills and can conduct most any mission across the full spectrum.

On the other hand, leader training should focus at the opposite end of the spectrum on stability or counterinsurgency (COIN) operations. In this environment, not only must leaders still employ and synchronize combined arms, they must also be policemen, diplomats, and oftentimes city

planners or managers. Leaders must also be able to think independently, operate decentralized, and be comfortable with ambiguity, as there are few front lines or black and white solutions. The full-spectrum leader must train for extremely challenging situations, and due to the variability of today's battlefield, he should possess the requisite skills to lead in any environment.

Leader Development of Staff Officers/Noncommissioned Officers (NCOs)

Developing officers and NCOs to serve as staff associates is often the most overlooked area on any staff. Very few soldiers really want to serve on a staff, and as leaders of staff sections, it is our job to provide these soldiers with purpose, direction, and motivation. Because the primary purpose of the staff is to plan, resource, and orchestrate battalion-level operations, problemsolving is an absolute critical skill all staff associates should possess and leaders should cultivate.

During initial planning, we decided to limit the bulk of our staff, the 11, 19, and 21 military occupational specialties, to 12 months time on staff. This meant we would have steady staff transitions; however, it was vital to keep experienced soldiers on the line, and by phasing transitions, it would be manageable. We would have a constant flow of soldiers who needed staff training, and to help develop problemsolving capabilities and staff skills, a continual series of professional-development sessions were conducted. These basic courses taught the roles and responsibilities of staff members, the MDMP, how to lead from a "nontraditional leadership position," and tactical vignettes. All staff NCOs should be required to attend the battle staff course, and every staff associate should be required to attend courses on all Army battle command systems, such as Force XXI battle command brigade and below (FBCB2), command post of the future (CPOF), advanced field artillery tactical data system (AFATDS), distributed common ground system-Army (DCGS-A), maneuver control system (MCS), and battle command sustainment support system (BCS3), they employ.

The battalion staff is so involved in daily operations of the unit that it rarely gets dedicated training events; however, we executed several staff exercises, in and out of the field, by leveraging time and managing expectations. We had 2 days that we could conduct classes and exercises, which were Mondays and Thursdays, during command maintenance and sergeant's time. To make the most of our allotted time, we had to manage some expectations, which included ensuring that the companies, battalion, and brigade knew that these times were sacrosanct and we would be maintaining and/or training during these times and not waiting for e-mail traffic or the phone to ring (which was a challenge).

Mondays are a great opportunity to train the entire staff, at the motor pool, to maintain vehicles and equipment and set up the tactical operations center (TOC) systems that the battalion will use in the field. We took full advantage of this training, which paid huge dividends when we got to the field for the first time. It is vitally important to have every staff associate not only involved in the physical set up of the TOC, but with the hookup, installation, and set up of digital equipment, which will ensure everyone has the proper equipment to successfully function as part of a team.

Thursdays were set aside for sergeant's time training (STT); however, if I could use a "do-over," I would dedicate one STT session per month to a staff exercise, not just MDMP exercises, but battle tracking and battle drill refinement. This would allow the headquarters and headquarters company to focus on basic soldier skills

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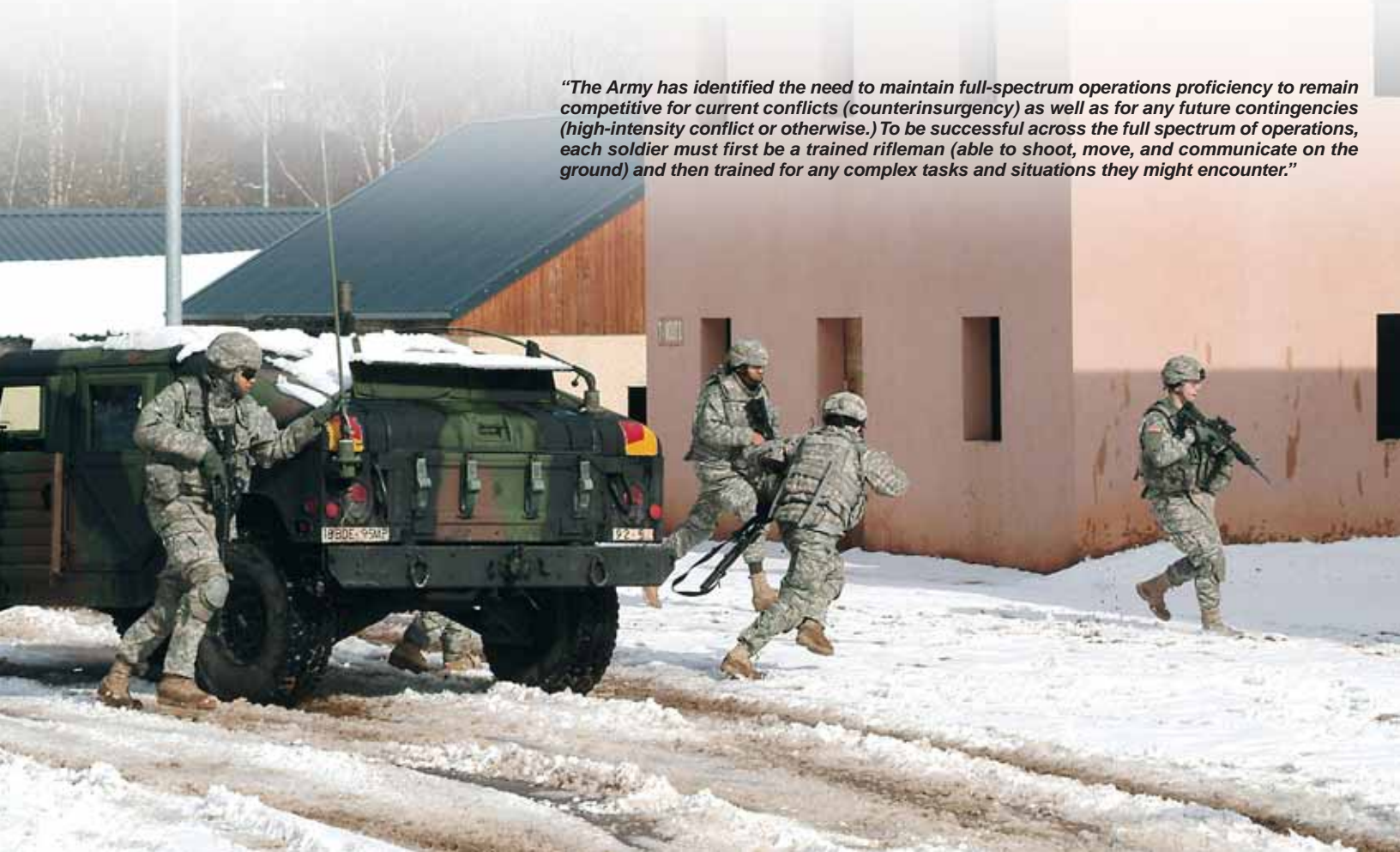
for the other three sessions (given a 4-week month), while the XO and S3 conduct officer professional development sessions with staff officers, if they are not involved in STT.

By setting up the TOC on Monday and leaving it in the motor pool, it allows the staff to conduct exercises on Thursday in a "field environment," while other exercises are conducted in a more sterile location such as the battalion conference room. During training, staffs must ensure they train on both analog and digital systems. As discussed earlier, we oftentimes expend so much time and effort training on and maintaining our digital systems that our acetate and alcohol marker skills erode. On a side note: the MCS is often overlooked, but we found that once operators were fully trained, we saved a great amount of time and effort.

Since the staff member is not a "green tab" leader, he has no official leadership position; therefore, he must lead and influence others to assist him by leveraging his disposition. This makes establishing relationships as the second key ingredient to being a solid staff member. Some of these relationships are obvious; battalion staff members need to link up with counterparts at the brigade and company levels. Additionally, the S2 and S3 need to link up and work together early and often to construct the mechanism that will drive operations during a deployment. The S4 and S3 often pass each other like ships in the night, which causes problems when the battalion plans a training event that conflicts with another event such as a fielding or equipment turn in.

A solid relationship should be built in garrison between the S3 and S4 involved in staff training exercises, so they learn to synchronize efforts and not work in a vacuum, which helps prevent paragraph 4 from becoming an afterthought. Vital to success are the relationships between the S6 and the operations sergeant major (SGM)/S3 NCO in charge (NCOIC); and the S2 and battalion scout platoon. With the first relationship, the operations SGM, along with the battalion XO, is responsible for establishing the battalion's command and control (C2) nodes, and while the S3 has communications personnel, the S6 should be linked with the S3 so everyone is involved in planning, establishing, and jumping C2 nodes.

Often overlooked is the S2 and scout platoon relationship. The scouts are tasked to gather information on the enemy or the terrain on which the battalion will be fighting. Linking the scouts with the S2 early and often will enable certain synchronization between the two elements, thereby offsetting any probable gaps. The S2 and scout platoons can create training scenarios and better refine their reciprocal RFIs. The S2 can provide the scouts a clearer picture of his intent; in turn, the scouts can provide the S2 with guidance and products on what he can realistically expect the scouts to deliver.

Given all this, the key element to staff development is counseling. Top chief executive officers (CEO) of Fortune 500 companies report that they spend 50 percent of their time on people issues, which is the largest single time commitment they have. A typical S3 does not have much time available either, but because we are in the business of developing leaders, counseling needs to be a priority. Like any counseling, it should be conducted regularly, be detailed, and include leadership preparation for future assignments. It is good practice to conduct and recommend quarterly counseling for everyone in your rating chain (to include the SGM) and include things that apply directly to the staff member's job, as well as personal and professional goals.

Closing Thoughts

While we were a successful organization, both as a staff section and as a battalion, there are always things that can be improved. Hopefully, some of the ideas in this article will generate discussion and help other units across the force. Nonetheless, at the end of the day, the Army is about people and I have been *extremely* lucky to have had an outstanding crew of junior officers, noncommissioned officers, and soldiers. As people are integral to our profession, I will close by thanking them for their hard work and share some musings on personnel matters.

Leadership. Something that often gets overlooked is the leadership role of staff officers, commissioned and noncommissioned, in the battalion. Staff time is *the* time for young soldiers to make a reputation for themselves, which oftentimes lays the groundwork before moving to a line platoon. These soldiers are in unique positions to better the performance of not only their staff sections, but of the unit as a whole. They can do this by observing the unit and their section, identifying existing gaps, and then applying their unique strengths and attributes to potentially fill some of those gaps.

Relationships with company commanders. As the S3, it was our role to support the battalion commander *and* company commanders; in effect, we were there to support the company, as well as the battalion. As one of three field grade officers in the battalion, I had a responsibility to coach and mentor them as well. For example, I captured many opportunities to provide counsel on how to present information, such as courses of action, to the battalion commander to influence his decisionmaking process.

Relationship with the SGM. As has been the case throughout my career, I was blessed with an outstanding noncommissioned officer as a battle buddy. An outstanding leader, he took on many missions and ran with them, allowing me to focus on the myriad of tasks at hand. The most important thing we did was counseling; I conducted quarterly counseling with my SGM and actually got it down on paper a few times. The most important thing that came out of our counseling sessions was a shared expectation of each other and the division of labor. Since the SGM was also an accomplished master gunner, he ran point on gunnery and master gunner training, as well as schools, tasking, land, and ammunition. We had junior officers and NCOs responsible for all of these areas as well, but had no issues dividing, conquering, and managing them at our level. I recommend you sit down early with your NCOIC and decide how to divvy up tasks and take advantage of each other's strengths.

Time management. As a deployed S3, you cannot do everything, so why attempt to handle everything while in garrison? The most important thing I learned as an S3 was the value of delegation; not only does it allow you to focus on the current decisive operation, but it is a great way to develop subordinates. Assigning subordinates tasks and missions, and holding them responsible for execution is empowering and oftentimes helps them commit to the organization. However, the noticeable long-term value of delegation is junior leader empowerment and development; on the other hand, the immediate effect allows senior leaders to focus on the big picture, the overall tasks, and manage quality assurance on multiple efforts; and manage current, as well as future, operations in both garrison and full-spectrum environments.

Conducting physical training (PT) in an intense training environment is difficult, to say the least. However, there exists an infinite number of ways to overcome time constraints, which are limited only by the unit's creativity. For example, we

had four mandated PT requirements per week; we conducted PT every morning from 0630-0730 hours (0800 hours, in some cases) with the exception of Thursday, due to STT. Often, PT was delayed due to range requirements or field events; however, to make up lost training, we had the standard first call, moved to the range, shot all day, and then conducted PT in a field environment between late afternoon and early evening until it was dark enough to conduct night fire. Another method we used to make-up PT was to incorporate it into STT by conducting a ruck march or buddy run from the company area, to and from the training site, or in between training sites.

Leaders at all levels are committed to taking care of soldiers; a staff leader is no exception. Given the tempo of the environment, soldiers work late hours and extra days. There are many creative ways for leaders to compensate soldiers for hard work; for example, giving soldiers a day, or a partial day, off whenever possible is rewarding and appreciative. Briga-

dier General Buchanan, then deputy commanding general for 10th Mountain Division, shared a very interesting time-management technique with our unit leaders during our deployment to Iraq. For the first quarter following a recent deployment, one of the division's brigade combat teams conducted 4-day work weeks, making up lost time on Fridays by phasing soldiers through lunch each day, as well as shortening the 90-minute time allotted between PT and duty time for personal hygiene and breakfast.

In closing, this has been an incredibly rewarding and challenging experience. While being a staff officer is not nearly as much fun as being a commander, it's just as important; I was lucky to have a great group of soldiers, NCOs, and officers to work alongside. Again, these are merely musings and I hope my comrades across the force will find something useful (to do or not to do) in them.

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"…leader training should focus at the opposite end of the spectrum on stability or counterinsurgency (COIN) operations. In this environment, not only must leaders still employ and synchronize combined arms, they must also be policemen, diplomats, and oftentimes city planners or managers. Leaders must also be able to think independently, operate decentralized, and be comfortable with ambiguity, as there are few front lines or black and white solutions."

THE ARMORED CAVALRY REGIMENT:
Battle Proven and Future Primed

by Captain Cole C. Pinheiro

The 3d Armored Cavalry Regiment (3ACR), a unit steeped in history and tradition, remains the premier reconnaissance organization and only unit capable of conducting a cover mission for an armor corps. Decisionmakers, operating on a mindset of Army Transformation and counterinsurgency thinking, ordered 3ACR to transition from an armored cavalry regiment to a Stryker brigade combat team in 2012. An exploration of Army Transformation illustrates that an information revolution in military affairs has not occurred and strategies based on transformation thinking have proven disastrous. When analyzed from a historical perspective, 3ACR proves to be a formation capable of excelling in both high-intensity operations and counterinsurgency warfare. Its unique task organization enables it to achieve great success across the spectrum of conflict.

The 3d Armored Cavalry Regiment has weathered multiple organizational changes since its inception on 19 May 1846. The regiment, originally outfitted with percussion rifles and horses, was designed to have greater mobility, accuracy, range, and lethality than the contemporary infantry and dragoon units.[1] The regiment fought in multiple campaigns, including the Mexican War, Civil War, Indian Wars, Spanish American War, Moro Rebellion, and World War I, earning its reputation as a decisive force. As mechanization changed the character of war between World War I and World War II (WWII), 3ACR transitioned to a mechanized force, excelling as the lead force for XX Corps, Third Army. The regiment, serving as General George Patton's spearhead for Third Army, moved 3,000 miles in 265 days, killing or capturing 43,000 enemy troops.[2]

With the development of AirLand Battle strategy during the Cold War, military leaders uniquely organized and trained armored cavalry regiments (2d, 3d, 11th, and 14th) to conduct offensive and defensive security and reconnaissance missions. The ACR became the only unit capable of conducting critically important cover missions for the U.S. Army armored corps during high-intensity conflict. Both 2ACR and 3ACR gained distinction during Operation Desert Storm, conducting these missions as lead forces for VII and XVIII Corps, destroying the Iraqi 12th Armored and Tawakalna Republican Guard Divisions.[3] Subsequently, 3ACR participated in security operations in Bosnia and during Operation Iraqi Freedom. Currently, 3ACR remains as the last unit organized as an armored cavalry regiment and the last unit capable of conducting a cover for an armored corps. The regiment is scheduled to transition to a Stryker brigade combat team (SBCT) after it completes a deployment to Iraq in September 2010. Converting the armored cavalry regiment to a SBCT is an organizational mistake, which ignores the effective economy-of-force missions executed by the regiment during counterinsurgency operations, destroys its ability to conduct a unique high-intensity conflict mission, and limits III Corps' ability to conduct effective reconnaissance.

The Genesis of Transformation

The decision to transition 3ACR to a SBCT is largely predicated on a failed strategy rooted in a fixation with new technology. Many senior advisors throughout the 1990s believed we were witnessing an information revolution in military affairs, which would "flatten" the battlefield, allowing commanders to concen-

trate the effects of combat power against the enemy. "Rather than move to contact, 'all arms' units essentially search and then destroy the enemy on the battlefield."[4]

Policymakers believed that dominance in airpower, precision weapons, and technology would establish conditions that required less armor and fewer soldiers in combat. They initiated costly programs to create rapidly deployable platforms designed to engage based on clear intelligence to achieve strategic success. The Army would "see first, understand first, decide first, and finish decisively."[5] Dominant battlefield knowledge would lead to decisive action quickly and reduce the financial, materiel, and human cost of war. This viewpoint developed a 'speed over mass' mentality in which rapid deployment and maneuver was traded for the protection of heavy platforms, which led to the invasion of Iraq in 2003, with a far smaller force than that of Operation Desert Storm.

The invasion force did not have the ability to find, fix, and maneuver to destroy the enemy. Information technology and precision systems did not prove decisive. The enemy used deception, dispersed,

"In April 2003, under command of Colonel David A. Teeples, 3ACR deployed to Iraq and assumed control of al Anbar Province, to include the cities of Fallujah, Habbaniyah, Ramadi, Hit, Hadithah, and al Qaim — the only operational port of entry on the Syrian border. The regiment maintained intrastate commerce, established local governance, and coordinated with host nation forces on security operations."

* * *

found concealment in the urban terrain, and waited for suitable political conditions before returning to fight a protracted war. Employing the ACR during the invasion, as it was employed in Desert Storm, would have increased the coalition's ability to conduct effective reconnaissance and fix and destroy the enemy. In the aftermath, the Army "has fought for 6 years under conditions that run counter to the body of ideas that drove Army Transformation thinking."[6] Simultaneously, the nonlinear war in Iraq established a paradigm in which policymakers continue to promote medium and light organi-

zations as better suited for the counterinsurgency fight. Accordingly, 3ACR is set to transform to a SBCT — an organization that is a byproduct of both Army Transformation and counterinsurgency thinking.

Counterinsurgency Operations in Iraq

A brief historical review highlights the impact of 3ACR's economy-of-force missions in Iraq. In April 2003, under command of Colonel David A. Teeples, 3ACR deployed to Iraq and assumed control of al Anbar Province, to include the cities of Fallujah, Habbaniyah, Ramadi, Hit, Hadithah, and al Qaim — the only operational port of entry on the Syrian border. The regiment maintained intrastate commerce, established local governance, and coordinated with host nation forces on security operations. On completion, 3ACR's battlespace was designated as Multinational Division–West and assumed by the U.S. Marine Corps. In March 2005, 3ACR returned to Iraq after less than a year refit and training at Fort Carson, Colorado. Third squadron was employed in an economy-of-force role in southern Baghdad while the remainder of the regiment operated in Ninewah Province. The regiment's operations to secure

"In November 2007, the regiment conducted a third deployment in Ninewah Province, greatly improving security in Mosul during a time when both coalition and Iraqi political and military efforts were focused in Baghdad and Diyala."

the Syrian Border and Tal Afar were so successful that it was distinguished by scholars as the model for counterinsurgency.

The 71st Colonel of the Regiment, Colonel H.R. McMaster, designed and implemented a strategy of "clear, hold, build" during Operation Restoring Rights in the northern city of Tal Afar. The template of conducting a combined clearance operation; holding the area with host nation forces supported by coalition forces; and rebuilding the economic, social, and political structure was implemented countrywide. In 2007, military leaders used this same methodology to form the core of the "surge strategy" in Baghdad and Diyala Province. In November 2007, the regiment conducted a third deployment in Ninewah Province greatly improving security in Mosul during a time when both coalition and Iraqi political and military efforts were focused in Baghdad and Diyala. During each tour, the regiment achieved success in areas of operation far larger than those assigned to other brigade combat teams, and was subsequently relieved by a far larger force at the end of each deployment.

Based in part on its heavy platforms, 3ACR was successful during its three deployments in Iraq. During 2005, in both Baghdad and Tal Afar, the protection, lethality, and accuracy of the regiment's armored platforms proved critical. Again, in Mosul during 2007, the armored platforms emboldened Iraqi Security Forces (ISF), provided lethal fires, crushed enemy morale, and protected soldiers. The regiment's heavy nature should have caused it to be too bulky for counterinsurgency warfare; however, stabilized weapons systems tied to advanced optics limited collateral damage. Reasoned leaders consistently demonstrated good judgment and restraint in the use of force.

Equally important was a lack of sufficient dismounts in the ACR's troop and tank companies, which caused 3ACR and ISF to develop a mutual reliance, which forced them to truly conduct combined operations in Ninewah. Coalition and Iraqi forces shared intelligence and information, conducted combined patrols, and lived together trusting each other for security. ISF needing coalition armor, firepower, aviation, and logistics expertise cooperated and compromised to reach operational goals. Coalition forces requiring additional dismounted forces, local intelligence, cultural expertise, and legitimacy were eager to work with ISF. The immeasurably important trust that developed led to mutually supporting operations and security for the local populace.

"Coalition and Iraqi forces shared intelligence and information, conducted combined patrols, and lived together trusting each other for security. ISF needing coalition armor, firepower, aviation, and logistics expertise cooperated and compromised to reach operational goals. Coalition forces requiring additional dismounted forces, local intelligence, cultural expertise, and legitimacy were eager to work with ISF."

* * *

In contrast, adjacent units with adequate dismounts for conducting counterinsurgency operations, specifically infantry-based organizations, did not rely on ISF and were likely to conduct operations unilaterally. It was quicker and easier for these units to operate independently because unilateral operations avoided cumbersome planning and coordination with ISF. Battalion commanders were briefing combined operations and partnership during their battle update briefs; in reality, however, units maintained separate, walled and secured compounds at joint outposts, and subordinated ISF forces when they chose to conduct missions with them. Accordingly, rifts grew between ISF leaders and coalition forces, which limited the amount of mutual support. There was less intelligence sharing, less effective reconnaissance, and a lower level of security.

Reconnaissance Capability

During both high-intensity conflict and counterinsurgency operations, 3ACR remains the premier organization for conducting reconnaissance operations. The regiment is currently organized with a military intelligence company, including tactical unmanned aerial vehicles, human intelligence, and signal intelligence platforms. The regiment maintains far more manned reconnaissance and attack aviation platforms than any other brigade combat team. Each troop maintains two Raven unmanned aerial vehicles for gaining imagery intelligence at the lowest level.

The optics on the regiment's organic weapons systems, the M1A2 SEPV3 with 50-power magnification and the M3A3 with 12-power magnification, match or surpass the capabilities of any platform found in the Army. Both systems maintain day and thermal capabilities and commander's independent thermal viewers to maximize target acquisition. The regiment also maintains long-range advanced scout surveillance systems (LRAS3) and multiple variations of smaller thermal and night-vision sights for conducting discrete dismounted observation. With these advanced and survivable systems, the regiment is capable of making contact with the enemy and fighting for intelligence. Iraq has proven that even in protracted war, an organization must be survivable and aggressive to conduct effective reconnaissance.[7] More importantly, 3ACR is led by exceptionally experienced noncommissioned officers and professional field grade and company grade officers. These leaders ensure a unique training regime that focuses the organization on conducting decentralized reconnaissance.

Transitioning the ACR to a SBCT will fundamentally change its mission-essential tasks and destroy its ability to conduct this form of aggressive reconnaissance for III Corps. Augmenting the corps with a battlefield surveillance brigade (BfSB) will not fill the gap; the SBCT and BfSB are incapable of conducting reconnaissance for an armored corps during high-intensity conflict. It would be catastrophic if either a SBCT or BfSB made contact with a heavy brigade. However,

the ACR is capable of gaining and maintaining contact with a heavy force, as H.R. McMaster did with his Eagle Troop (E/2/2ACR) at the battle of 73 Easting. Eagle Troop highlighted the ACR's capabilities by destroying a brigade of the Tawakalna Republican Guard Division (approximately 30 tanks, 16 BMPs, and 39 trucks) in 23 minutes.[8] The unit subsequently assisted with the forward passage of 1st Infantry Division to complete the destruction of the Republican Guard Division. As 2ACR demonstrated, a reconnaissance organization for a heavy corps must be able to gain and maintain contact, survive, and facilitate the passage of follow-on forces to achieve destruction of the enemy. It is obvious that the light-skinned SBCT or toothless BfSB cannot accomplish this task.

Similarly, both organizations (the SBCT and BfSB) have yet to prove their decisiveness in protracted warfare. The 2d Stryker Cavalry Regiment (2SCR), organized as a SBCT, made notable contributions during Operation Iraqi Freedom, specifically, in Sadr City and Diyala Province. However, 2SCR was greatly assisted with armor from the 4th Infantry Division; attack aviation from 4th Squadron, 3ACR, in Sadr City; and 2d Squadron, 3ACR armor in Diyala Province. The 3d Stryker Brigade Combat Team, 2d Infantry Division, lacking armor support, was incapable of preventing the collapse of ISF and erosion of security in Mosul in 2005.

During the same period, merely 30 kilometers to the West of Mosul, 3ACR was achieving its renowned success implementing "clear, hold, build" during Operation Restoring Rights in Tal Afar. Both locations have unique cultural, tribal, socioeconomic, and governance nuisances; however, the results of the two simultaneous operations illustrate the difference in organizational capabilities. When 3d Squadron, 3ACR assumed operations in Mosul in December 2007, the city was still controlled by al Qaeda, former regime loyalists, organized crime, and political dissident groups. By April 2008, 3d Squadron, 3ACR, had restored security, arrayed ISF, and initiated the transition to reconstruction. In 2008, the BfSB, located in Ninewah, struggled to gain actionable intelligence because its lack of maneuver formations prevented it from gaining placement with the local populace. It often produced inaccurate intelligence, sending it directly to Baghdad to advise the corps commander, conducting limited operations on its actionable intelligence. It is difficult to imagine either a BfSB or SBCT achieving the same results as 3ACR did in Iraq; it has not happened to date.

Unique High-Intensity Mission

The 3ACR is the last organization in the U.S. Army capable of conducting an offensive cover for an armored corps. This uniquely complicated mission requires a covering force to "locate and penetrate the security zone and forward defenses of an enemy force" and "destroy enemy reconnaissance, advanced guard units and, as required, the first-echelon regiments of a moving enemy force."[9] The 3ACR maintains a unique task organization that emphasizes combined arms at the lowest tactical level to achieve this task.

The regiment, comprised of three ground cavalry squadrons (1st, 2d, and 3d Squadrons), is designed to array itself across the entire front of a deployed armored corps. Each squadron is structured to array three cavalry troops with a tank company in reserve. The squadrons maintain an organic howitzer battery with two fire direction control centers, allowing the squadrons to provide fires along their vast fronts. Each troop maintains its own 120-mm mortars section, allowing the troop commander to employ fires in an extremely timely manner. The squadron maintains an organic and robust headquarters and headquarters troop that provides necessary logistics, maintenance, personnel, and lift support. The regiment maintains a support squadron to facilitate additional combat service support. The organic aviation squadron (4th Squadron) is comprised of 24 AH-64 Apache Longbows, which provide significant armed reconnaissance capable of identifying and attacking enemy positions. Broken into three air troops and an aviation maintenance troop, 4th Squadron dedicates one air troop (eight AH-64s) to each ground squadron, which enables commanders to develop habitual relationships and hone their tactics in training. It also provides ground commanders greater direct control of air assets during planning and execution of combat operations. The regiment maintains a separate chemical, military intelligence, and engineer company.

The 43d Engineer Company has a unique modified table of organization and equipment (MTOE) found nowhere else in the Army. It is organized with three sapper platoons to support each of the three ground cavalry squadrons, and an assault and obstacle platoon. Further, 3ACR is uniquely trained to conduct cover missions with leaders skilled in employing fires and combat multipliers across the breadth of a deployed corps. Combined arms leaders are taught to make decisions and conduct decentralized operations based on clear commander's intent. As

U.S. Army soldiers from 2d Stryker Cavalry Regiment make their way through outlying fields to patrol and clear houses in the Diyala Province of Iraq, January 2007.

"The 2d Stryker Cavalry Regiment (2SCR), organized as a SBCT, made notable contributions during Operation Iraqi Freedom; specifically, in Sadr City and Diyala Province. However, 2SCR was greatly assisted with armor from the 4th Infantry Division; attack aviation from 4th Squadron, 3ACR, in Sadr City; and 2d Squadron, 3ACR armor in Diyala Province."

taught by Colonel H.R. McMaster, "The only unforgivable sin is to say that you were waiting for orders."[10] It is an organization that expects initiative from junior leaders.

U.S. Army Field Manual 17-95, *Cavalry Operations*, suggests that a heavy organization, such as a heavy brigade combat team (HBCT), could conduct cover missions with considerable augmentation and time to train.[11] The HBCT would require an additional combined arms battalion (CAB) to cover the same front as the ACR's three ground cavalry squadrons. It would also require an attack aviation battalion with associated maintenance support, and additional field artillery assets with additional fire direction control centers, associated maintenance, and radar capabilities to support the CAB. The HBCT commander would then organize these units and provide clear command relationships to support the decentralized CABs during cover missions. Lastly, logisticians would be required to reorganize the maintenance and supply structure of the HBCT to support the decentralized operations of its CABs and enablers. Additional time would be necessary to train these missions and allow soldiers to adapt to the new systems and operating environment. Similarly, leaders would have to learn to command and control decentralized combined arms operations with units dispersed over great distances.[12] This is not a quick process and seems impractical if faced with imminent armed conflict.

In transforming the 3ACR to a SBCT, the Army is making a critical organizational mistake. The Army is demonstrating the beliefs that we will either not fight another armored conflict in the future or we will dominate with intelligence and precision weapons. Proliferation of weapons of mass destruction, state sponsored terrorism, a destabilizing middle east, and belligerent states, such as North Korea and Iran, make future conflict likely. The decision ignores the necessity for armor in both high-intensity conflict and protracted war, and is rooted in belief that Stryker organizations will provide the speed for a quick and clean victory. The transformation concepts of "rapidly decisive operations" and "speed over mass" enabled the Iraq war to take its nonlinear course.[13] The idea of a surgical war based on dominant battlefield knowledge is delusional; it is evident that policymakers have not internalized the lessons of the Iraqi invasion.

The emphasis on light and medium forces for counterinsurgency operations minimizes the multiple successful campaigns conducted by a combination of heavy units and host nation forces. The Army praised 3ACR's innovation and adaptability by adopting its "clear, hold, build" methodology while simultaneously deciding that the organization is no longer necessary. Tal Afar, Mosul, and Baghdad provide a proven template of heavy formations operating with ISF to achieve lasting security.

Ultimately, leaders would better prepare the Army for both high-intensity and counterinsurgency operations by shifting its focus from materiel to the professionalism of the force. As professionals, we must "keep the lure of technology in perspective, and realize that the human component is key to adaptability."[14] Decision-makers are either selecting what lessons they choose to learn from Iraq's protracted war or are still paralyzed by the inauspicious glow of Army Transformation. Either way, the Army is about to lose its premier reconnaissance organization and the only unit capable of providing both early warning and protection for America's armored corps.

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Notes

[1]Third Cavalry Museum, *BLOOD AND STEEL! The History, Customs, and Traditions of the 3d Armored Cavalry Regiment,* Third Cavalry Museum, Fort Carson, Colorado, 2006, p. 1.

[2]Ibid, p. 20.

[3]Robert A. Doughty and Ira D. Gruber, *Warfare in the Western World Volume II: Military Operations Since 1871*, D.C. Heath and Company, Lexington, MA, 1996, pp. 990-994.

[4]Douglas A. Macgregor, *Breaking the Phalanx: A New Design for Landpower in the 21st Century*, Center for Strategic and International Studies, Washington D.C., 1997, p. 49.

[5]Headquarters, Department of the Army (HQDA), U.S. Army Field Manual (FM) 6-0, *Mission Command: Command and Control of Army Forces*, U.S. Government Printing Office (GPO), Washington, DC, 2003, p. 1-8.

[6]Brigadier General H. R. McMaster, "The Problem of Future War," Speech at the Hoover Institution, 28 August 2008.

[7]Ibid.

[8]Tom Clancy, *Armored CAV: A Guided Tour of an Armored Cavalry Regiment*, Jack Ryan Limited Partnership, 1994, p. 260.

[9]HQDA, FM 17-95, *Cavalry Operations*, 1996, pp. 4-43.

[10]Colonel H.R. McMasters, "Verbal in-brief to new 3ACR lieutenants," December 2004.

[11]FM 17-95, *Cavalry Operations.*

[12]Major George A. Stewart III, Monograph "The Last Cavalry Regiment: The Corps Commander's Requirement for the 3d ACR," School for Advanced Military Studies, U.S. Army Command and General Staff College, Fort Leavenworth, May 2007, online at *www.dtic.mil/cgi-bin/GetTRDoc?Location=U2 &doc=GetTRDoc.pdf&AD=ADA471143.*

[13]Brigadier General H.R. McMaster "The Human Element: When Gadgetry Becomes Strategy," *World Affairs: A Journal of Ideas and Debate*, Winter 2009.

[14]Brigadier Nigel Aylwin-Foster, British Army, "Changing the Army for Counterinsurgency Operations," *Military Review*, November-December 2005, p. 15.

MAX RECON FORCES FORWARD

Air Cavalry and Attack Aviation's Role in Limiting Enemy Freedom of Movement and Maneuver

by Lieutenant Colonel Demetrios J. Nicholson

"Effective reconnaissance is continuous." [1]

Cavalry/attack aviation battalion commanders need to ensure they provide a scout weapons team (SWT)/attack weapons team (AWT) mission tempo with the purpose of establishing continuous recon for the brigade combat team (BCT). Similarly, aviation S2s, ground maneuver S2s, and collection managers need to remain linked in understanding the enemy and developing reconnaissance plans that fit the ground scheme of maneuver, as well as adding SWT/AWT to the mix and redundancy of other intelligence, surveillance, reconnaissance (ISR) assets. Together, aviation mission tempo and coordinated ISR planning allow aviation commanders to maintain continuous SWT/AWT air reconnaissance missions that support the ISR plan and create a level of deterrence that limits the enemy's freedom of maneuver and movement. Continuous reconnaissance conducted by cavalry/attack aviation units during counterinsurgency operations limits enemy freedom of movement/maneuver by interdicting enemy lines of communication (LOC) and support zones, identifying enemy and friendly patterns, and deterring enemy attacks that assist BCTs in focusing on nonlethal lines of effort (LOE).

Due to the successful 2007 coalition surge operations in Baghdad and the Baghdad belts, al Qaeda in Iraq (AQI) and the insurgency started to move north to regroup and conduct operations along the Tigris River Valley, in Mosul, and parts of the Nineveh Province. Violence levels in Mosul began to climb as the insurgency gained momentum in Mosul in late fall of 2007. In December 2007, the 3d Armored Cavalry Regiment (3ACR) conducted transfer of authority (TOA) and assumed operations in Mosul and the Nineveh Province, Iraq. As part of its campaign plan, the 3ACR executed a "clear, hold, build" approach with one ground cavalry squadron in Mosul focused on the combat/civil security operations LOE. The violence levels continued to increase in Mosul, which led to 3ACR receiving a U.S. infantry battalion and more Iraqi

army forces in January 2008 to assist with operations. The 3ACR and Iraqi army (IA) forces continued clear, hold, build operations by clearing insurgents from neighborhoods; holding the area by establishing joint combat outposts (JCOP); and building/reinforcing traffic control points (TCPs) throughout Mosul. (See Figure 1.)

As the direct support aviation unit, 4th Squadron, 6th Air Cavalry (4-6 ACS), Task Force Redcatcher, maintained an air cavalry troop (OH-58D), and by January 2008, it acquired an attached attack reconnaissance company (AH-64D) to support 3ACR units in the Mosul battlespace. From December 2007 to May 2008, 4-6 ACS focused on providing security missions to protect the ground cavalry squadron, the infantry battalion, and IA units with associated military transition teams (MiTTs) as they conducted combat/civil security operations in Mosul. The 4-6 ACS commander also developed a two SWT/AWT 24-hour a day mission set, which allowed each maneuver battalion attack/cavalry aviation support throughout combat/civil security missions. During these missions, the SWT/AWT focused its missions on security for troops in contact (TIC), cordon and searches, combat patrols, JCOP construction, route clearances, as well as counter-improvised explosive device (CIED) reconnaissance to protect U.S. and Iraqi forces during the
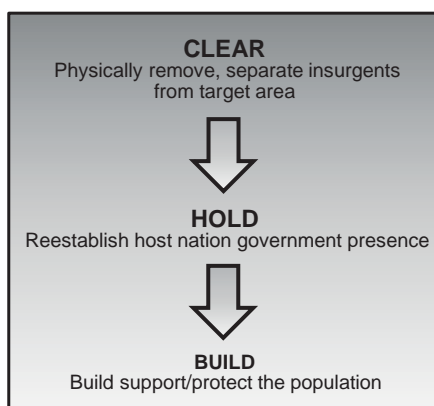

CLEAR
Physically remove, separate insurgents from target area

⬇

HOLD
Reestablish host nation government presence

⬇

BUILD
Build support/protect the population

Figure 1

height of insurgent attacks as they moved and maneuvered throughout the city. By April, violence levels had decreased; 3ACR cleared more neighborhoods, established numerous JCOPs, and during Operation Lion's Roar, the Iraqi army succeeded against insurgents in Mosul, which increased civil security.

Transition from Security to Reconnaissance Missions

With increased security by June 2008, 3ACR embarked on a new campaign plan to change focus from lethal to nonlethal operations, shifting away from the combat operations LOE to emphasizing other LOE such as essential services, governance, and economic development. The new campaign plan resulted in decreased violence, which reduced 4-6 ACS's mission requirements to conduct security operations for ground forces until its relief in place (RIP) in August 2008. Meanwhile, the air cavalry squadron commander continued to provide a two SWT/AWT 24-hour daily mission set to maintain the pressure, in the form of deterrence, on the insurgency as coalition forces continued to move throughout the city. With the increase of security and reduction of tasked security missions, the commander shifted focus to reconnaissance missions in conjunction with 3ACR's scheme of maneuver to assist in limiting the enemy's freedom of movement and maneuver. His two SWT/AWT mission set could now establish continuous reconnaissance, tied into the ACR's ISR plan, throughout Mosul and in Mosul's insurgent support zones while still providing security missions when needed and enabling the 3ACR and Iraqi army to focus on other nonlethal LOE. The continuous recon by SWT/AWT not only gained information for ground commanders, but maintained a deterrence effect that continued to disrupt enemy operations.

With combat/civil security operations inside Mosul being the priority, the two maneuver battalions could not afford the combat power to conduct consistent operations in rural areas and villages in their battlespace outside the city. Additionally, some of the rural areas consisted of restricted terrain in the form of ridgelines, wadi systems, and the Tigris River, which made mounted patrols difficult. These rural areas and villages made up insurgent support zones and LOC in which to stage weapons, store supplies, and base insurgents for transit to and from Mosul. Turning squadron focus to reconnaissance, 4-6 ACS made recon missions in the support zones and villages one of its priorities. The S2, 4-6 ACS, coordinated and planned with the 3ACR collection manager, along with the S2s from both maneuver battalions, to narrow the recon

focus based on intelligence and ISR focus in their area. The S2, 4-6 ACS, also used historical aircrew debriefs from crews in Mosul, as well as from squadron aircrews operating in Tal Afar, who had experience with reconnaissance in many rural areas and villages outside of Mosul and throughout western Nineveh.

Combining its intelligence with 3ACR and ground battalions, 4-6 ACS developed recon objectives in the rural support zones and along LOC. These recon objectives, as well as missions assigned by 3ACR, were tasked daily to the SWT/AWTs. The weapons teams' mission was to interdict insurgent forces and deny them use of support zones and LOC. The aircrews searched for personnel movement along roads, in wadi systems, along the Tigris River, and across ridgelines. They also searched for caches, enemy observation posts (OPs), mortar/rocket systems and launch sites, and possible improvised explosive device (IED) emplacement along main supply routes (MSRs) into Mosul. Additionally, the Iraqi army and 3ACR built a berm around Mosul called the "Riyadh line" to canalize traffic into several TCPs entering and exiting Mosul. The aircrews also reconnoitered the Riyadh line, searching for breaches and traffic moving through breaches.

The squadron's numerous recon objectives maximized the use of two SWT/AWTs continuously on mission, and coupled with the speed and vision of helicopters, the teams covered much of their mission-window areas multiple times. Although difficult to measure the effectiveness of actual interdiction of insurgent movement, the aircrews were instrumen-

tal in the detection of two vehicle-borne IEDs (VBIEDs) and bomb-making material in a wadi; a katyusha rocket launcher; five insurgents hiding in a wadi with a cache and underground living areas; and two buried IEDs on a MSR. We also reconnoitered support zones to confirm or deny enemy presence and determine enemy patterns that would assist maneuver battalions in planning future interdiction missions.

Since recon objectives were assigned to every weapons team conducting flight missions throughout a 24-hour period, the aviation squadron helped confirm or deny enemy presence and develop time-of-day patterns for 3ACR and subordinate battalions in the support zones, as well as Mosul proper. Again, the recon objectives were tied to 3ACR's ISR plan, historical pattern analysis, and scheme of maneuver for both maneuver battalions. As part of 3ACR's ISR plan, the weapons teams assisted in the mixing and redundancy of reconnaissance assets available to the regiment, as well as timely cueing in response to human and signal intelligence (HUMINT/SIGINT) reports. Finding caches, IEDs, or other weapons systems obviously confirmed enemy presence. While observing vehicle traffic, foot traffic, and boat traffic, aircrews established patterns of movement on all citizens, from neutral local Iraqis to possible insurgents.

In conjunction with the maneuver battalion's scheme of maneuver, some recon objectives were tied to coalition-imposed curfews, route-clearance and CIED missions, and future cordon and search objectives. Reconnaissance during curfew hours helped aircrews track any unusual

"Continuous recon by SWT/AWT not only gained information for ground commanders, but maintained a deterrence effect that continued to disrupt enemy operations."

activity prohibited during curfew, or even patterns of permitted movement, which included the movement of local Iraqi emergency services. During route clearance operations, the weapons teams conducted route reconnaissance before and after route clearance to confirm or deny IED emplacement or mounted/dismounted enemy activity on side streets or alleyways. Route clearance and CIED were closely tied, but aircrews, mindful of former IED emplacement locations and time patterns, continually reconnoitered for IED emplacement and changes in insurgent patterns. Likewise, during CIED operations, the ability to find, or not find, IED emplacers in designated tier 1 hotspots, combined with 3ACR IED trends, redefined CIED recon objectives.

The battalions also submitted objectives for possible future missions, which laid the groundwork for SWT/AWTs to conduct photo recon and video recon, as well as recon of possible VBIED factories, historical cache sites, historical mortar/rocket points of origin, or possible insurgent meeting locations. To avoid our own recon pattern, while simultaneously adjusting to enemy patterns, the aviation squadron S2 varied the times and objectives throughout each weapons team mission window — they adjusted tactics, techniques, and procedures (TTP) during reconnaissance, and avoided establishing set patterns around recon objectives.

Reconnaissance of friendly objectives also became a focus of the regimental commander. The SWT/AWTs were as-signed recon objectives in Mosul that were linked to maintaining civil security and developing friendly and enemy patterns. One set of objectives included reconnoitering Iraqi police and Iraqi army TCPs to observe traffic flow and force protection posture of policemen and soldiers, which helped identify possible future insurgent targets or transition points. Combat outposts (COPs) were also used to identify traffic, monitor pedestrian movement patterns, and detect force protection issues in and around the COPs. During Iraqi voter registration, the voter registration centers became recon objectives for scrutinizing force protection measures and observing movement patterns around the centers. We made moderate use of establishing friendly recon objectives focused on identifying friendly and enemy patterns in Mosul economic areas, to include sheep markets, open air markets, and other industrial centers.

Deterrence: The Secondary Effect

The two weapons teams' continuous reconnaissance mission, which covered numerous recon objectives in support zones, along LOCs, and in Mosul proper, also maintained a continuous attack aviation presence that afforded the second-order positive effect of deterrence. This deterrence had a significant impact on limiting the enemy's freedom of movement and maneuver. During its initial missions, 4-6 ACS aircrews learned, based on previous lessons learned, prior combat experiences, and recent experience in Mosul, that the presence of armed helicopters helped deter insurgent attacks. Other sources of intelligence, primarily HUMINT and SIGINT, describe how the presence of armed helicopters also deterred the enemy's movement to positions to begin an attack or conduct further attacks after initial contact. This deterrence effect is more prevalent in security missions and in a TIC situation where the SWT/AWTs are focused on protecting a ground force. During many TIC situations, when SWT/AWTs arrived, on station the enemy stopped shooting; as soon as the aircraft departed the area for refueling, the shooting resumed within minutes.

Another example of the weapons teams' success occurred during operations in Mosul when a catastrophic IED detonated and destroyed a Bradley Fighting Vehicle (BFV), killing two U.S. soldiers. Hearing the explosion and seeing the smoke, a SWT immediately flew to the area to provide area security as ground forces reacted to contact and conducted recovery and casualty evacuation. No further enemy contact occurred following the IED attack. Several days later, intelligence sources reported that insurgents had planned a further ground attack with small arms and rocket-propelled grenades (RPGs) as part of an ambush following the IED attack, but decided against it because of the arrival of coalition helicopters. In one instance of limiting enemy freedom of movement, the intelligence report revealed that an IED emplacer refused to emplace an IED due to the threat of armed helicopters and the fear of being engaged.

"Combining its intelligence with 3ACR and ground battalions, 4-6 ACS developed recon objectives in the rural support zones and along LOC. These recon objectives, as well as missions assigned by 3ACR, were tasked daily to the SWT/AWTs. The weapons teams' mission was to interdict insurgent forces and deny them use of support zones and LOC."

With an increase in reconnaissance missions, the 4-6 ACS commander wanted to maintain the same deterrence effect seen in security missions tied to reconnaissance missions, ultimately limiting the enemy's freedom of maneuver and movement in the same way. To maintain deterrence, the commander ensured two priorities: maintain the presence of SWT/AWTs continuously over a 24-hour period; and ensure reconnaissance objectives were tied to the friendly scheme of maneuver. For SWT/AWTs to create deterrence, they should have objectives that not only focus on enemy forces, but on friendly forces as well. As mentioned earlier, 4-6 ACS, in conjunction with 3ACR, developed friendly recon objectives, which focused on COPs, TCPs, voter registration centers, and economic areas. Though the primary purpose was to identify force protection measures and "patterns of life" around those objectives, the second-order effect was to deter insurgents from attacking those areas.

Another form of deterrence resulted from successful sensor-to-shooter operations during CIED reconnaissance. From December 2007 through April 2008, 4-6 ACS was highly successful in using unmanned aerial sensors and manned fixed-wing ISR platforms to find and engage IED emplacers. The IED emplacers usually operated during the same time, evening and early nighttime, to emplace large, deeply buried IEDs, consisting of homemade explosive-filled propane tanks and large military-grade munitions, as well as smaller pressure plates and pipe bombs. After numerous successful engagements over several months, IED emplacers greatly reduced the amount of large IEDs emplaced during the evening and at night. The SWT/AWTs continued CIED recon during that time period to deny the enemy the ability to emplace large IEDs under the cover of darkness. A combination of increased 3ACR COPs and TCPs, along with continuous engineer route-clearance missions and successful sensor-to-shooter operations, greatly reduced deeply buried IED emplacements at night by denying freedom of movement and maneuver to emplacers. The insurgents transitioned to daytime-phased emplacement, sometimes hastily, of smaller IEDs on lesser traveled roads. The 4-6 ACS used the enemy's shift in IED tactics as a measure of effectiveness (MOE) of successful CIED reconnaissance.

Measuring Effectiveness

By using shifts in enemy tactics as one indicator of success, 4-6 ACS developed other MOE based on intelligence reports, decreased levels of violence patterns, and seized enemy caches, weapons, and personnel to gauge the SWT/AWTs' deterrence methods and their effectiveness on limiting enemy freedom of maneuver and movement. The 4-6 ACS used HUMINT and SIGINT reports to measure the effectiveness of deterrence. These intelligence reports usually detailed the effect of helicopters against pending insurgent attacks and the inability to move and conduct follow-on attacks from the enemy's point of view. Whether the reports came in sparingly or several at a time, they confirmed a level of effectiveness of helicopter presence not only in security missions, but also in reconnaissance missions and associated reconnaissance objectives. The squadron also used intelligence reports associated with COPs, TCPs, vehicular radio communications (VRCs), or any other friendly recon objectives to ensure they remained tied to the friendly scheme of maneuver and possible threats against it.

Another MOE was tied to 3ACR's scheme of maneuver and compared to the level of violence patterns and security infrastructure. The aviation squadron analyzed levels of violence patterns, which were measured by 3ACR based on enemy weapons systems used, time of day, and locations. The levels of violence were also tied to levels of security in neighborhoods as compared to areas where COPs and TCPs were located. The 4-6 ACS, in coordination with the maneuver battalions, established recon objectives based on levels of violence and tied them to the ground unit's established security plan. Decreased levels of violence measured the effectiveness of not just the SWT/AWTs' deterrence, but the total effect of SWT/AWTs' recon objectives and how they tied into the ground unit's scheme of maneuver, COPs, and TCPs, and possible layers in between. When levels of violence or enemy activity increased in certain areas, the weapons teams shifted to other recon objectives. A final, more concrete MOE was when the teams actually located enemy caches, weapons systems, and personnel. As mentioned earlier, SWT/AWTs found caches, VBIEDs, rocket launchers, and enemy hideouts in support zones, which, combined with the maneuver battalion's intelligence on the area of operations, helped refine reconnaissance objectives.

Measuring the effectiveness of continuous reconnaissance and deterrence does not always produce an immediate impact or a single spectacular event. Except for the lethal aspect of sensor-to-shooter operations during CIED, there is not always a flash-to-bang result with continuous recon and deterrence. The fruits of continuous recon in certain objectives could take days, weeks, or months as part of the BCT's scheme of maneuver to show constant impact. Likewise, effective deterrence may be occurring consistently, but can be difficult to measure or not always apparent on a daily metric. Aviation commanders, maneuver commanders, and aircrews need to maintain discipline, patience, and resolve to ensure continuous recon and deterrence are successful. The ultimate effect is the ability of the weapons teams to limit the enemy's freedom of maneuver and movement over time, which permits BCTs to maintain civil security and focus on nonlethal LOE.

In the end, whatever the MOE, continuous armed reconnaissance conducted by SWT/AWTs is an invaluable asset to the BCT commander when tied to the ground scheme of maneuver and imbedded in his ISR plan. Colonel A.T. Ball, former commander, 25th Combat Aviation Brigade, has a favorite quote, "fly, recon, report, shoot." During phases of high-levels of enemy activity and violence, it is easy for maneuver brigade and aviation commanders to keep attack/cavalry aviation focused on executing security missions to protect ground forces, especially for TIC response. Usually, when security improves and ground units transition to nonlethal lines of operations, aviation units tend to reduce flying missions based on reduced security missions, reduction in TIC, or minimal tasked reconnaissance missions. As evident in Colonel Ball's quote, SWT/AWTs need to fly and conduct continuous reconnaissance to gain information on the enemy and deter and interdict enemy operations, while limiting enemy freedom of movement and maneuver, thus enabling ground commanders to remain focused on the nonlethal lines of operations.

Notes

[1]Headquarters, Department of the Army, Field Manual 3-90, *Tactics,* U.S. Government Printing Office, Washington, DC, 4 July 2001, p. 13-1.

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Highlighting the Most Significant Work of

Volume VI, Supplemental: The Rise and Fall of Hussein ibn Ali, King of the

by Commander Youssef Aboul-Enein, U.S. Navy

Part 7

Foreword

In the quest to understand the human landscape of a military area of operations, foreign area officers, military planners, and intelligence analysts must cultivate empathy for a region and its people. Getting into the mindset of our adversaries and the population we are protecting, and developing sound counterinsurgency programs requires an understanding that transcends beyond the realm of internet searches. What is needed is an analytic immersion offered by books and a visit to the resources available at military libraries. We pride ourselves at cultivating a love of analytic research at the John T. Hughes Library, as hundreds of students pursuing their graduate and undergraduate degrees in strategic intelligence, write papers and prepare graduate-level theses based on a year of intellectual inquiry in an area of interest to the intelligence community and the individual student.

Commander Aboul-Enein has been a permanent fixture at our library, maintaining a second office among our stacks, and requesting our library staff to acquire for him obscure Arabic titles needed to understand the region. The work of Dr. Ali al-Wardi, although in Arabic, represents the types of books we acquired for those whose knowledge of the Arabic language enable them to incorporate such sources in educating our future military leaders. The John T. Hughes Library staff is pleased to be part of this project. When Commander Aboul-Enein described the volumes of Ali al-Wardi to us, it took less than 6 months to acquire a set for our collection and this review essay series.

Never underestimate the capabilities of military libraries located in locations such as the Pentagon, war colleges, staff colleges, and on major military installations. As we have done for Commander Aboul-Enein, we expend every effort to acquire books, even in such strategic languages as Arabic, through interlibrary loan. In defense of our Nation, no title is obscure, and I commend ARMOR *for providing a forum for this important series written by the father of Iraqi sociology.*

— Ms. Denise Campbell
Director, John T. Hughes Library

Hussein ibn Ali, the sherief of Mecca's personality is described in Wardi's supplement to his sixth volume of the definitive Arabic language history of Iraq. As he has done with earlier volumes, which focus on Ottoman Iraq and Persia, the supplemental volume covers personalities and regions in the periphery of modern Iraq; Iraq after World War I will be absorbed in events occurring not only within the country, but in Arabia, Transjordan (modern day Jordan), and Syria.

The previous review essay in *ARMOR*'s January-February 2010 edition covers Prince Feisal ibn Hussein's capture of Damascus in 1918, his declaration as King of Syria, and his final eviction by French forces from Syria in 1920. This edition's review essay covers Wardi's views on his father, Hussein ibn Ali (hereafter referred to as Hussein), the sherief of Mecca, after World War I. It was in the name

Iraq's Social, Political, and Military History:

Hejaz and Sherief of Mecca, of the Multivolume Collection of Dr. Ali al-Wardi

Dismounted General Sir Edmund Allenby entering the Holy City of Jerusalem on foot, 1917.

of Hussein, that the 1916 Arab Revolt occurred, and his sons Abdullah, Feisal, and Ali would lead forces, along with T.E. Lawrence (of Arabia), to undermine Ottoman forces in the Middle East. Yet, after the war, Hussein would gradually alienate many and succumb to the forces of Abdul-Aziz Ibn Saud (hereafter referred to as Ibn Saud). What Wardi lacks in detailed tactical information about tribal wars, he makes up by providing details on the personalities of the leaders, their psychology, fears, and styles of decisionmaking, which is not generally available in western accounts. This is the art of empathizing with a military leader, and to acquire the skill of empathy (not sympathy) for an adversary requires copious readings of historic accounts; in the case of the Middle East, in both English and Arabic.

King Hussein ibn Ali: A Lesson in Hubris and Overexaggerated Sense of Self

Hussein, descendant of the Prophet Muhammad from Ali, expected his person to be revered as such. This gave him an overinflated sense of importance, which would lead to an exaggerated hubris of his tribal enemies. He also possessed a fearsome temper, and Wardi advises that when summoned to Mecca, regardless of innocence or guilt, write your will, as Hussein was not discerning and would likely order an execution for minor offenses. Hussein was also stubborn and did not consider alternate points of view, surrounding himself with courtiers and poets that fed his delusions. He saw the world as he wanted, and not what it actually was. As King of the Hejaz (the region encompassing most of the Red Sea coast, including the holy cities of Mecca and Medina), Hussein had a difficult time delegating authority to subordinates. Perhaps the most crippling weakness was his deluded sense of importance, thinking that his political opinions, particularly those published in the newspaper, *al-Qibla*, were read by great powers such as Britain and France. He alienated senior Muslim clerics by declaring that his interpretation of the *Quran* superseded all other clerics in the realm, which went against the concept of ijmaa (consensus in matters of faith). Hussein had many delusions, such as believing all Arabs supported him, and he constantly threatened the British that he would abdicate as King of the Hejaz if they failed to acquiesce to his demands. This prompted Winston Churchill, as colonial secretary, to inquire of Hussein's designated heir.

One of the most interesting aspects of Wardi's section on Hussein is his phobias rooted in Islamic history. It was his ancestors who were massacred in the Field of Karbala in 680 CE. Karbala is where Hussein, son of Ali ibn Abi Talib, grandson of the Prophet Muhammad, and his family, along with 70 retainers were ambushed and massacred by 10,000 of Yazid ibn Muawiyah's forces while under a flag of truce. It is an event commemorated by Shiite Muslims every 10th day of Muharram. In 1921, more than 1,200 years later, Hussein, the King of the Hejaz, received a cable requesting his son, Feisal, as King of Iraq. The father declared his concern that his son would meet the same fate as his ancestors in Karbala. This fear reached such a level that it took from 1923 to late 1924 for Feisal to be reunited with his wife and oldest son, Ghazi, because Hussein feared they would be massacred in Iraq.

Money Dries Up for Hussein ibn Ali

Another weakness of Hussein was the reduction of British subsidies and payments after World War I, beginning in 1920. This would lead him to tax urban centers and meddle in the affairs of merchants and craftsmen of major cities. With British subsidies drying up, Bedouins paid by Hussein began to stop receiving payments and resorted to raiding caravans and setting up tolls along roads to Mecca, Medina, Jeddah, and Taif. Members of the Harb tribal confederacy attacked Iraqi pilgrims, killing 40, including four women. Hussein's decision to compensate pilgrims harmed by tribal brigands added a further strain on his finances.

Hussein's pride also alienated members of his own family such as his son, Abdullah's, assault on his relative, Khalid ibn Luai, ruler of Taif, in 1918. This physical assault, over a disagreement, turned Ibn Luai toward Ibn Saud in central Arabia and Wahabism. Hussein devoted scarce forces and his barely trained army of the Hejaz to securing Taif and fighting Ibn Luai and his sponsor, Ibn Saud. In 1919, when Hussein took over the Ottoman arsenal in Medina, armed with large quantities of ammunition, rifles, light and heavy machine guns, and artillery, he felt strong enough to take the fight deeper into Ibn Saud's territory — the Najd (literally, the uplands, but describing the region of central Arabia). This particular campaign, between Hussein and Ibn Saud, demonstrates that possessing superior weapons does not assure victory. His son, Abdullah, warned Hussein that his forces were exhausted from laying siege of Medina and were reluctant to muster.

Feeling confident with his weapons, Hussein ordered his son to campaign in central Arabia. Abdullah obeyed his father and took an inadequate force of 850 regulars and 1,500 tribal levies, armed with 10 artillery pieces, and 20 light and 20 heavy machine guns. Most of the regular officers sent to fight Ibn Luai

and Ibn Saud were Iraqi. Ibn Saud assembled a force of 12,000 tribal levies and 1,500 Ikhwan (ultra-wahabi fanatics) as skirmishers. The Ikhwan skirmishers were commanded by Ibn Luai and Sultan Ibn Bijad. By May 1924, Ibn Saud sent a messenger requesting Prince Abdullah to withdraw from the village of Turbah; both the villages of Turbah and Khurmah were considered a tribal border between Ibn Saud and Hussein. Ibn Saud's messenger added that the Ikhwan was on the outskirts of Turbah, which angered Abdullah, leading to him to order the death of the messenger.

The attack of the Ikhwan came days later as the call of dawn prayers were being cried out, while the town of Turbah was still in darkness and the forces of Abdullah were still asleep or just waking for prayers. The skirmishers of the Ikhwan would overwhelm the forces of Abdullah. Of the 850 regulars, only 157 survived; all the machine guns, artillery, and rifles were captured. Ibn Saud's victory at Turbah, with the fanatical Ikhwan, would reverberate in Mecca, Medina, Jeddah, and even London and Cairo. Prince Abdullah barely escaped with his life and was rescued by his uncle, Zeid ibn Shakir, who provided him a horse and camel to escape to safety.

British Reaction to Ibn Saud's Victory

The British, through their consul general in Jeddah, sent a note to Ibn Saud to withdraw his forces from the neutral villages of Turbah and Khurmah and return them to the Najd. He was warned that all agreements with the British would be voided if Ibn Saud pressed on and invaded the Hejaz. Ibn Saud had pressures from England to contend with, and from his fanatical Ikhwan fighters chanting, "Onto Taif!" Ibn Saud would restrain his fighters and maintain his hold on Turbah and Khurmah. London was surprised by the quick taking of Turbah by Ibn Saud.

It was hoped that the newly created and British-trained Hejaz army could keep the balance of tribal power between Ibn Saud and Hussein. Foreign Secretary Lord Curzon consulted with Harry St. John Philby, who recommended that Ibn Saud be allowed to retain Khurmah and Turbah, to placate him, but to extract an agreement from him to cease his push into the Hejaz or taking the city of Taif. London sent Philby to the Najd to let Ibn Saud know of this plan and present it as the British position on the matter. The British had pressure not only from Hussein to stop the Wahabis, but when word spread that Turbah and Khurmah were taken by Wahabis, the cities of Mecca, Medina, and Taif saw an exodus of refugees packing the port city of Jeddah. London discussed what could be done about Wahabi massacres, concluding that unless they were willing to commit British regular forces, there was nothing that could be done.

Upon Philby's arrival in Cairo, Ibn Saud had withdrawn his forces into the Najd, refugees returned to Mecca, Medina, and Taif, and he was ordered not to proceed with his mission. This was a strategic mistake as the British threatened Ibn Saud to withdraw from Turbah and Khurmah, and did not present the British follow-up position, which gave the impression that London was disinterested in the affairs of Arabia, allowing Ibn Saud to keep the two neutral villages. General Allenby, the British high commissioner in Cairo, had six biplanes shipped to Jeddah to reinforce the defense of the Hejaz against the Wahabis and Ibn Saud. Philby advised Allenby that if pilots were captured in Ibn Saud's

"The attack of the Ikhwan came days later as the call of dawn prayers were being cried out, while the town of Turbah was still in darkness and the forces of Abdullah were still asleep or just waking for prayers. The skirmishers of the Ikhwan would overwhelm the forces of Abdullah."

territory they would be cut to pieces, so the planes were left in their crates at the pier in Jeddah. This was another tactical blunder that would only embolden Ibn Saud.

Battle of Turbah's Impact on Hussein's Morale

The Battle of Turbah impacted the morale of Hussein so much so that he took ill, blamed his son, Abdullah, and obsessed about seeking revenge on Ibn Saud. Instead of taking a pragmatic approach to defend the Hejaz, and making preparation to challenge Ibn Saud, he withdrew into his delusions of grandeur. Of note, Hussein would negotiate with T.E. Lawrence, wanting Iraq, Palestine, and Transjordan as part of his Arab kingdom. He wanted the Hejaz to include the southern Arabian region of Asir, up to the port of Hodeida in modern-day Aden. He demanded from Lawrence that the British recognize him as first among all princes of Arabia and force Ibn Saud to withdraw from Turbah and Khurmah. Lawrence reported Hussein's fantasies and delusions to Lord Curzon. Despite outward appearances of obedience, Hussein's sons, Feisal and Abdullah, disagreed with him politically. Hussein treated negotiations with British officials as "all or nothing," and Feisal, in particular, took a "give and take" approach. The sons would cut their own deals with British officials, making Abdullah emir of Transjordan and Feisal king of Iraq, much to Hussein's consternation. Hussein was engaged in fantasy by believing that the French would not have dared take Syria and evicted Feisal in 1920, had Syria been part of his Arab kingdom and attached to the Hejaz. From 1923 onward, Hussein spent many more days in Jordan, and in 1924, his son, Ali ibn Hussein, took charge of running Mecca and the Hejaz. It was short-lived, as Ibn Saud took Taif, with Wahabis, conducting a brutal massacre; the fear of which laid Mecca and Jeddah open to their conquest in 1924 and 1925, respectively.

Hussein Declares Himself Caliph and Makes Powerful Enemies

The period 1924 would see the caliphate institution abolished by Kemal Ataturk on March 1st. This was a shock to the Islamic world, as the institution had been in existence since the death of the Prophet Muhammad in 632 CE. Wardi has an excellent dialogue between Hussein and Abdullah over the issue, with Abdullah encouraging his father to declare himself caliph. Four days after Ataturk's decision, Hussein declared himself caliph and took fealty from his sons, the rulers of Jordan and Iraq.

In Iraq, Feisal even engineered the Shiite Muslims in Karbala to offer fealty to his father, the new caliph, arguing he was descendant of the Prophet Muhammad from the line of Ali, Muhammad's cousin, and revered among Shiites. This was a major coup; the Shiites never publicly recognized the Ottoman Sultan as caliph. Hussein's decision to declare himself caliph added powerful enemies plotting against him and his sons. His enemies included Ibn Saud in Central Arabia; King Fuad of Egypt, who did not appreciate Hussein's cultivation of Shiites; and the British, who did not like the idea of a caliph who could agitate Muslim subjects in India, Malaya, Egypt, and the Sudan. In hindsight, there are hidden burdens and even dangers to declaring oneself caliph that were unforeseen by Hussein.

This portion of Wardi's volumes contains many lessons, such as creating modern Saudi Arabia at the expense of the miscalculations, blunders, and misjudgments of Hussein; and offers a classic tale of overreach. Hussein overreached his abilities by wanting an Arab kingdom from Iraq to Yemen, declaring himself caliph, alienating his British allies, overestimating his influence, and underestimating his adversaries. On the issue of the caliphate in the 21st century, militant Islamist groups, such as al-Qaeda, yearn for the restoration of this institution as a goal. Bin Laden also made mention of the loss of the caliphate in his early speeches, but sense of history versus knowledge of history, precludes them from understanding the burdens and complexities of whoever assumes that title, which, in essence, is a political tradition and not ordained in Islam.

It is vital that America's current and future military leaders understand this rarely studied history of the region as part of their education in defending America's national security interests in the region. Wardi's volumes represent an Arabic work of military significance to U.S. forces that should be fully translated, debated, and taught so our forces can acquire information dominance in the region.

Part 8, on the next page, highlights Wardi's details of the personality and rise of Abdul-Aziz Ibn Saud, and his creation of modern Saudi Arabia.

Volume VI, Supplemental:
Weakening Ottoman Control of Arabia before World War I

Foreword

The national security challenges the United States faces demands a continual look at new ways to teach its deploying forces. It is important to provide them with a level of understanding of the cultural, historic, and human aspects of the area in which they will operate. Having personally served in both Afghanistan and Iraq, I am convinced of the importance of educating all who intend to deploy in support of operations. Some level of awareness of the regional and local culture should be shared, not only with the military, but also with contractors, interagency, and nongovernment agencies.

Since 2002, Commander Aboul-Enein has provided Joint Forces Staff College students and its faculty with a foundation of the nuances of Islam, militant Islamist ideology, and the intricacies of modern Middle East political history. Commander Aboul-Enein's experience and perspective enhance the overall educational experience our students receive, thereby better equipping them to meet challenges they will face as they deploy to serve as critical campaign planners.

I am pleased to introduce the eighth essay, which provides a historical narrative of Iraqi history from the Ottoman period to the founding of the Iraqi nation-state. This essay *exposes the fascinating rise of the Hashemite dynasty of Hussein ibn Ali, the sherief of Mecca, and the seeds of the 1916 Arab Revolt. The essay also discusses the Hashemite rival in Arabia, the Ibn Sauds, whose descendants would eventually triumph and discover modern Saudi Arabia. Wardi offers details on the origins of appointing the descendants of Prophet Muhammad to govern Mecca and the Ottoman policy of selecting which of those descendants would govern Islam's holiest site on its behalf. Readers are in for a few surprise facts, such as the first signs of Ottoman decline in Arabia did not begin in Mecca during World War I, but in Yemen in 1911. This exploration of Wardi's history allows us to cultivate the empathy needed to operate in Iraq. I applaud* ARMOR *for providing Commander Aboul-Enein a forum for this work.*

For those readers of ARMOR *who qualify during their career, I hope to see you at the Joint Forces Staff College, where we cultivate critical thinking required to conceive and apply joint solutions on the 21st-century battlefield. Understanding that battlefield includes discussing and analyzing Arabic authors such as Dr. Wardi.*

— BG Katherine "Kate" Kasun
Commandant, Joint Forces Staff College

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Part 8 of the review essay in the *ARMOR* series highlighting the multivolume work of Dr. Wardi concentrates on the Ottoman rise and decline of power in Arabia before World War I, which led to rebellions in Yemen and ultimately to the infamous 1916 Arab Revolt in Mecca.

The final essays of this series, parts 9, 10, and 11, conclude with Prince Feisal's short-lived monarchy in Syria, the decline of the Hashemites as rulers of Mecca and the Hejaz region of Arabia, and the final triumph of Ibn Saud, as well as the challenges Ibn Saud would face consolidating his hold on the Arabian Peninsula.

As we near the end of this series, it is important to stress the need to educate our combat forces through Arabic sources. Wardi's volumes should be fully translated into English and made available to American military leaders deploying to Iraq and those involved in stabilizing the country. It is hoped that this multipart exposé will form the basis to advocate the need to translate, highlight, and discuss Arabic works of military significance. Finally, you may wish to review all of the essays in the series and join the debate in *ARMOR* regarding Iraq, its past, future, and impact on America's fighting men and women.

The Sheriefs of Mecca:
Rulers of Islam's Holiest City from 939 to 1925

Iraqi leaders are tied tribally by a network of alliances reaching into Arabia. During and after World War I, these leaders would see the emergence of two factions as the Hashemite and Ibn Saud struggled for dominance of the Arabian Peninsula. The rivalry between the two was not only over territory, but also over an ideological difference. The Hashemite vision was of a Pan-Arab dream encompassing Arabia, Jordan, Iraq, and even Syria, united by descendants of Muhammad. Ibn Saud wanted to consolidate his rule as absolute leader of the Arabian Peninsula, with a tacit agreement negotiated for legitimacy by Ibn Saud's forefathers, to propagate the Wahabi form of Salafi Sunni Islam.

Wardi discusses Islamic viewpoints on the status of the descendants of Prophet Muhammad and thereby the authority of the created position of sherief of Mecca. Sunni Muslims generally respect the Prophet's descendants; whereas, Shiite Muslims revere Muhammad's descendants. However, Islam and Muhammad himself opposed a class system, and ala Muhammad (family of Muhammad), or more precisely ahl-al-bayt (family of the household), could represent Muhammad's family or the followers of Muhammad and not his immediate family (*Quran* 33:33).

The position of sherief of Mecca, derived from Muhammad's descendants, was established in 969 CE, more than three centuries after Muhammad's death, by the Fatimids, a Shiite dynasty that ruled from Egypt. The first person descended from Muhammad to assume position of sherief of Mecca was Jafar ibn al-Hassan, who would also assume the position wali (governor) of the Hejaz, the entire Arabian Red Sea coast. The Fatimids created the position in a political maneuver, cultivating Mu-
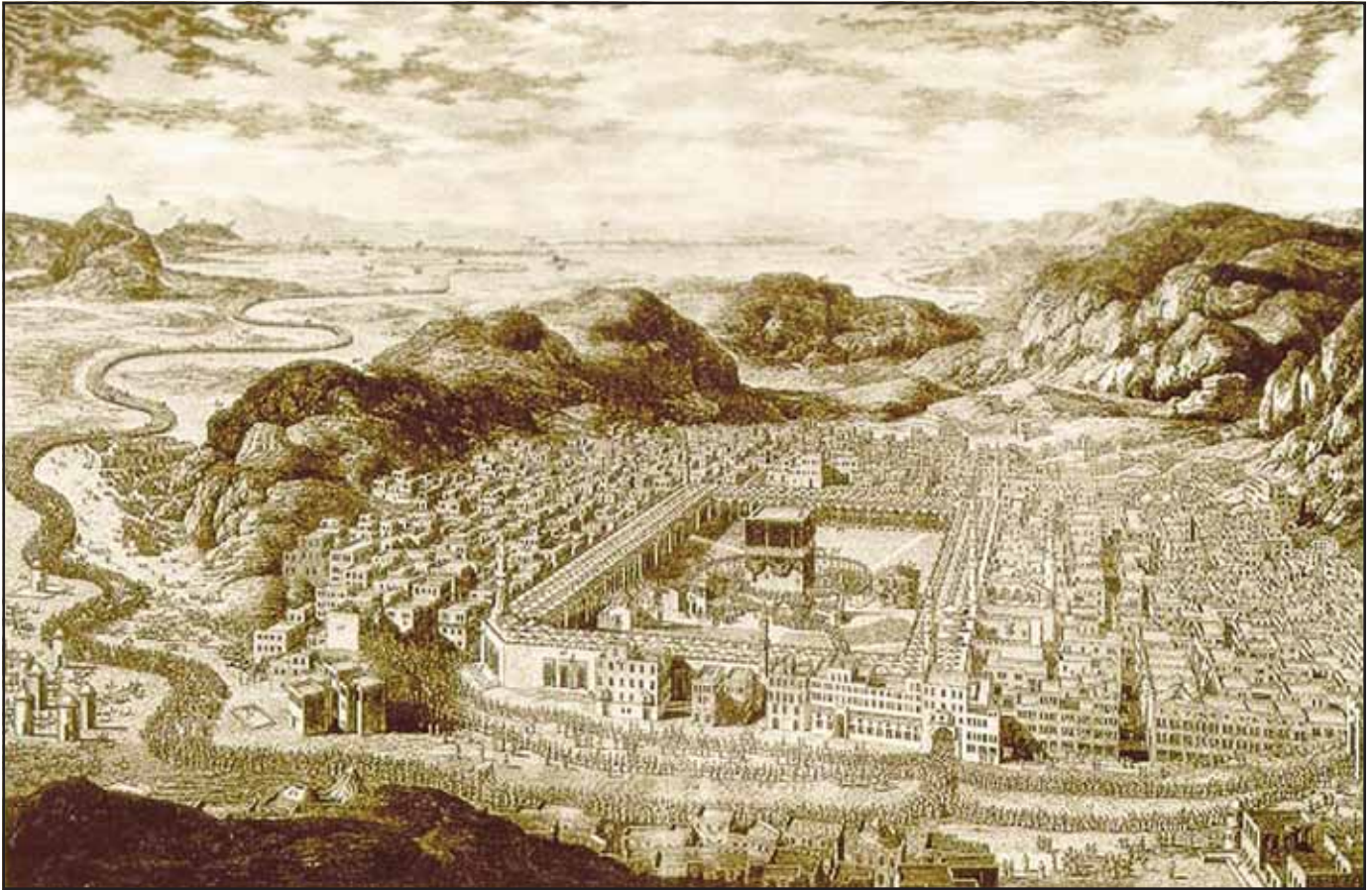
"In 1802 and onward, Saud ibn Abdul-Aziz, ancestor of the modern founder of Saudi Arabia, wanted to exploit his gains in Taif to take Mecca and the seaport town of Jeddah. The Wahabis briefly took Mecca in 1803, demolishing the tombs of Prophet Muhammad's companions and birthplaces; destroying the tomb of Muhammad's first wife, Khadija; and leveling many domes."

hammad's descendants and thereby undermining their rivals, the Abbasids, governing from Baghdad. The Abbasids responded to this maneuver by sending an emissary, Hussein ibn Musa, to Fatimid-controlled Mecca to represent Iraqi pilgrimage interests. Hussein ibn Musa's primary mission was to convince Jafar ibn al-Hassan to resume reading his blessings from Mecca on the household of the Abbasids, as well as the Fatimids.

Part 8 of Wardi's writings continues to discuss every person occupying the position of sherief of Mecca and mentions Abu al-Futuh, who ruled Mecca in 994 AD, as one of the greatest sheriefs of Mecca — a poet, warrior, and religious scholar. Al-Futuh fought his uncles in Medina and Yemen, consolidating his authority over the Hejaz region. He coveted being the single absolute caliph and viewed with disdain three caliphates in the Muslim world of the period — the Fatimids in Egypt, Abbasids in Iraq, and Umayyads in Spain. Abu al-Futuh was a Shiite and would rebel against the Shiite caliphate in Egypt, leading a large Bedouin army in an attempt to conquer the Levant. His army would be pushed back.

Of particular note, in 1023 CE, an Egyptian pilgrim attacked the Black Stone, the only stone of the Kaaba (the house built by Abraham for the worship of one God) original to Abraham, and split it into three pieces before being killed by a Yemeni onlooker. This would lead to a riot between Egyptian pilgrims and others in the vicinity of the Kaaba. As a result, in 1042 CE, the sherief of Mecca, Zeid ibn Muhsin, banned Shiites from Mecca, and until 1743, Shiites were viewed as defilers of the Kaaba. The Ottoman caliphate by that date controlled the lands in what

was once known as the Fatimids and Abbasids, to include Mecca. Persian ruler, Nadir Shah, concluded an agreement with the Ottomans to resume Shiite pilgrimage to Mecca in 1743. The sherief of Mecca, Masood ibn Saeed, received the Shiite religious dignitaries; however, the public was not ready for Shiite preachers in Mecca, and the Turkish administrator of Mecca called for the death of Shiite religious representatives.

Sherief of Mecca and the Wahabis

Sherief Masood ibn Saeed would determine Wahabi doctrine as heretical, and bar them for making the hajj (pilgrimage to Mecca), a ban that would last until 1788. It would be sherief of Mecca, Ghalib ibn Masood, who would conclude a truce with the Wahabis, allowing them access to Mecca. In 1802, with a truce concluded on their western flank, and access to Mecca, the Wahabis raided northward and sacked Karbala. With the riches looted from shrines in Karbala and general looting of markets in the city, the Wahabis felt confident enough to break their truce with the sherief of Mecca. They would take over the city of Taif and carry out a vicious massacre of the populace.

Before 1798, the sherief of Mecca, Ghalib ibn Masood, led military incursions into central Arabia to demonstrate his military power among the Wahabis. In 1802 and onward, Saud ibn Abdul-Aziz, ancestor of the modern founder of Saudi Arabia, wanted to exploit his gains in Taif to take Mecca and the seaport town of Jeddah. The Wahabis briefly took Mecca in 1803, demolishing the tombs of Prophet Muhammad's companions and birthplaces; destroying the tomb of Muhammad's first wife,

Khadija; and leveling many domes. Saud ibn Abdul Aziz ordered the destruction of water pipes, tobacco, and musical instruments, and banned burials with headstones. They would impose the teachings of Muhammad ibn Abdul-Wahab (1703-1792), founder of Wahabism, on the populace. The Wahabis held Mecca for only a few months before being driven out, forcing them to lay siege to the holy city. The Wahabi siege of Mecca would fail and Saud ibn Abdul Aziz withdrew his forces back into central Arabia. In 1804, he attempted to lay siege to Mecca again and failed.

In 1806, Sherief Ghalib ibn Masood concluded a truce with the Wahabis, but they began to force their doctrine on the populace and Mecca's leaders. When the pilgrimage season came, the Wahabis warned Egyptian pilgrims, carrying the ceremonial covering of the Kaaba, not to bring this annual tribute next pilgrimage season. The kiswa (cloth covering of the Kaaba) was made annually in Egypt and placed in a ceremonial carrier, called the mahmal. This would then be ceremonially escorted from Egypt to the Levant and finally to Arabia and Mecca at the start of the pilgrimage season. True to their word, in 1807, the Wahabis, then in temporary control of Mecca, attacked the mahmal procession, burning the carrier and the ceremonial cover of the Kaaba. The Wahabis then imposed further bans on pilgrims entering Mecca who had no beard. Egyptians, Syrians, and Iraqis boycotted Mecca, and Ibn Saud, along with the Wahabis, would destroy tombs in Medina, leaving the Prophet's tomb, but robbing it of all its tribute.

Destruction of the First Saudi State (1744-1818)

Ottoman Sultan Mahmood II ordered his Egyptian Viceroy, Muhammad Ali Pasha (*in Ottoman, pasha equates to lord and bey equates to sir*), to address the Wahabi nuisance. In 1811, Muhammad Ali Pasha's older son, Tousson Pasha, would secure Jeddah, Mecca, and Medina, with the help of European-trained forces and cannon. Captured Wahabi leaders were sent to Cairo. Viceroy Muhammad Ali Pasha visited the Hejaz region, and Ibn Saud offered ransom money of 100,000 silver riyals for the return of Wahabi prisoners. Muhammad Ali Pasha sent word to Ibn Saud that he would release the prisoners if Ibn Saud returned the treasures looted from Prophet Muhammad's tomb. Muhammad Ali then sent some of the Wahabi prisoners to the Ottoman Sultan; they were paraded in the streets of Istanbul and then executed.

The Sherief of Mecca, Ghalib ibn Masood, was exiled by the Ottoman Sultan to the island of Salonika, off the Greek coast, for making a truce with the Wahabis, which is where he died in 1816. Also dying from illness in 1816, was Tousson Pasha, while on military campaign to subjugate the Wahabis. His younger brother, Ibrahim Pasha, would arrive in the port town of Yenbu, utterly defeating the Wahabis in 1818. He used a combination of force and swayed tribes to switch alliances. Ibrahim Pasha obeyed his father's order to level the capital of First Saudi State Diriyah in Central Arabia a year later. Egyptian rule over the Hejaz, and dominance of Arabia, would last from 1819 to 1840.

The Ottoman and Egyptian rulers would alter the power structure of Mecca's rulers; the sherief of Mecca would share rule with an appointed Ottoman vali (governor). They also had two branches within Muhammad's family, the Zawi Zaid and the Zawi Awn, compete amongst themselves for Ottoman and Egyptian favor and the appointment of sherief of Mecca. The Ottomans ensured compliant sheriefs ruled Mecca, a system that would last until Ottoman Sultan Abdul Hamid II appointed Hussein ibn Ali as sherief of Mecca in 1908. Hussein would send his older son, Abdullah, to be among two representatives of Mecca in the newly established Ottoman parliament.

In 1910, the conflict between Sherief Hussein ibn Ali, of the Hashemites, and Abdul-Aziz Ibn Saud, the founder of modern Saudi Arabia, would begin. Wardi discusses how the initial rivalry between the two was one in which Ibn Saud played a weaker and subordinate role while he consolidated his power in central Arabia. Both would observe Ottoman reaction to the Idrisi rebellion in Yemen to gauge how autonomous they could be in their relationship with the Ottoman Empire.

Asir (Yemen) Expedition to Suppress the Idrisi Rebellion

In 1904, Yahya ibn Muhammad was installed as Imam of the Zaydi sect of Shiites in Yemen, and began a rebellion against Sunni Ottoman domination. Although the rebellion was contained, the Italians began arming the rebels. This undermined the Ottomans and led to a renewed momentum in the rebellion. This is a little-studied aspect of pre-World War I power rivalries between the Italians and Ottomans as played out in Yemen. Yemeni Saydi Muhammad al-Idrisi led a robust insurrection against the Ottomans, supported from the sea by Italian naval gunfire. This rebellion was suppressed in 1911, but also resulted in more autonomy for the Idrisi clan. Yemen eventually declared an independent imamate in 1918.

The Ottomans would continue to rely on regular forces, supplemented by tribal levies provided by Sherief Hussein. While Sherief Hussein's forces were occupied in Yemen, Ibn Saud attempted to seize Mecca, and three Ottoman regular battalions had to push back Ibn Saud's incursion in 1910. The way the Ottomans handled the insurrection proved to Sherief Hussein that they were not reliable guarantors of his power in Mecca; Ottoman forces barely thwarted the Wahabi

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incursion into the Hejaz and Mecca; the Ottomans marginalized his authority in favor of the Turkish civil-military governor of Mecca; and with an infusion of Italian support, the Yemenis gained autonomy from the Ottomans, despite Yemeni tribal forces being defeated in the field.

It became apparent that the Ottomans were weakening, leading tribal confederations, such as Ibn Saud and Sherief Hussein (the Hashemites), to re-examine their relationships with the Ottoman Sultan. Wardi discusses the train of thought that would lead to Sherief Hussein contacting the British in February 1914.

"In 1914, Hussein's son, Prince Abdullah, made a trip from Mecca to Istanbul and stopped in Cairo to pay his respects to Egypt's ruler, the Khedive Abbas Hilmi II. Egypt's ruler hosted Abdullah in Abdin Palace. Egypt had been a British Protectorate since 1882, so the British high commissioner in Egypt, Horatio Kitchener, and his oriental secretary, Ronald Storrs, arranged a meeting with Abdullah to discuss the affairs of Arabia."

First British Contact with Sherief Hussein of Mecca

First contact with the British, leading to the 1916 Arab Revolt, would be a series of meetings, correspondence, and messages between Hussein, his sons, and British officials in Egypt. In 1914, Hussein's son, Prince Abdullah, made a trip from Mecca to Istanbul and stopped in Cairo to pay his respects to Egypt's ruler, the Khedive Abbas Hilmi II. Egypt's ruler hosted Abdullah in Abdin Palace. Egypt had been a British Protectorate since 1882, so the British high commissioner in Egypt, Horatio Kitchener, and his oriental secretary, Ronald Storrs, arranged a meeting with Abdullah to discuss the affairs of Arabia. These initial conversations centered on Ottoman relations with Prince Abdullah's father and Turkish plans to replace Hussein as sherief of Mecca. Abdullah asked what the British position might be if his father rebelled against the Ottomans.

Being months before the outbreak of World War I, the official British position ruled the matter as an Ottoman problem; however, Storrs and Prince Abdullah engaged in endless hours of nighttime discussions on Arabic literature, and pre-Islamic poetry. Abdullah asked the British to provide heavy machine guns; Storrs responded that the British could indeed supply such weapons to friendly allies for self-defense, if his father so requested. This was a nuanced answer, basically saying that the British would arm the sherief of Mecca, as they would technically be equipping an Ottoman vassal for self-defense. Of course, should relations with the Ottomans and British change, as they would in 1914, this cloak could be lifted ever so

"Lord Kitchener (shown at right) would be vacationing in England at the outbreak of the first world war, and would be named war minister. Storrs wrote Kitchener, asking for consideration in Britain supporting the Arab cause for autonomy from the Ottoman Empire, should they side with Germany against Britain and France. Kitchener's answer came a month later. Storrs was authorized to approach Abdullah's father, Hussein, to ascertain the position of sherief of Mecca should the Ottomans side with the Germans."

slowly, and the sherief of Mecca could be a British ally in what would become World War I. Each time Abdullah visited Egypt, he saw Storrs and they discussed Arabic poetry, chess, and options Britain would take if certain scenarios played out with the Ottomans. These talks occurred in the Egyptian ruler's palace and in a side room located atop the Egyptian newspaper, *al-Muqatam*, and would be the initial seeds of the Arab Revolt.

World War I Breaks Out and Sides Are Taken

August 1914, the start of World War I would lead to a solidification of these talks between Storrs and Abdullah. Lord Kitchener would be vacationing in England at the outbreak of the first world war, and would be named war minister. Storrs wrote Kitchener, asking for consideration in Britain supporting the Arab cause for autonomy from the Ottoman Empire, should they side with Germany against Britain and France. Kitchener's answer came a month later. Storrs was authorized to approach Abdullah's father, Hussein, to ascertain the position of sherief of Mecca should the Ottomans side with the Germans.

Between 1914 and 1915, Storrs detailed an Egyptian messenger, Ali Asghar, as a courier and communications conduit between he and Hussein. Having access to Mecca, Asghar would deliver messages personally to the sherief and these exchanges would result in an understanding that should the Ottomans violate its neutrality, Britain would provide material support for the Arabs to gain autonomy from the Turks.

In November 1914, the Ottomans sided with the Germans in a ruse involving the transfer of German battle cruisers that began shelling Russian ports in the Black Sea. The Ottomans called on the sherief of Mecca to declare a jihad on Britain. The sherief prayed for an Ottoman triumph over the infidels, but expressed concern that a public declaration would lead the British fleet to shell Red Sea coastal towns. The British could easily blockade ports along the Red Sea. A blockade would lead to starvation, which could cause a general riot and even tribal uprisings. The Ottomans grew impatient with Hussein and sought to remove him as sherief of Mecca. In February 1915, Weheb Pasha, the Ottoman civil-military gover-

nor of Mecca, lost his personal bag as he traveled from Mecca to Medina. The bag was found by a Bedouin, who brought it to Sherief Hussein of Mecca. It was an intelligence coup for Hussein, containing personal papers outlining Ottoman intent to remove him from his position as sherief of Mecca.

Hussein sent his other son, Prince Feisal, to the Levant to assess the strength and seriousness of the Arab nationalist movement. Feisal was to continue his journey, from the Levant to Istanbul, to present his complaint before the sultan of a conspiracy by Weheb Pasha to remove him. After spending four weeks in Syria, talking to Arab nationalists of secret societies, such as al-Ahd, Feisal also spent time with the commander of the Ottoman 4th Army and governor of Syria, Djemal Pasha. Feisal's mission in Istanbul, presenting his father's case against Weheb, was a success and Weheb was replaced by a more pliant and passive leader, Ghalib Pasha. Among Syria's Arab nationalists, six leaders swore fealty to Sherief Hussein and worked to sway the officers of the 12th Ottoman Division, which had the greatest concentration of Arabs, to support the nationalist cause. Feisal, in keeping with protocol, requested permission from Ottoman Djemal Pasha to leave the Levant, travel from Damascus to Jerusalem, where Djemal was, and request his leave.

McMahon-Hussein Correspondence

In modern Middle East political history there are certain agreements, declarations, and letters that stir up much controversy. There is, for instance, the 1916 Sykes-Picot Agreement that carved up the Ottoman Middle East into spheres of British, French, and Russian influence; and the 1917 Balfour Declaration that established a Jewish state in Palestine, but not at the expense of the indigenous peoples. The correspondence between British high commissioner in Egypt, Sir Henry McMahon, and Sherief Hussein of Mecca would rank among those controversial documents in the tragic history of the modern Middle East. Wardi outlines the ten letters exchanged between the two, five from McMahon and five from Hussein, riddled with flourishes and platitudes, and lacking any real commitment to Arab nationalist aspirations. Hussein read these platitudes as British acceptance of an Arab national homeland in Arabia, Jordan, Palestine, Syria, and Iraq. This miscommunication would have dire consequences and is a lesson in the need for occasional clarity in diplomacy.

In Early 1916, Prince Feisal departed for Damascus with 50 horsemen, which was the contingent that would participate in an assault to gain control of the Suez Canal, Britain's lifeline to India. Djemal Pasha viewed this contribution with contempt and made Feisal his permanent guest (read "glorified hostage") until his father sent more troops. Feisal would spend five months in Damascus; however, he did not waste his time. Instead, managing the criticisms against his father by Djemal Pasha and visiting War Minister Ali Fuad Bey, he diverted attention from Hussein's talks with McMahon. Despite being a hostage, Feisal held a massive banquet in honor of Djemal Pasha.

Feisal was not entirely in the British camp and hoped for reconciliation with the Ottoman sultan; however, several Arab nationalists were caught and Feisal interceded, along with Djemal Pasha, to free them. However, seven were hung in Damascus and fourteen in Beirut, which transformed Feisal and he became

"Mecca thus had 1,200 troops when the Arab Revolt occurred in June 1916. The revolt would be sustained by the British, to include famous officers such as T.E. Lawrence (of Arabia), (shown at right), who advised Prince Feisal; John Glubb, who advised Prince Abdullah; and Harry St. John Philby, who advised Ibn Saud."

even more committed to ridding Arabia and the greater Middle East of Ottoman suzerainty. Feisal received word from his father to depart Damascus as the revolt against the Ottomans was about to start. Feisal left Damascus under a ruse, telling Djemal Pasha he had to meet fighters amassing in Medina and ride at their head to Damascus in preparation for the second Sinai assault.

The first assault occurred in 1915, during the first months of the Ottoman declaration of war, and pitted 25,000 Ottoman troops against 30,000 British Expeditionary troops, who pushed the Ottomans back. Djemal did not trust Feisal or his father and sent General Fakhri Pasha to take over the garrison of 3,000 troops in Medina. Djemal also ordered those troops to remain in Medina and not deploy to Yemen, as originally planned. Mecca thus had 1,200 troops when the Arab Revolt occurred in June 1916. The revolt would be sustained by the British, to include famous officers such as T. E. Lawrence (of Arabia), who advised Prince Feisal; John Glubb, who advised Prince Abdullah; and Harry St. John Philby, who advised Ibn Saud.

Wardi concedes that much has been written about the 1916 Arab Revolt; therefore, he limits his own writings to the events leading up to the revolt. He points out that many of the Ottoman regulars who defected to the Arab nationalist cause were Iraqis and would form the core of returning officers who would create Iraq's modern army.

There are many recent books recommended for anyone interested in gaining a deeper understanding of the Arab Revolt and Lawrence of Arabia, to include the unconventional tactics used in tying down tens of thousands of Ottoman forces and neutralizing their threat on British Egypt. The revolt also allowed General Edmund Allenby to push toward Jerusalem and Damascus and defeat the Ottoman 4th Army in the Battle of Megiddo in September 1918 (the Arab Revolt secured Allenby's right flank).

Wardi focuses much of Volume 6 (Supplemental) on Prince Feisal's short-lived rule over Syria. Arab and British forces arrived in Damascus simultaneously and a new phase of the conflict would begin over control of the Levant. This history is vital in teaching America's combat forces, as it provides a sense of the human terrain in an area of strategic importance to the United States.

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THE MBSFA

Implications for Manning, Equipping, Training, and Employing Combat Advisors

by Captain Daniel Bolton

The summer of 2009 represented a significant shift in the advisory effort in Iraq. On 17 September, the last class of combat advisors destined for Iraq graduated from Fort Riley. These combat advisors represented a transition point between the legacy externally sourced transition teams, such as military transition teams (MiTTs), border transition teams (BTTs), and federal police transition teams (FPTTs), and the new stability transition teams (STTs) forming under the modular brigade augmented for security force assistance (MBSFA) concept. The STT concept was developed based on guidance from the theater commander to provide increased unity of effort between deployed U.S. Army brigade combat teams (BCTs) and transition teams operating in the BCT's operating environment (OE). His vision pictured the STTs as an extension of the BCTs and

subordinate battalion task forces (TFs). The first STTs began training at BCT home stations, combat training centers (CTCs), and Fort Riley in the summer of 2009, and deployed in August that same year. The Army Force Generation (AR-FORGEN) process and recommended training continuum, designed for greater interaction between the STTs and the BCT, preclude a concise residential training curriculum in conjunction with ongoing 162d Infantry Brigade training at Fort Polk. These factors call for a new paradigm in manning, equipping, training, and employing combat advisors, as outlined in this article.

Manning

Manning of STTs occurs in two phases and for best results, should be accomplished no less than 60 to 90 days prior to

the BCT's CTC rotation. Early in the STT personnel-fielding process, this goal was unachievable, resulting in execution of the training continuum outside the recommended model. Due to initial startup costs, BCTs only formed 8 to 10 STTs, but in full swing, some BCTs will be expected to form as many as 24 STTs. The first phase of STT manning is the assignment of augmented advisors. Two field grade officers, the augmented advisors (AAs) for each team, are assigned from across the Army by the Human Resource Command (HRC).

The second phase of STT manning occurs within the BCT and consists of task organization of two additional elements, which includes the functional area specialist (FAS) team and the personal security detachment (PSD). The core advisor

Legacy MiTT and STT Comparison

Legacy BDE MiTT (10 PAX)				STT (~19 PAX)			
Team Chief	LTC	02A	AAs	Team Chief	LTC	02A	HRC Provided
Staff/Maneuver Trainer	MAJ	02A		D/Team Chief	MAJ	02A	
Intelligence Advisor	MAJ	35D	FAS	Operations Advisor	SFC-CPT	11/19	BCT Provided
Intelligence NCO Trainer	SFC	35F		Intelligence Advisor	SFC-CPT	35D/F	
Logistics Advisor	CPT	90A		Logistics Advisor	SFC-CPT	88/91/92/90A	
Logistics NCO Trainer	MSG	88/91/92		Effects Advisor	SFC-CPT	13A/F	
Effects Advisor	CPT	13A		Communications NCO	SSG	25C	
Effects NCO	SFC	13F		PSD (~12 PAX)	PVT-1LT	11/13/19	
Communications NCO	SSG	25C					
Medic	SPC-SFC	68W					

Figure 1

team must be augmented with a FAS team organic to the BCT to properly advise across Iraqi Security Force (ISF) warfighting functions (WFF). A recommended FAS team consists of advisors for intelligence, fires, operations, communications, and logistics, at a minimum, while other considerations include attachment of law enforcement professionals (LEPs) and human intelligence (HUMINT) collection teams (HCTs). These teams must consist of soldiers with enough rank and experience to gain rapport with and influence senior ISF officers who may have considerably more combat experience than members of the STT.

The final element of the STT is the PSD, which is typically a scout, tank, infantry, or artillery platoon or section. The FAS team and the PSD may be tailored as the BCT commander sees fit, based on analysis of his OE. A comparison of a legacy brigade MiTT to an example STT is shown in Figure 1. While the optimum STT contains elements of augmented advisors task organized with a FAS team and a PSD, BCT commanders may choose not to augment teams in this fashion. In fact, a spectrum exists in which some BCT commanders choose to fully augment their STTs, some choose to augment only for specific mission sets, and others choose not to augment at all and use their STTs in a liaison-type role. This decision clearly depends on mission, enemy, terrain and weather, troops and support available, time available, civil considerations (METT-TC).

Equipping

Because adding augmented advisors to a BCT's overall endstrength is not supported by the BCT's modified table of organization and equipment (MTOE), some additional equipment will have to be procured. To properly equip advisors to standard, they will require individual small arms and optics, chemical defense equipment, and the BCT's standard original clothing and individual equipment (OCIE) menu and rapid fielding initiative (RFI) grid draw. For equipment listed above and beyond the BCT's MTOE, there are several avenues to properly equip advisors. The BCT may choose to submit an operational needs statement (ONS), request a change in MTOE by submitting DA Form 4610-R, or seek to borrow the equipment through the Army loan program.

Training

Because STTs are task organized by the BCT during the ARFORGEN cycle, training must be synchronized between the 162d Infantry Battalion, the Department of Defense (DoD) proponent for combat advisor training, and the STT's parent BCT. The elements of CONUS-based training include the combat training center's leader training program (LTP), the battle command training program (BCTP) seminar, an advisor academy, BCT-specific individual and collective training, a tactical leader's seminar, an STT seminar, a validation exercise, and a BCT CTC rotation. This training continuum builds on previous training and provides an opportunity for BCT involvement in planning and synchronizing future training. The BCTP seminar, or in some instances the LTP, is the first opportunity for 162d Infantry Battalion cadre to interface with the BCT and its augmented advisors.

During the BCTP seminar, a representative from the 162d Infantry Battalion briefs BCT leaders and any augmented advisors present on the MBSFA concept and the 162d's training continuum, as shown in Figure 2. This opportunity allows the 162d and the BCT to make necessary coordination for follow-on training. Coordination culminates with a memorandum of agreement, executed between the BCT commander and the 162d Infantry Battalion's commander, which outlines training and resources along with dividing responsibilities for each unit.

The advisor academy is the first block of instruction for augmented advisors and should be conducted once a majority of the advisors have arrived at the BCT. The academy covers a period of 10 days, and can take place either at the BCT's homestation or at Fort Polk. The majority of the academy is classroom instruction on theater-specific history, culture, language, and religion; advising and influencing; host nation security force structures and staff functions; and use of linguists. Classes during the academy build advisory skills necessary to interface with host nation security force (HNSF) personnel, and advisors are presented with role-played ISF leader engagements to allow practical application of these skills. During the academy, opportunities also exist to conduct a video teleconference with the unit that will be replaced in theater by the STTs, as well as interface with previous advisors to capture tactics, techniques, procedures, and lessons learned. Should training be completed prior to the arrival

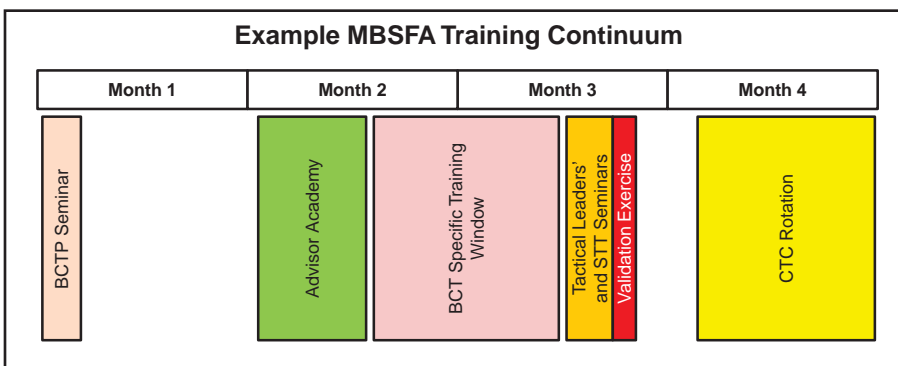**Example MBSFA Training Continuum**

Month 1	Month 2	Month 3	Month 4
BCTP Seminar	Advisor Academy	BCT Specific Training Window — Tactical Leaders' and STT Seminars — Validation Exercise	CTC Rotation

Figure 2

Example Advisor Academy

Day 1	Day 2	Day 3	Day 4	Day 5
Welcome/Course Intro	Language/ Culture (DLI)	Language/ Culture (DLI)	Language/ Culture (DLI)	Language/ Culture (DLI)
Operations, Intelligence, and Environment (OI&E) Brief (BCT Event)	Security Agreement	Rapport Building	Interpreter Management	Border/Port of Entry (POE) Overview
Islam/Country History/Culture	Government/HNSF Overview	Influence/Negotiations	WFF Sustainment, Ministry of Defense (MOD)/Ministry of Interior (MOI) Logistics	WFF Intelligence Capabilities
Operational Framework, USF-I C2	Culture/Cross Culture Shock	Leader Meet Example	Leader Engagement #1 Intro/Ammo	WFF Intelligence Advising
Counterinsurgency (COIN)/ Stability Overview, Provincial Reconstruction Team (PRT)	Roles/Traits of Advisor	WFF Overview w/Foreign Security Forces (FSF)		
Assign Case Studies/Teams	Personality Traits Team Dynamics	WFF Maneuver/ Staff Planning		Cultural Meal *Fort Polk, LA – Meal Away - Chai*
		Targeting		

Day 6	Day 7	Day 8	Day 9	Day 10
Video Teleconference w/Theater				
Language/ Culture (DLI)	Language/ Culture (DLI)	Language/ Culture (DLI)	Language/ Culture (DLI)	Language/ Culture (DLI)
Operational Readiness Assessment (ORA) Overview	WFF Fires	WFF Protection	Preparing American Advisors/Ethics	Historical Advisory Mission Case Studies
WFF C2	IP Overview Police Transition Team (PTT)	Information Operations, Media		
Leader Engagement #2 Intelligence	Leader Engagement #3 Improvised Explosive Device (IED) Cell/Fratricide	Leader Engagement #4 Detainees	Leader Engagement #5 Indirect Fire/Force Protection	Leader Engagement #6 Corruption
Redeploying TT Panel				

BCT Event ●   Defense Language Institute (DLI) ●   Leader Meet ○

Figure 3

of all augmented advisors, it can be made up with a later BCT. An example advisor academy layout is shown in Figure 3.

Following the example continuum, the next step in advisor training is BCT-specific training. Whereas previous externally sourced transition teams completed all theater-specific training at Fort Riley, advisors assigned to STTs execute non-advisor-specific individual and collective training tasks with their parent BCT. These tasks include weapons qualifications, combat lifesaver qualification, theater-specific individual readiness training (TSIRT), and any other tasks chosen by BCT leaders. Preferably, augmented advisors will complete this training alongside their FAS teams and PSDs, in an effort to build small-unit cohesion, prior to arrival at the CTC.

The final training gates, prior to the BCT's CTC rotation, are the tactical leader's seminar, STT seminar, and validation exercise. These training events occur at the BCT's homestation and involve several echelons of BCT and STT leaders. The tactical leader's seminar focuses on BCT leaders who are not assigned to advisor teams, in the rank of staff sergeant through captain, and covers 3 days of classes on culture, stability operations and counterinsurgency, and partnership with host nation security forces, as shown in Figure 4. This event arms leaders, from squad to company level, with tools to train soldiers in tasks they will encounter during deployment as partners of ISF units. The seminar also re-blues leaders who may not have previously deployed in roles that required ISF partnership. The tactical leader's seminar also affords the BCT commander the flexibility to hold an executive session with his battalion commanders and discuss graduate-level vignettes on partnership and advising. Should the BCT choose not to execute a tactical leader's seminar, the executive session can be appended to the STT seminar. The STT seminar runs concurrently with the tactical leader's seminar and integrates augmented advisors with

FAS teams and key leaders of PSDs. As shown in Figure 5, the STT seminar focuses on advanced advisory concepts and specific ISF structures and readiness for units they will advise in theater.

The final phase of training prior to the BCT's CTC rotation is the validation exercise, which is a 2-day exercise that involves a combined planning exercise with role-played ISF officers at echelons similar to those that STTs will advise in theater. The event also requires integration with the BCT and subordinate battalion staffs, a forcing function designed to better prepare the STTs for CTC rotation. An example validation exercise is shown in Figure 6.

As discussed earlier, augmented advisors must arrive prior to the BCT's CTC rotation to allow them to complete this training continuum, build the team, and integrate with the BCT and battalion staffs. At the CTC, the BCT and its STTs will be required to conduct combined targeting, combined planning, and combined

Example Tactical Leaders' Seminar

Day 1	Day 2	Day 3	Day 3 (CDRs)
Welcome / Introduction	Arab / Iraqi Culture	COIN Overview	Integrate WFF as Combat Advisor
OI&E Brief (BCT Event)	Religion	Use of Interpreter with Leader Engagement Practical Exercise (PE)	BCT Concept of Operations (CONOPs) for Leadership and Advising
Security Agreement	History	Rapport Building and Influencing	Influence WFF
Iraq Country Brief	Tribes	Negotiating	After-Action Review (AAR)
ISF and WFF Overview		SFA and Stability Operations in Partnership	

Figure 4

Example STT Seminar

Day 1	Day 2	Day 3	Day 3 (CDRs)
Welcome / Introduction	Know the Enemy	WFF Vignettes (6) for advising EAB	Integrate WFF as Combat Advisor
OI&E Brief (BCT Event)	Human Terrain	90 Day "Road to War" based on Operational Readiness Assessment (ORA) / Police Station Monthly Report (PSMR)	BCT CONOPs for Leadership and Advising
PJCC, Governate Director of Police, IA Division HQs, Operations and Area Command HQs, Brigade HQs Organization / Transition Team Structures	Know the Enemy/ Human Terrain Vignettes / PEs (4)	AAR	Influence WFF
ISF Echelons Above Brigade (EAB) C2 Vignettes / PEs (4)			

Figure 5

operations with role-played ISF in a simulated combat environment, necessitating prior execution of the 162d Infantry Battalion training continuum.

Employment Considerations

Ultimately, employment of STTs within a BCT's OE is a decision that rests on the shoulders of the BCT commander. However, several factors must be taken into consideration when determining optimal employment. These factors affect how the BCT commander will augment his teams, at what echelon he will employ them, and the command/support relationships he will impose on them. Consideration must be given to available forces, the enemy threat, current level of ISF development, specified ISF development tasks from higher headquarters, and the sheer number of ISF headquarters in the OE. Below are three examples that illustrate the flexibility afforded BCT commanders through use of the STT concept:

Example 1. Faced with an OE that encompassed a province with a low enemy threat, a large stretch of national border, two well-developed Iraqi army (IA) divi-

sions, and an Iraqi operations command, one BCT chose to merge its eight sets of advisors into three teams, focused on the ISF operations command, the Department of Border Enforcement (DBE) Region headquarters, and the Provincial Governance Center. Due to the level of ISF development, the BCT commander chose not to augment his teams with FAS team members, using instead the augmented advisors in more of a liaison role between ISF and the BCT. Because he was also employing the teams with higher headquarters, he chose to keep command/support relationships at the BCT level.

Example 2. A BCT deploying to a province with a low threat and one well-developed IA division, the BCT commander chose to use his eight sets of advisors in a liaison role, focusing on the Provincial Joint Coordination Center (PJCC), the IA division, and the district joint coordination centers (JCCs). By reducing the number of augmented advisors on the JCC teams, the BCT commander placed more emphasis on his divisional team, which he chose to augment, as necessary, with FAS from his staff. No other teams were augmented; some teams maintained command/support relationships with the BCT, while others were carved down to subordinate battalions.

Example 3. A BCT deploying to a densely populated province, with nearly 40 ISF brigade and above headquarters, moderate enemy threat, and moderate ISF development, chose to build full teams with FAS and cover down on all divisions, and above, and ISF brigades as determined by lower development levels. This BCT commander pulled large portions of FAS for his division teams and augment-

ed his brigade teams with more modest portions. Some teams maintained command/support relationships with the BCT, while others established relationships with subordinate battalion task forces.

The use of STTs in a BCT's advisory effort is the way ahead for ISF development. The concept requires a paradigm shift in the way the Army mans, equips, and trains its advisors in preparation for deployment. The 162d Infantry Battalion has developed the necessary training package to support BCTs as they build and train teams to conduct advisory missions in theater. Once formed and trained, the STTs provide great flexibility for the BCT commander when determining the best task organization and employment of his advisor teams, unlike the rigid transition team structure of the past. The STTs serve as an extension of the BCT and subordinate battalion task force leaders better than legacy transition teams due to well-defined command/support relationships. While this concept is currently only being used in Iraq, it also serves as a future model for advisory efforts in Afghanistan.

Example Validation Exercise

Day 1	Day 2
Intro/overview	STT and BCT/battalion maneuver and resource planning (STT and BCT leader engagement)
Receipt ISF CONOP (STT to HNSF leader engagement	STT/BCT brief production
Mission analysis (STT and HNSF)	Combined CONOP brief to BCT commander (w/ISF commander in attendance)
Joint planning session/construct briefing (STT with ISF) (STT to BCT leader engagement)	BCT commander comments
Backbrief maneuver and support plan to ISF commander	AAR
AAR	

Figure 6

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Joint Security Stations: Transitioning and Closure

by Captain Patrick Howlett

When General David Petraeus assumed duties as the commanding general, Multi-National Force-Iraq in February 2007, he initiated a bold new counterinsurgency strategy for the military. Building on his experiences from his previous assignment as commander, 101st Airborne Division, General Petraeus guided U.S. forces in Iraq to focus on counterinsurgency fundamentals. "Population security is the first requirement of success in counterinsurgency," and was one of the primary concerns for General Petraeus.[1] In addition to the surge of supplemental combat brigades deployed to secure the populace, coalition forces established multiple joint security stations (JSS) throughout the Baghdad area in February 2007.

These security stations were established to eliminate segregation inherent in massing U.S. troops on large forward operating bases (FOBs) located on the outskirts of major population areas in favor of integrating smaller outposts within neighborhoods, which places security stations in a better position to provide security to the local populace. A JSS located within the city and among the populace allows units to develop a rapport with the immediate community, which increases the knowledge of the local terrain, and according to Dr. David Kilcullen, is one of the fundamentals of company-level counterinsurgency operations.[2] The location of the JSS not only places U.S. forces at a proximate distance to the local people, but it also allows them closer associations with local Iraqi Security Forces (ISF). Supporting the resident security forces is absolutely essential to overall victory as the host nation must ultimately win the war. This achievement "requires [the] development of viable local leaders and institutions."[3] Living, patrolling, and working in close coordination with the Iraqi army and Iraqi police enables the development of host nation's forces, which will eventually allow them to provide security for their own people with little or no external aid, which is the "cornerstone of any [counterinsurgency] effort."[4]

Blackfoot Troop, 5th Squadron, 4th Cavalry (5-4 CAV), arrived in Baghdad to conduct its relief in place and transfer of authority (RIP/TOA) with 1st Squadron, 75th Cavalry (1-75 CAV), at the end of the surge period and inherited an area of operations (AO) in which the ISF had recognizably improved. With a relatively stable host nation security force already in place and fewer combat brigades scheduled for deployment, the decision was made to begin the transfer of these security stations to full Iraqi control.

Blackfoot Troop began its deployment with the monumental task of transferring control of JSS Ghazaliyah III (Ghaz III) to the ISF within the space of 3 weeks. The U.S. forces in Baghdad had never conducted this type of operation and Ghaz III would be the first of many JSS closures throughout the city over the course of the upcoming months. Blackfoot Troop arrived at Ghaz III on 5 November 2008, and on 21 November 2008, as ordered, handed over complete con-

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trol of the JSS to the Iraqi army. Blackfoot Troop would validate its experiences and lessons learned in February 2008 when they closed JSS Ghaz II between 14 and 27 February 2009, and JSS Ghaz I between 15 August and 7 September 2009.

This article provides an overview of JSS closure and transfer operations during the transfer of Ghaz III to the Iraqi army, as well as discussions of lessons learned during the operation. These assignments are more focused on logistics and security than on offensive combat operations. It is important to keep in mind that these tactics, techniques, and procedures (TTP) should be modified based on mission, enemy, terrain, troops, time, and civilian considerations (METT-TC), as well as the size and complexity of the JSS involved. The intent is to close a JSS with minimal combat power while simultaneously maximizing logistics support to reduce the duration of the operation to allow resources to be concentrated elsewhere on the battlefield.

Manning and Security

With decreased combat power and heavy focus on JSS closure operations, there exists a potential to shift focus from necessary duties of external security to internal closure tasks. To mitigate increased threat to the security of the security station, which is attributed to a reduction in overall combat capabilities, the officer in

charge (OIC) and noncommissioned officer in charge (NCOIC) must immediately assess the current force components and identify the security station's potential weak points. Security measures deemed unsatisfactory must be modified to improve security and reduce the threat to U.S. forces.

While every JSS is different in scale and complexity, a minimum number of personnel are required to run the station and conduct closeout operations. In terms of managing combat power for a JSS scheduled for closure, establishing a proper guard/rest rotation must be paramount. Expecting individual soldiers to repeatedly perform long periods of guard duty commonly results in an overall feeling of complacency, thus sufficient personnel must be maintained as a preventive measure. The unit must also remain flexible to perform patrols that result from fragmentary orders (FRAGOs), which may or may not be received on short notice. There is no set formula to determine how many personnel will satisfy the manning requirements to maintain a secure perimeter. Each JSS will have its own orientation and established battle positions, as well as an entry control point (ECP) to manage. In addition to supplying personnel tasked with preserving physical security from established defensive positions, local national contractors, who provide services at the JSS, must be escorted with-

in the perimeter. Since operations at a JSS are conducted as joint maneuvers with the local ISF, it is necessary to augment U.S. forces with contract personnel.

During closeout operations at both Ghaz II and III, Blackfoot Troop was tasked to produce combat patrols in response to enemy activity in sector and support an operation that required additional security measures. At Ghaz III, Blackfoot Troop operated with three maneuver sections, comprised of four vehicles and approximately 15 personnel each. These proportions supported a strong and alert work force while sustaining a security force that maintained the plasticity to conduct patrols and other operations. To maintain perimeter security, Blackfoot Troop occupied all preexisting battle positions and towers for a total of five positions, as well as the ECP. Two additional soldiers were tasked to conduct escort duty for the local national contractors operating in and around the JSS. An ISF soldier was always present at the ECP to provide linguistic support.

To accomplish various guard and patrol duties necessary during closeout procedures, each section within the troop operated on a 12-hour rotation, completing two cycles within every 24-hour period. Each of the three sections rotated through three 4-hour shifts consisting of rest, JSS security operations, and work details. The

section on work detail rotation was also tasked with responsibility for providing a quick reaction force (QRF), as needed. This schedule had to be maintained for 2 to 3 weeks and was sufficient to avoid complacency while preserving the requisite flexibility.

Logistics and Support

Logistics support in its myriad forms is possibly the most critical element in JSS closure operations. Over time, the JSS accumulates a vast quantity of materiel, which requires removal from the JSS prior to the ISF transfer. Items such as theater provided equipment (TPE), morale equipment, supplies, construction materials, and personal effects are only a few examples of the property stored on a JSS. A combination of palletized loading system (PLS) truck support from the forward support company (FSC); high mobility, multipurpose wheeled vehicle (HMMWV) cargo trailers; multiple 20-foot shipping containers; and a light medium tactical vehicle (LMTV) for cargo transportation can accommodate most equipment that must be moved. Integrating lessons learned from closing Ghaz III, a PLS was dedicated specifically for container transportation and proved an invaluable resource when closing Ghaz II, as it allowed for a systematic removal of all property containers at the closing unit's pace instead of relying solely on the traditional logistics resupply patrol.

As a JSS is disassembled, trash and garbage normally tends to accumulate. A plethora of items, from simple trash to used construction materials and force protection items, appear as barriers are removed and buildings are vacated. This trash cannot be left, as it is disrespectful to the host nation and homeowners. While closing Ghaz I, Blackfoot Troop required the FSC to provide the sideboards for the PLS to transport piles of trash to the city dump. Without the sideboards in place, it would have taken many more trips to properly remove the trash from the site.

A JSS closure is not a heavy offensive procedure and does not have a high operational tempo. Despite the comparatively low volume of combat patrols being conducted out of the JSS during closure operations, vehicles will inevitably suffer mechanical issues requiring maintenance support, in addition to normal preventive maintenance checks and services (PMCS). As a remedy to this situation, Blackfoot Troop established a contingent of the troop-level maintenance team, which was tasked to provide maintenance support to the sections responsible for JSS closeout. The team was physically lo-cated at the JSS 3 days a week to assist in maintenance operations. Additionally, each section on the JSS was allocated time once a week to conduct PMCS during their normal off time.

A company-level organization is authorized one communications specialist; however, during closeout procedures at Ghaz II and Ghaz III, Blackfoot Troop was allotted an additional signal expert from the squadron's S6 shop. Considering the troop was still operating a tactical operations center (TOC) and the abundance of communications equipment required to properly provision the TOC, the skills and knowledge of a signal expert are absolutely necessary to safely uninstall and remove all sensitive property from the security station while meeting the transfer deadline.

Perimeter Wall and Towers

Depending on how many assets are located at the JSS and its ultimate end state, repositioning of perimeter concrete barriers and concrete guard towers may be necessary. Allowing for the requisite METT-TC considerations, planning and execution of this task can be complex. Blackfoot Troop was tasked with reducing the overall perimeter at Ghaz III in the course of closure operations. The FSC provided an equal number of PLS and cranes through the squadron's S4 shop. This balance of movement assets permitted a faster transfer and relocation of concrete barriers. When conducting actual repositioning, perimeter security was maintained through coordination with the ISF, which added personnel to the formation of an outer cordon, while Blackfoot Troop provided the inner cordon.

Moving concrete towers is one of the less difficult operations involved in the closure of a JSS. The type of support required to reposition a tower heavily depends on the distance to where the tower must be moved. For example, if the unit is moving the tower only a short distance, a 20-ton crane can accommodate the task easily; however, should the tower be moved a greater distance, PLS support from the FSC will be required. Additionally, plan to mark the concrete tower pieces to ensure correct reassembly by the crane operators to avoid delays. As a security precaution during tower repositioning, Blackfoot Troop assumed a supplementary battle position on the roof of one of the JSS buildings to guard the area, which is normally overseen by the tower.

ISF and Civilian Interaction

Consolidating the JSS footprint will almost certainly be required as a result of transfer of control from U.S. forces to ISF (or permanent closure). The reduction in personnel will mean that not only are fewer living quarters now required, but fewer soldiers will necessitate a smaller perimeter to maintain an equal level of security. Coordination and planning to this end will involve cooperation from both the Iraqi army and nearby civilians.

In the case of Ghaz III, control of the JSS was being transferred to the Iraqi

"Logistics support in its myriad forms is possibly the most critical element in JSS closure operations. Over time, the JSS accumulates a vast quantity of materiel, which requires removal from the JSS prior to the ISF transfer. Items such as theater provided equipment (TPE), morale equipment, supplies, construction materials, and personal effects are only a few examples of the property stored on a JSS."

"Footprint reduction commonly results from private homes, which the JSS use as buildings, being returned to respective owners. Based on the ISF's apathy toward the homes they occupied, coupled with alterations, such as force protection measures and additional sleeping rooms, U.S. forces made during its residence, the homes will likely have suffered some degree of modification or even damage."

army, thus it was imperative to incorporate them into the closure process. The unit's OIC and NCOIC engaged ISF leaders early and continuously based on the critical need for ISF to be well informed on future plans, especially since they are also residents. Engagement and interaction with Iraqi army leaders proved to be very successful during an effort to incorporate them in reconnaissance patrols for perimeter movement and house consolidation, which resulted when the JSS footprint was decreased. This further facilitated the eventual transfer of all security positions to the Iraqi army. The leaders of Blackfoot Troop repeatedly engaged in dialogue with its Iraqi army counterparts to ensure everyone understood the timeline/status for each building, for example, which buildings Iraqi army personnel could move into once they were vacated by U.S. forces. The superior level of cooperation was manifested when the Iraqi army moved into its newly reduced footprint within the allotted time.

Footprint reduction commonly results from private homes, which the JSS use as buildings, being returned to respective owners. Based on the ISF's apathy toward the homes they occupied, coupled with alterations, such as force protection measures and additional sleeping rooms, U.S. forces made during its residence, the homes will likely have suffered some de-

gree of modification or even damage. To protect U.S. forces from liability, take photographs of the interior and exterior of the homes prior to withdrawing from the JSS, which provides evidence of the condition of the home at the time of its return to the homeowner. Proprietors seem to be readily aware of when their homes are being returned and quickly come forward to make claims for damage compensation. At Ghaz III, Blackfoot Troop was able to schedule a walkthrough with homeowners to determine the extent of damages and begin the claims process.

Primary goals of a successful counterinsurgency strategy is establishing the host nation's "institutions that can sustain government legitimacy;" while the last stage is "movement to self-sufficiency" and "transition responsibility for [counterinsurgency] operations to [host nation] HN leadership."[5] Transferring JSS Ghaz I, II, and III to full Iraqi control marked a major milestone in the buildup of the ISF in Baghdad and demonstrated faith and confidence in the Iraqi army, enabling it to secure its own people without U.S. support. Since the transfer of Ghaz III from Blackfoot Troop to the Iraqi army in November 2008, 5-4 CAV has overseen an additional six JSS closures and transfers within its operating area.

As U.S. military presence continues to draw down in Iraq, as a result of the pos-

itive developments in Iraqi Security Forces, more security stations will close. Deploying units must be aware of the improving situation in Iraq and be prepared to conduct closure or transfer operations at their individual joint security stations. It is important for units to maintain flexibility, be prepared to move, and maintain close interaction with the ISF to allow for a smooth transfer of authority.

Notes

[1]*The U.S. Army/Marine Corps Counterinsurgency Field Manual*, The University of Chicago Press, Chicago, IL, 2007, xix.

[2] David Kilcullen, "Twenty-Eight Articles; Fundamentals of Company-level Counterinsurgency," *Military Review*, Fort Leavenworth, KS, May-June 2006, p. 2.

[3]*The U.S. Army/Marine Corps Counterinsurgency Field Manual*, p. 47.

[4]Ibid., p. 42.

[5]Ibid., p. 235; and 154, respectively.

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The M10 Tank Destroyer and M4 Sherman: The Difference in Capabilities

by Lieutenant Colonel Scott K. Fowler

During a recent visit to the Patton Museum with my two sons, I took special notice of the M10 tank destroyer and the M4 Sherman, both of which are displayed inside the museum. I knew the M10 was used in the early days of World War II by the United States and Great Britain; however, I did not realize the similarity in the diameter of these two main guns. On further inspection of both gun tubes, they appeared to be the same size, but how can a tank destroyer have the same main gun size as an M4 Sherman? I further read the signs displayed at each vehicle and realized the M10 has a 3-inch (M7) main gun and the M4 Sherman has a 75mm M3 L/40 main gun.

Being curious about the exact difference in the two main guns, I did some research and discovered a difference of 1.2 mm in diameter. In other words, the M10 boasted a 3-inch (76.2mm) main gun, while the M4 Sherman had a 75mm main gun. But, I still wasn't satisfied — why would a tank destroyer have a main gun only 1.2mm larger than an M4 Sherman, which was obviously outclassed when met by a German Panther or Tiger tank on the battlefields of France in 1944.

M10 Tank Destroyer

"Army combat preparations anticipated the battlefield presence of large German armored formations similar to those used to overrun much of Europe and Russia. Therefore, the War Department established a tank destroyer force to nullify the German tank threat. Tank destroyers represented a new concept, and responsibility for their development was thus deliberately separated from the existing combat arms."[1] The M10 gun motor carriage (GMC) replaced the M3 self-propelled 75mm halftrack vehicle as a tank destroyer. "The vehicle mounted a 3-inch gun in an open-topped turret. It entered service in the latter half of 1942 and entered combat in March 1943. The main armament's gun sight and armor penetration ability surpassed that of the M4 Sherman medium tank, but the longer range of the 3-inch gun encouraged crews to exaggerate its performance."[2]

Even so, I still wondered why the United States created a tank destroyer that, performance wise, was only slightly better than an M4 Sherman, thus leading me to the history of the main gun of the M10 GMC. "In September 1940, a project was started to adapt the 3-inch gun to the antitank role, starting with the T9 experimental model, but equipping it with the breech, recoil system, and carriage borrowed from the 105mm M2 howitzer. This was accepted for service as the 3-inch M5. A final adaption was the 3-inch M7, which included minor modifications for mounting on the M10 GMC."[3]

In June 1942, the M10 was ordered into full production. During its combat debut in Tunisia in 1943, the M10 was successful and could destroy most German tanks in service. Later, during the Battle of Normandy, the M10's gun proved to be ineffective against frontal armor of the new German Tiger and Panther tanks.[4] After reading about U.S. tanks in the 1940-1942 timeline, it became obvious that a 3-inch gun probably seemed like a large-caliber weapon to mount on a tank destroyer.

M4 Sherman

The M4 Sherman's main gun was the short-barreled, medium-velocity 75L24-mm M3 gun. In late 1942, when the Sherman first saw combat in North Africa, against Panzer III and Panzer IV tanks, its gun could penetrate the armor of these tanks at normal combat ranges. The U.S. Army intelligence discounted the arrival of the Tiger I (late 1942) and Panther tanks (1943), predicting they would be produced only in small numbers. The U.S. Army failed to foresee that the German army would make the Panther the standard tank of its panzer divisions by 1944, supported by substantial numbers

Above, an M10 Wolverine tank destroyer sees action near St. Lo, France, June 1944. At left, an M10 in North Africa, 13 March 1943.

Above, a tank crew checks its M4A1 after landing at Red Beach 2 in Sicily on 10 July 1943. At left, a 1st Tank Battalion, 1st Armored Division M4 crosses the Arno River near Casoina, Italy, in September 1944.

ther and Tiger. This request was answered, "In response to the growing concerns from the combat theaters about the inferiority of American tanks, the Ordnance Department undertook the independent development of a more powerful tank armed with a 90mm gun. Ultimately, this project became the M26 Pershing heavy tank, which entered combat in the final weeks of the war."[8]

As I read history, the M10 GMC was the best the U.S. Army had, based on then-current tank destroyer doctrine, to destroy large columns of smaller German tanks. What the armor corps had at the time was a 3-inch main gun, which until 1944, could penetrate most German tanks on the battlefield. Complemented with the 75mm main gun of the M4 Sherman, the M4 and M10 were a lethal one-two punch on the battlefield of North Africa, Sicily, and Southern Italy from 1942 to 1944.

Notes

[1]Robert S. Cameron, *Mobility, Shock, and Firepower: The Emergence of the U.S. Army's Armor Branch, 1917-1945*, U.S. Army Center of Military History, Washington, D.C, p. 405, 2008.

[2]Ibid.

[3]*Wikipedia*, "3-Inch Gun M1918," available online at *http://en.wikipedia.org/wiki/3-inch_Gun_M1918.*

[4]*Wikipedia*, "M10 Tank Destroyer," available online at *http://en.wikipedia.org/wiki/M10/Wolverine.*

[5]*Wikipedia*, "M4 Sherman," available online at *http://wikipedia.org/wiki/M4_Sherman.*

[6]*Mobility, Shock, and Firepower: The Emergence of the U.S. Army's Armor Branch, 1917-1945*, p. 462.

[7]*Wikipedia*, "M10 Tank Destroyer."

[8]*Mobility, Shock and Firepower, The Emergence of the U.S. Army's Armor Branch, 1917-1945*, p. 463.

of Tigers.[5] The increased frequency of armored battles generated interest in increasing the M4's firepower; some M4 variants were fielded with 76mm guns, but the potential value of this weapon was partially nullified by the extensive muzzle blast and smoke that surrounded its discharge, thereby identifying the tank's position.[6]

The Slight Difference

The M10 main gun is a converted M1918 coastal-defense, 3-inch antiaircraft gun

The crew of an M26A3 tank from the 14th Battalion, 9th Armored Division, awaits attack orders in a field on the outskirts of Vettweiss, Germany, 1 March 1945.

mounted on an "M4A2 chassis and replaced the circular turret with a pentagonal version."[7] Although slightly larger than the M4's 75mm main gun, the 3-inch main gun on the M10 performed only slightly better on the battlefield in North Africa, not to mention that the speed doctrine producers were expecting from a tank destroyer was disappointing.

During the battles of Normandy, European theater commanders wanted a tank with a larger caliber weapon that could kill another tank; specifically, the Pan-

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The Soviet FST-2 and the Russian T-95:

The New Russian Tank Generation Coming into Focus

by James M. Warford

"The Soviets have achieved a technical development at the tactical level of war which has strategic implications. We haven't seen anything like that in Europe since the advent of tactical nuclear weapons."[1]

General Donn A. Starry (1988)

In April 1988, *Newsweek* and the *Daily Telegraph* published articles on a new Soviet tank, which was erroneously labeled "FST-1."[2] They described this new tank as a "tank in shining armor" and a "slimline Soviet tank that holds bad news for NATO." Accompanying drawings showed a revolutionary tank design with an elevated overhead main gun housed in a very small turret. Additional tank details included a new 135mm main gun, a 2-man tank crew positioned in a hull protected by thick advanced frontal armor, and an array of sophisticated electronic devices, including a counter-optics blinding weap-

on. While other reports claimed this new tank may have entered production as early as 1988, these two articles, citing the Secretary of Defense's Defense Science Board, identified the likely start of production in the 1993 to 1995 timeframe.[3]

While the collapse of the Soviet Union certainly derailed any planned production and fielding dates for this new tank, published reports since that collapse, some only available very recently, confirm that the mysterious tank labeled the FST-1 in 1988 was much more than urban legend. In fact, a still newer tank called the T-95, directly descended from the tank described as "bad news for NATO" in 1988, is about to make its appearance as the new centerpiece of the Russian army.[4]

Future Soviet Tank

The term "future Soviet tank (FST)," was originally used by NATO to describe the tank that was expected to follow the

newly identified (at the time) M1983/T-80B, which the Group of Soviet Forces Germany (GSFG) first identified in 1983. Interestingly enough, the T-80B was originally designated as the next Soviet tank (NST) prior to its arrival at the GSFG. The NST was expected to be a revolutionary design; however, it turned out to be an evolutionary development of its predecessors.

Over the years, the follow-on FST designation grew to include more than a single tank or tank design. Soon, two new NATO designations were added: FST-1 and FST-2. Within NATO, the designation "FST-1" actually referred to a level of evolutionary technology incorporated into specific Soviet tank types. That level of technology is now known to be embodied in both the T-80U and T-72B tanks. The FST-2, on the other hand, truly reflected something new. In 1988, the descriptions of the tank, provided by the

"The term 'future Soviet tank (FST),' was originally used by NATO to describe the tank that was expected to follow the newly identified (at the time) M1983/T-80B, which the Group of Soviet Forces Germany (GSFG) first identified in 1983. Interestingly enough, the T-80B was originally designated as the next Soviet tank (NST) prior to its arrival at the GSFG. The NST was expected to be a revolutionary design; however, it turned out to be an evolutionary development of its predecessors."

"In the past few years, however, there appears to be some life in Russia's tank business. The continued significant sale of T-90S 'Bishma' tanks to India, as well as new sales of the T-90SA tank to Algeria (finalized in 2006), signal the tank situation in Russia is improving. Also in 2006, the Russian army received 31 new T-90 tanks and the numbers of upgraded T-72 tanks are on the rise."

press, simply mislabeled the revolutionary new tank (and its technology), which was actually known as "FST-2." The impact of the FST-2 on NATO and the U.S. Army, in particular, was huge. The threat presented by this new tank was significant enough to make it the primary consideration in the decision to fund and develop depleted uranium armor for the M1A1 tank.

The Revolutionary FST-2

During the 1980s, a 3-way Soviet tank development project was initiated to develop a new tank that would represent a "quantum leap" in tank technology. The project involved three different and competing Soviet tank design bureaus: OKMO (Spetsmash) at Leningrad/Saint Petersburg; Morozov (KMDB) at Kharkov, Ukraine; and Kartsev-Venediktov (Uralvagonzavod) at Nizhny Tagil. This 3-way development project was known as "Molot" (Hammer).

The OKMO (Spetsmash) design bureau was involved in this project even though its associated tank plant had been shut down in 1991. The effort focused on a 2-man tank design with the crew in the center of the hull, behind the powerpack, which was positioned in front of the hull. The main gun, which was fed by an automatic loader, was mounted in a very small unmanned turret positioned behind the crew compartment. While the size of the main gun has not been confirmed, it is likely that the well-known 125mm smoothbore gun would have been used, along with thermal night sights. The composition of the tank's armor protection is also

not known, but published information reports suggest that the hull front was protected by thick advanced armor, as well as reactive armor. Reportedly, this 2-man tank design advanced to the prototype stage and was tested in the mid-1990s, but was never produced.

The former Soviet, now Ukrainian Morozov, design bureau was the first to suggest the development of a truly new tank. Known as "Object 477," the Morozov tank has been the subject of intense speculation and certainly played a greater role than that of its competition from Leningrad/Saint Petersburg. In fact, most of the available information refers to Object 477 as the Molot without mention of the 3-way tank development project. Work on the Object 477 began at the Kharkov tank plant during the 1976 to 1981 timeframe with the initial design completed in 1984. The design focused on a 3-man crew with the driver centered in the hull and the tank commander and gunner positioned on either side, below the elevated overhead main gun. The hatches used by the commander and gunner were just slightly above the hull deck. This crew arrangement was similar to that used by the U.S. M60A2 tank.

Object 477 mounted an impressive 152-mm main gun, a new advanced fire control system, and a new self-defense system called "Shater" (tent). The Shater system was the direct predecessor to the well-known Russian (present-day) Arena self-defense system. The tank was powered by a 1200 horsepower diesel engine and was fitted with advanced armor protection of unknown composition. Prototypes

of Object 477 were reportedly built in 1987 and testing was almost complete by 1999.

According to published Russian reports, Object 477 was overly complicated and really had no future. Specifically identified was the length of travel required for each extremely long 152mm main gun round as it moved through the tank's automatic loading cycle. The design also failed to solve the critically important requirement to separate the onboard main gun ammunition supply from the tank's crew. This design feature is characteristic of most modern Western tanks and, in many ways, defines the current tank generation.

At the time, the Soviet plan also included developing a standardized tracked chassis that would be used for the new tank, as well as self-propelled artillery, surface-to-air missile systems, tactical surface-to-surface missile systems, and engineering vehicles. Finally, while no photographs of Object 477 have been published, one or two photographs have appeared showing a little-known Morozov tank prototype, known as "Object 450," which is a small tank with its crew positioned in front of the hull. The main gun is mounted in a very small unmanned turret. While there is no confirmed connection between Object 450 and Object 477 Molot, it does provide a glimpse of what the Morozov design bureau had in mind.

At this point, the status of Object 477 is unknown. It is unlikely, however, that this modern design has simply faded away. To remain competitive with its Russian neighbors, Ukraine (and the Morozov design bureau) has surely been working on a new tank of its own. In some cases, Ukraine competes directly with Russia on the international arms market; in other cases, both countries provide tanks to different adversaries. For example, Russia sold T-90S tanks to India while Ukraine sold T-80UD tanks to Pakistan. A very likely scenario will show continuing tank upgrade, export sale, and design competition between Russia and Ukraine into the foreseeable future.

Post-Soviet Russia

The years following the collapse of the Soviet Union can be characterized by the incredible turmoil forced on the Russian defense establishment. Initiatives labeled as "successful economic reforms," stripped away much of Russia's tank de-

velopment and production capabilities. To make matters worse, government orders for tanks came to a halt and factory workers who continued to work did so without pay.

Published reports also confirmed that the Russian defense industry had problems producing and delivering tank main guns, mass producing 125mm main gun ammunition, and providing modern electronics and optics for tanks. An example of this poor capability is confirmed by the press-service of the French company, Thales, which finalized a contract with Russian officials to supply around 100 thermal vision cameras (the Catherine FC model) for installation on Russia's "newest T-90 tanks."

For a period of years, Russia's surviving tank development and production efforts refocused toward developing and selling upgraded packages for existing tanks and on very limited production of new tanks. In the past few years, however, there appears to be some life in Russia's tank business. The continued significant sale of T-90S "Bishma" tanks to India, as well as new sales of the T-90SA tank to Algeria (finalized in 2006), signal the tank situation in Russia is improving. Also in 2006, the Russian army received 31 new T-90 tanks and the numbers of upgraded T-72 tanks are on the rise.

While many difficulties remain for Russia's army and particularly its tanks, including its continued reliance on outdated 125mm 3BM42 armor-piercing, fin-stabilized discarding sabot (APFSDS) ammunition, a very successful operation against the Georgian army and its Israeli-upgraded T-72AV SIM-1 tanks, in August 2008, confirms that all is not lost for the Russians. In a manner befitting a skilled magician, the Russian army has proudly paraded its latest evolutionary (newest in-service) T-90A main battle tank (MBT), during 2008 and 2009 victory parades in Red Square, while keeping a much larger prize securely hidden. Although not seen during these two important parades, it appears that the Russians may have decided that the time has come for the world to finally see their revolutionary new tank — the T-95.
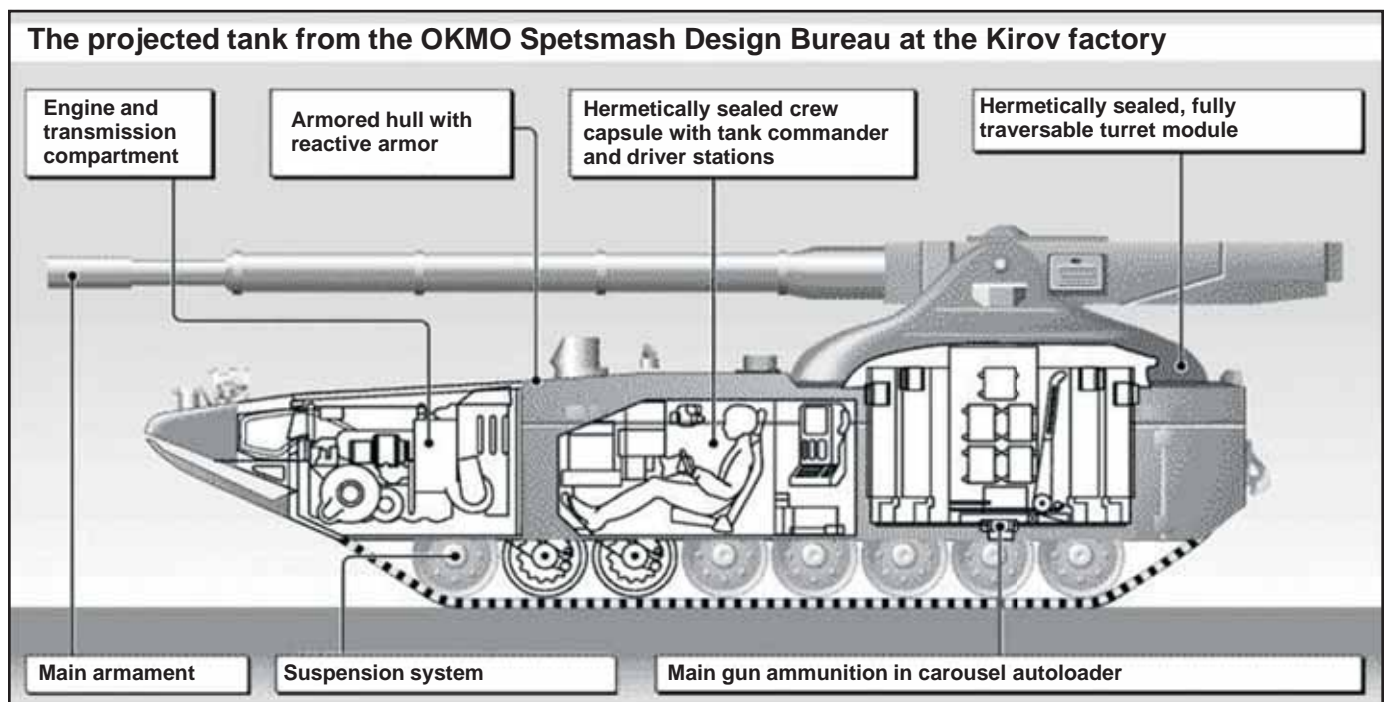
The Russian T-95

"The tank will have a running gear, a power unit, armaments and systems of fire control, target identification and reconnaissance that are absolutely new."[5]

— Nikolai Makarov, General of the Army and Russian Deputy Defense Minister

The new tank design from the Kartsev-Venediktov (Uralvagonzavod) design bureau, originally part of the 3-way tank development project during the 1980s, ap-

pears to be the sole survivor of the defense establishment turmoil in Russia. First discussed in the defense-related press in 1995, the "revolutionary" new tank design was fitted with an elevated overhead main gun "with a caliber as large as 135mm to 140mm" in a small unmanned turret.[6] The tank crew was positioned at the front of the hull with the main gun and ammunition at the vehicle's center. The tank's powerpack was positioned at the vehicle's rear.

A Russian news article in *IZVESTIYA* (2 September 1995) quoted the Russian Chairman of the State Committee for the Defense Sectors of Industry as saying, "the development of a fundamentally new tank will be completed within a couple of years."[7] Reports at the time said the new tank may be designated the "T-95," including unconfirmed reports that the Russian delegation participating in the 1995 IDEX Defense Exhibition in Abu Dhabi, admitted there was a new tank program underway called the "T-95." Other sources, however, claimed that the designation of the new tank was still unconfirmed, resulting in a variety of labels being used for the tank in the West. One name stuck with the new tank for a period of time, the "Nizhny Tagil Tank," which referred to the location of the tank's design bureau.

The projected tank from the OKMO Spetsmash Design Bureau at the Kirov factory

Engine and transmission compartment

Armored hull with reactive armor

Hermetically sealed crew capsule with tank commander and driver stations

Hermetically sealed, fully traversable turret module

Main armament

Suspension system

Main gun ammunition in carousel autoloader

The Russian T-95, referred to as a "tank of landmark design" in *NEZAVISIMAYA GAZETA* in 2000, is finally a reality.[8] With developmental roots going all the way back to the hot days of the Cold War in the 1980s, this first truly new and revolutionary Russian tank, since the T-64, was expected to make its first public appearance in 2009. Some sources have reported that the T-95 was originally planned to enter service as early as 1994, but a lack of funding kept the new tank in the shadows. According to Defense Minister Igor Sergeev, in reports from various Russian news sources, in March 2000, Russia now has "a new T-95 tank."

While many of the T-95's specific characteristics remain classified, the available information provides enough detail to get a virtual glimpse of the new tank. The highest priority of the new T-95 design is crew protection. Reportedly, the level of protection is high enough to protect the crew from a hit from virtually any antitank weapon from any angle. This is possible due to the 3-man crew being positioned in the hull, inside an armored "pod." This marks a significant step forward for Soviet/Russian tank design, which has lagged behind Western and NATO tanks in this critical area for decades.

The T-95 weighs about 50 tons, which keeps it in the same weight class as the latest versions of fielded and well-known Russian and Ukrainian tanks such as the T-90S and the T-80UD. The key difference is that for about the same weight, the T-95 has a much lower silhouette than more conventional Soviet/Russian tanks. The lower silhouette is achieved by using a new small unmanned turret on the T-95, which not only increases the overall survivability of the tank, but allows the saved weight to be added as increased armor to protect the hull and tank crew.

One of the many characteristics of the tank's hull, which ties the development of the T-95 to Cold War Ukrainian Object 477 Molot, is the new Russian self-propelled gun (SPG) prototype, which reportedly uses the same hull as the T-95. The new SPG is a development of the well-known 152mm 2S19, which has gone through the unprecedented modification of being fitted with two 152mm guns. This modified 2S19 may be the first in a planned series of new armored vehicles based on the new T-95's hull.

Perhaps the next highest design priority of the T-95 is its firepower. The T-95 is fitted with a 152mm smoothbore main gun, making it the most powerfully armed tank in the world. This gun, with develop-

mental roots going back to the early days of the Cold War during the late 1950s, may have been originally intended for a Soviet heavy tank as a rifled gun. It appears to have been brought back to life in the 1980s as a smoothbore gun that reportedly can fire both conventional tank ammunition, such as APFSDS and high explosive antitank (HEAT), as well as antitank guided missiles (ATGMs). While the ability to fire ATGMs through the main gun is not new, firing a large missile with the same diameter as the U.S. tube-launched, optically tracked, wire-guided (TOW)-2 ATGM is something very new and represents a significant new capability.

While some of the early information surrounding the T-95 included reports of a 135mm to 140mm main gun, photographs have recently appeared confirming developmental work on the 152mm main gun involving a heavily modified T-80B MBT. Additionally, a defining characteristic of Soviet/Russian tanks, the carousel auto-loading system, reportedly is not used on the T-95. Since the crew is safely separated from the gun and its ammunition (a first for Soviet/Russian tanks), a new automatic loading system is used. The fire-control system used by the T-95 is reportedly very advanced and consists of a "multichannel" system, including optics, thermal night sights, infrared, and laser and radar systems.

The exact timing of the T-95's unveiling is yet to be determined. Sources in 2007 reported that the new tank was going through final testing in 2007 and 2008, with production scheduled to start in 2009. Sources last year, however, reported that the Russian army would start receiving the T-95 after 2010.[9] According to the head of the Russian Federal Service for Defense Contracts, Sergei Mayev, "T-72s and T-80s will not be modernized and will be eventually replaced by new generation tanks (T-95s), which will start entering service after 2010. The model's future is brilliant; it has high firepower, is armed with guided missiles with a range of 5 to 7 kilometers, and has great endurance and nontraditional means of defense."[10] He also added that the crew will be able to operate for 24 hours without leaving the tank.

With several years of development and testing now complete, and victory in Georgia still fresh in the minds of the Russian army and military observers in the West, the stage is set and the time is right to show off the next revolution in Russian tank design. While the potential impact of the new T-95 is yet to be determined,

the impact of the last Soviet revolutionary tank, the T-64, was huge. When it was first shown to the world in September 1976, U.S. and NATO forces were forced into dangerous positions of playing catch up. According to *King of the Killing Zone*, by Orr Kelly, "the fact was that the Soviets had, as one general officer later put it, 'turned inside us.' They had managed to field a tank (the T-64), which, despite its shortcomings, was ahead of anything in the West."[11]

Official Russian statements regarding the T-95 clearly indicate that a new revolution is on the way. The T-95 will be the revolutionary new centerpiece of the Russian army. As this article goes to press, new information surfaced regarding the T-95. Unconfirmed reports indicate that the Russians may be redesigning the T-95 program to fit into a new structured brigade program incorporating a family of new common component vehicles.

Notes

[1]Mott, Gordon, and Barry, "A Tank in Shining Armor," *Newsweek*, 11 April 1988; and Adela Gooch, "Slim-line Soviet Tank Holds Bad News for NATO," *Daily Telegraph*, 11 April 1988.

[2]Ibid.

[3]Ibid.

[4]Ibid.

[5]"Russian Army to Get Essentially New Tank in 2009" (author not cited), *Interfax*, 22 December 2007.

[6]Christopher F. Foss, "Revolutionary Russian MBT Prototype Built," *Jane's Defense Weekly*, 28 January 1995.

[7]*IZVESTIYA*, 2 September 1995 (no further information available).

[8]"Russia Builds Tank of Landmark Design" (author not cited), *NEZAVISIMAYA GAZETA*, 17 March 2000.

[9]"Russia's New Main Battle Tank to Enter Service After 2010" (author not cited), *Novosti*, 8 May 2008.

[10]Ibid.

[11]Orr Kelly, *King of the Killing Zone*, W.W. Norton Company, NY, 1989, p. 21.

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Logistics Small-Arms Gunnery: Reaching the Band of Excellence

by Lieutenant Colonel David Wilson

Logistic assets remain the most vulnerable platforms on the battlefield. A great amount of effort has gone into combat logistics patrol readiness in the form of pre-combat checks (PCCs) and pre-combat inspections (PCIs); however, not enough effort has gone into setting conditions for these logistics formations to move in and out of contact with authority, hit enemy targets, mark and bypass obstacles, and report what transpires along routes.

Recently, III Corps leaders echoed across the corps that these capabilities are essential for our formations, and although U.S. Field Manual (FM 4-01.45), *Multi-Service Tactics, Techniques, and Procedures for Tactical Convoy Operations* scratches the surface in this area, it does not dictate the means or ends that establish the baseline for weapons engagement while on the move or stationary.[1]

Combat logistics convoys (CLCs) that traverse main and alternate supply routes (MSR/ASR) in the brigade combat team's battlespace, conducting sustainment replenishment operations (SRO) and combat replenishment operations (CRO), often engage in missions that ultimately result in movement to contact. Actions on contact decide the difference between life and death, as well as mission success or failure. Conditions for success must be set long before logistics soldiers and platforms traverse the battlespace.

The key to success is logistics small-arms gunnery, which is often the necessity of two evils, as standards in training commission (STRAC) allocation for ammunition has not kept pace with combat service support and combat support (CSS/CS) elements in the formation. The allocations in Chapter 9, Department of the Army Pamphlet (DA Pam) 350-38, *Standards in Training Commission*, dictate 486 rounds per year for CSS/CS units for qualification and familiarization (see Figure 1), but fails to address requirements for CSS/CS units to execute a small-arms gunnery program, which includes a culminating convoy live fire and qualification requirements for mounted crew-served qualification from gun truck platforms.[2]

The leaders of 121st Brigade Support Battalion (BSB) took a holistic approach to this problem as they examined requirements to ensure all soldiers would reach the band of excellence for weapons qualification and convoy live fire. The model used was a small-arms gunnery model that included tables I through XII (see Figure 2), which culminated with a mounted live fire. Tables I through IV focused on basic

M16/M4 Qualification (FM 3-22.9)			AA33/A063	AC	RC
Event	**Type**	**DODIC**			
Preliminary Marksmanship Training	EST/LMTS			4	2
Iron Sight Zero	Ball	18		2	1
Iron Sight Practice Record	Ball	40		2	1
Iron Sight Record	Ball	40		2	1
Subtotal				**196**	**98**
NBC Practice	Ball or EST	20		2	1
NBC Record	Ball or EST	20		2	1
Unassisted Night Practice	**Ball/Tracer or EST**	20		2	1
Unassisted Night Record	**Ball/Tracer or EST**	20		2	1
Subtotal				**160**	**80**
Squad/Platoon LFX	Ball	130		1	0
Total				**486**	**178**

Figure 1. M16/M4 Qualification[3]

and advanced rifle marksmanship and served as the basis for continuance with the remaining tables. Unit leaders must ensure the disciplines of the first four tables are enforced and ensure they seek creative ways to reinforce using DICE, engagement skills trainer (EST) 2000, multipurpose arcade combat simulator (MACS), location of miss and hit (LO-MAH) devices, and target acquisition and designation sights (TADS).

Using this baseline, we crewed the battalion's organic vehicles and ensured we had all required weapons mounts for logistics platforms such as fuelers; palletized load systems (PLS); 5-ton trucks; high, mobility, multipurpose wheeled vehicles (HMMWVs); and wreckers. This process allowed us to place soldiers in vehicle seats from within the unit. Step two of this process was to ensure we had enough combat lifesavers (CLS) for each vehicle, as well as crew-served weapons for each platform equipped with a weapons mount. This approach allowed us to place CLS-trained personnel on every platform and ensure we trained applicable personnel on crew-served weapons within the battalion.

To sustain today's expeditionary Army, logisticians must possess the ability to control resources that were unimaginable 10 years ago. On today's battlefield, soldiers (in some cases at the sergeant level) are controlling air weapons teams and close air support (CAS); using full-motion video; receiving unmanned aerial vehicle (UAV) feeds; and participating in counter-IED work groups for route-clearance assets. Convoy live-fire exercises, executed for our logistics soldiers, must provide realistic venues for soldiers to use assets as they would in battle.

To address this issue, the 121st BSB partnered with 5th Brigade, 1st Army, to run a quality counter-IED and convoy lane training with realistic scenarios, forcing junior leaders to make split-second decisions, which could mean the difference between life and death. The training days included 2 days for counter-IED and 3 days for lanes training, with two iterations of each, that encompassed a dry run and a live run. The trainers took the most recent tactics, techniques, and procedures (TTP) from theater, as well as the Center for Army Lessons Learned, and incorporated them into our training deck. This allowed crews to become familiar with the most up-to-date TTP during counter-IED and convoy operations.

The joint training allowed the battalion to proofread its 121st BSB tactical convoy commander's guide, which was developed to assist small-unit leaders in planning, preparing, and executing secure movement of sustainment platforms from one location to the next. The guide also laid out the tempo for command and control, administrative logistics, medical evacuation, and convoy operations, as well as actions on contact, which included overpass drill, consolidation, and reorganization. This took the guesswork out

Convoy Table	Task	IWLT	LTA	STX	Remarks
I	PMI		DA		List date completed
II	Zeroing and Grouping		101		List date completed
III	Qualification		102		List date completed
IV	NBC/Night/Buddy Team LFX/Reflexive		101, 102		Working use of RG 101, 102, 122, 310, 307, 311
V	Blank engagement from stationary vehicle	HV			
VI	Live Engagement from Stationary Vehicle				Ring Mounts/Ammo/Ranges
VII	Dry and Blank from Single Moving Vehicle	HV			List date completed
VIII	Live Fire from Single Moving Vehicle				Ring Mounts/Ammo/Ranges
IX	Convoy Operations on a Blank Table	DA		NTC STX	List date completed
X	Convoy Operations on a Live Table				Ring Mounts/Ammo/Range
XI	Platoon Convoy Operations on a Blank Table	DA		NTC STX	List date completed
XII	Platoon Convoy Operations on a Live Table				Ring Mounts/Ammo/Range Availability

Figure 2. Logistics Small-Arms Gunnery Model

of planning and preparing for an operation and even provided leaders with sample PCCs, backward planning, and mission brief. The culmination of training at home station enabled the battalion to adjust its tactical convoy commander's guide and scope our sergeant's time training to shore up weak areas identified during home station collective training.

We continued to work through certain issues prior to mission rehearsal exercise (MRE), which included mounted crew-served weapons gunnery as a confidence builder for soldiers firing from tops of vehicles, as well as firing on the move. The battalion quickly prepared newly arrived soldiers for small-arms gunnery by scheduling a preliminary marksmanship instruction (PMI) as part of unit in-processing, followed up by the EST 2000, to gauge the success of the PMI prior to soldiers going to gunnery.

Whenever possible, we ensured every soldier went to the range with a sergeant or a battle-rostered squad, which ensured the applicable coaching required for substandard performance would be readily available for soldiers requiring assistance. The command sergeant major and battalion commander assembled a group of former drill sergeants, which were skilled in teaching basic rifle marksmanship to trainees, to assist soldiers in reaching the

band of excellence during training. Bringing together this group was necessary as we lacked school-trained small-arms master marksmen and a battalion small-arms master gunner.

This core group had an immediate impact on the performance of our logistics soldiers during small-arms gunnery and enabled our units to attain high qualification standards, which resulted in expert firers improving scores by 20 percent and sharp shooters by 35 percent. These results enabled us to realize that the goal in weapons qualification should not be about passing the test — it should be about mastering the weapon. We instantly understood that if soldiers are properly trained, techniques become muscle memory, along with reinforcing events, which are nested in the small-arms gunnery tables used by the Iron Hammer battalion.

The training methodology goes beyond qualification, it motivates noncommissioned officers to become subject-matter experts and coaches to our soldiers, which encourages soldiers to become marksmen and master their weapons. This is extremely important as our marksmanship training becomes more combat focused to address today's battlefield. A program that includes target discrimination, close quarters marksmanship, reflexive fire, and mounted and dismount-

ed crew-served weapons firing sets the conditions for logistics warriors to be prepared for any situation they may encounter along a route while executing operations in support of maneuver forces.

Notes

[1]Headquarters (HQ), Department of the Army (DA), U.S. Army Field Manual (FM) 4-01.45, *Multi-Service Tactics, Techniques, and Procedures for Tactical Convoy Operations,* January 2009.

[2]HQ, DA Pamphlet 350-38, *Standards in Training Commission,* 13 May 2009.

[3]Ibid., Table 9-2.

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"To sustain today's expeditionary Army, logisticians must possess the ability to control resources that were unimaginable 10 years ago. On today's battlefield, soldiers (in some cases at the sergeant level) are controlling air weapons teams and close air support (CAS); using full-motion video; receiving unmanned aerial vehicle (UAV) feeds; and participating in counter-IED work groups for route-clearance assets. Convoy live-fire exercises, executed for our logistics soldiers, must provide realistic venues for soldiers to use assets as they would in battle."

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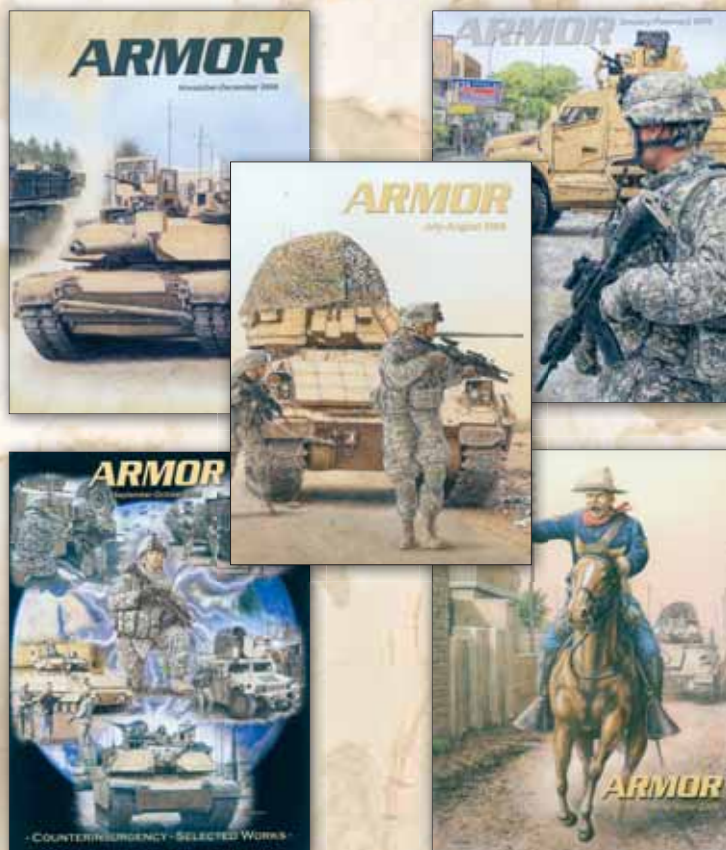
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Evolution of the Plow: Supporting the IED Fight

by Major William F. Coryell

"Conflict in the future will slide up and down a scale, both in scope or scale and in lethality. And we have to procure the kinds of things that give us — the kinds of equipment and weapons that give us the maximum flexibility, across the widest range of that spectrum of conflict."[1]

— Secretary Robert Gates

Across the Army, young soldiers are asking about the rusting hunk of metal in the corner of the motor pool and why they have to inventory its components. Inevitably, a young sergeant responds, "it's an old piece of equipment they used to find minefields, but we don't do that anymore. We look for IEDs, but we don't use plows or rollers because they tear up roads."

Maneuvering along roads searching for improvised explosive devices (IEDs) is a tedious and monotonous task. Nevertheless, commanders will, and should, continue to task armor crewmen to conduct counter IED-clearing operations because the M1 Abrams is the most survivable vehicle on the battlefield and has the best trained crews. Unlike the Buffalo or mine resistant ambush protected (MRAP) vehicle, tanks have the ability to maneuver in areas where direct contact is likely and transition to offensive operations once enemy contact is made. The ability of the M1 Abrams to absorb initial contact and then maneuver to destroy the enemy is unmatched. Yet, the full power of the M1 Abrams is not being used on today's battlefield.

The glaring deficiency of the M1 Abrams in urban combat is its lack of an organic IED interrogation device. An IED interrogation device is nothing more than an adaptation of the plow and roller for the current generation of warfare. The armor community must expand its role in counterinsurgency operations and assist the military by honing the experience of armor crewmen and the survivability of the M1 Abrams. The armor community must also adapt to the current and future operating environment and use its tanks, as Secretary Gates said, to "give us the maximum flexibility, across the widest range of that spectrum of conflict."[2]

IEDs are the most deadly weapon on today's battlefield and our enemies continue to refine their lethality. It is common knowledge that to defeat IEDs, we must defeat IED cells. However, this fact does not mitigate the need for counter-IED clearing operations, and during high-intensity operations, establishing the point of penetration to gain and maintain freedom of maneuver. While scientists and developers search for technological systems that neutralize IEDs, we must mount up and hunt them. We cannot overcomplicate the process: "Red 1, Black 6, employ your interrogation tank and report."

Prior to Operation Iraqi Freedom, mechanized units trained tirelessly on conducting breaching operations. Tanks were expected to use their organic equipment to find minefields and, if possible, create lanes to maintain the freedom of maneuver for follow-on units. The open landscape of the desert floor allowed us to use these organic assets. The terrain changed from open desert to asphalt roads and minefields are now IEDs; however, the need for freedom of maneuver and/or the establishment of a point of penetration has not changed.

IED warfare has created an insatiable requirement for counter-IED assets. Fitting the Abrams with an organic IED interrogation device will provide unit leaders with multiple organic IED-detection devices, thus providing unit commanders with the ability to take greater ownership of the counter-IED fight. These organic assets reduce risks, when units are dispersed across large areas, and allow commanders the ability to plan for counter-IED tasks without relying on higher headquarters to provide resources such as explosive ordnance detachments (EOD).

EOD and engineer route-clearing teams can quickly become overwhelmed by events on the battlefield. Consequently, suspected IEDs can be cordoned for hours before they are investigated by a specialized team. This delay may lead to unconventional and rudimentary investigation techniques by troops on the ground. Soldiers will not leave a suspected IED, but it just isn't feasible to cordon every suspected piece of trash or broken curb. Every soldier is a sensor and our armor crewman need equipment to properly conduct these mission types. Not only is this requirement needed for routine operations, but also for high-intensity combat operations.

The enemy incorporates IEDs into its defensive scheme of maneuver and conducts overwatch with rocket-propelled grenade (RPG) and machine gun positions. Buffalo and MRAP vehicles are extremely vulnerable to direct fire and do not have the ability to transition to offensive operations. A tank can absorb the initial contact, engage and destroy overwatch positions, and, with an interrogation device, confirm or deny the disposition of suspected IEDs.

The bottom line: we train armor crewmen to complete missions with the equipment they have and not the equipment they want. It is not the fabric of an armor crewman to whine about equipment — they complete missions. Unfortunately, the resulting attitude is that armor crewmen believe an IED clearance mission entails, "drive down the road and if something blows up on you, you are safe inside the tank and should be all right." We owe our soldiers more than that.

Notes

[1]U.S. Department of Defense, Office of the Assistant Secretary of Defense, *News Transcript*, Press Conference with Secretary Gates and Admiral Mullen, online at *http://www.defense.gov/Transcripts/Transcript.aspx?TranscriptID=4435,* 18 June 2009.

[2]Ibid.

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