MIPB

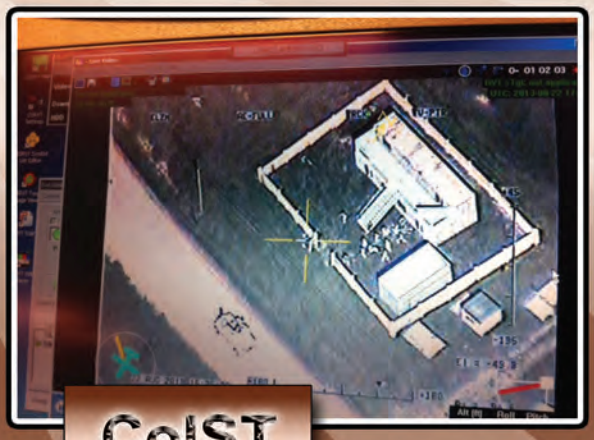
Military Intelligence Professional Bulletin

July - September 2013 PB 34-13-3

Regionally Aligned Forces

Biometrics

Forensics



CoIST

FROM THE EDITOR

We end 2013 with articles that look to the future of our Army. Captains Murray and Cabic write about integrating the Shadow UAS into CoIST training to train the Intelligence Warfighting Function at the company level with important questions for future operations. Captain Diebold discusses the value and the challenges of CoIST predeployment training for separate brigades and National Guard units.

As the Army moves forward with its Regionally Aligned Forces (RAF) initiative Colonel Frickenschmidt, ACoS, ICoE, presents the case for MI professionals to develop a baseline knowledge of country specific and regional issues that impact their potential areas of operation. His first, in a series, of articles is on Central Asia, specifically Khazakhstan and its nuclear future. Coincident with this is an article pushed out by TRADOC by GEN Cone and Captain Mohundro on the concept of strategic landpower for the company commander.

ICoE's TCM Biometrics and Forensics updates us and outlines future endeavors in the areas of site exploitation, biometrics in Identity Intelligence, and foreign media monitoring. George Seffers, SIGNAL, details a prototype system that compresses surveillance imagery without losing the quality of the data in an effort to more effectively manage the large amount of data imagery presents.

Lieutenant Colonel Frost, currently at HRC, presents an MI officer's professional development plan geared to meeting the needs of a down sizing Army while maintaining officer quality.

We have included the CG's Reading list on the inside back cover. Abstracts of each of the selections can be found at the MI Library on IKN.

Important Notice: As directed by the CG, ICoE (see the CG's *Always Out Front* column, page 2, column 2), MIPB is undergoing some changes that will improve this professional bulletin over the course of the upcoming year. We have evaluated our effectiveness and identified some aspects of this bulletin that will be improved to ensure we discuss the most important topics to our Army MI force, broadcast the most important intelligence strategic messages, and use MIPB as a driver for training and force modernization developments.

Some of the changes are: reintroducing MIPB themes, soliciting specific articles from senior leadership and across the MI Corps, changing some of our recurring departments and adding new ones. You will also see a change in the current MIPB format for easier reading and added visual appeal.

Articles from the field will always be very important to the success of MIPB as a professional bulletin. Please continue to submit them. Even though the topic of your article may not coincide with an issue's theme do not hesitate to send it to me. Most issues will contain theme articles as well as articles on other topics. Your thoughts and lessons learned (from the field) are invaluable.

As noted in CG Ashley's column the following themes and suspenses are established:

- January-March 2014, *Emerging Intelligence Capabilities*, This issue is closed for article submissions.
- April-June 2014, *Intelligence Training and Leader Development*, deadline for article submissions is 14 March 2014.

Due to a current lack of articles and in order to reenergize our publication and implement this new method of operation beginning the January-March 2014 issue we will not publish the October-December 2013 issue. For those who have submitted articles for the October–December issue, you can expect to see them in the January-March or April-June issues. Please call or email me with any questions regarding your article. We appreciate your cooperation as we undertake this exciting new effort to upgrade MIPB and serve you better.

Sterilla A. Smith
Editor

MIPB will not publish an October-December 2013 issue.

MILITARY INTELLIGENCE

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Purpose: The U.S. Army Intelligence Center of Excellence (USAICoE) publishes the **Military Intelligence Professional Bulletin** (**MIPB**) quarterly under the provisions of **AR 25-30**. **MIPB** presents information designed to keep intelligence professionals informed of current and emerging developments within the field and provides an open forum in which ideas; concepts; tactics, techniques, and procedures; historical perspectives; problems and solutions, etc., can be exchanged and discussed for purposes of professional development.

Disclaimer: Views expressed are those of the authors and not those of the Department of Defense or its elements.The contents do not necessarily reflect official U.S. Army positions and do not change or supersede information in any other U.S. Army publications.

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FEATURES

Departments

ALWAYS OUT FRONT

by Major General Robert P. Ashley
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We are fortunate to be able to print GEN Cone's and CPT Mohundro's paper, *"Strategic Landpower for the Company Commander: Leading the U.S. Army into the 21st Century,"* in this issue of the MIPB. I strongly recommend carefully reading the article on page 17. It is an important conceptual writing that captures the ongoing effort to transform from an "Army of Execution" to an "Army of Preparation." In the near future, it is worth taking some time to reflect on what has driven this transformation as we emerge from a decade of war and prepare our Army for future conflicts in an uncertain environment.

The past 12 years of combat operations has built an Army and institution focused on counterinsurgency operations in Iraq and Afghanistan. We can all be proud of the Army's accomplishments but need to carefully weigh the lessons learned as we move ahead. However, it is clear that today's Army is not optimized or balanced enough to meet the range of challenges presented by the current operational environment and the projections for the global operational environment through 2030. The experts believe that the composite of emerging threats, global trends, and regional friction will continue to result in rapid changes across the various regions, often causing varying degrees of instability. However, what will remain constant is that operational success or failure will ultimately depend on operations within the land domain where the Army serves as the key partner within the joint force.

This challenge coincides with growing fiscal austerity and other new realities. The Army views this challenge as a real opportunity to "rebalance our investments for the future" as opposed to a path to becoming less capable. There is some historical precedent to the Army's current situation, but there is no precedent to guide the many difficult decisions that are required to rebalance the force. We have to plan for the future with an Army that is more cost-effective, while allowing flexibility for an uncertain future. The Army must be increasingly expeditionary and effective within joint and multinational operations despite the challenges presented by a complex and changing environment. Additionally, we have to prudently invest in adaptive leaders and cyber and space capabilities as an integral part of mission command in future operations.

The investments we make in key technologies and research are key to building a smaller, more capable and adaptive Army. However, the centerpiece of our force will always remain the quality of our leadership training, which sets us apart from any other Army. Another key area to help rebalance the force and make these critical investments is the Campaign of Learning. The Campaign of Learning will leverage innovative ideas and guide emerging concepts, policies, and resourcing decisions. The overall effort will help the Army reach the most critical future goals by focusing on the Chief of Staff of the Army's strategic priorities:

- Adaptive Army leaders for a complex world.
- A globally responsive and regionally engaged Army.
- A ready and modern Army.
- Soldiers committed to our Army profession.
- The premier all-volunteer Army.

In my last column I briefly discussed the roadmap for Army Intelligence 2020 and Intelligence Center of Excellence (CoE) priorities for the upcoming year. The roadmap and Intelligence CoE priorities are based on the larger Army transformation discussed above. As complex and technical as the Army intelligence roadmap is, the most important aspect of our future depends on how well we do at investing in our people.

As I mentioned in the last issue, the mission of the Intelligence CoE during this transition is to develop and educate our Army's Intelligence Soldiers, civilians, and leaders as well as design, develop, and integrate intelligence capabilities, concepts, and

doctrine that support unified land operations in a joint, interagency, and multinational environment. I want to briefly discuss two simple but important aspects of our current efforts:

- Rededicating ourselves to becoming experts at the basic fundamentals of our profession.
- Further strengthening leadership skills and resiliency in our junior leaders at the lowest unit levels.

In order to contribute to building adaptive Army leaders for a complex world, we must return to the basics of intelligence. A football analogy would be how every year a football team gets back to the most fundamental skills by conducting team drills to improve "running, passing, blocking, and tackling." For intelligence professionals, the fundamental skills are synchronizing the overall intelligence process, planning requirements, and assessing collection (referred to as collection management in joint doctrine), executing intelligence operations, and conducting intelligence analysis. At the Intelligence CoE, we are reshaping our concepts, doctrine, leader development programs, institutional training and continuous learning products, and training simulations and technologies to support the focus on returning to our fundamental skills. One example is the revision and consolidation of our intelligence doctrinal publications (from 58 publications down to 27) as a part of Army Doctrine 2015. Another example is an increased emphasis to improve the analytic and writing skills of our intelligence force based on years of lessons learned collected about this key task.

One constant in Army operations over the past 238 years is that success comes from the initiative and dedication of our lowest tactical units. The best way to maintain this significant advantage is to carefully build adaptive, confident, resilient, and competent junior NCOs, warrant officers, and officers. This effort is much broader than just improving institutional training; the effort requires the participation of the entire MI Corps. We need to effectively engage with our Soldiers and build real connections, counsel and guide both their job performance and growth as leaders, ensure they feel that they are a part of the team, foster resiliency, and mentor them. One of our major contributions to the Army must be taking the time to "build" our subordinates and other junior Soldiers, teaching them about the Army professional and our culture.

As we move forward with transforming the Army and MI Corps, we will continue to reach out to the intelligence community to collect input/feedback. As part of the effort to support these goals, I am reenergizing our efforts with this professional bulletin. We are going to do a better job of using this publication as a timely forum for professional development, a driver of training and force modernization, and a means of strategic communications within the MI Corps. As part of a new approach, I am directing the themes for the next three issues of MIPB:

- January–March 2014, *Emerging Intelligence Capabilities*. By the time this is printed we anticipate the issue will be closed for article submissions.
- April–June 2014, *Intelligence Training and Leader Development*. The deadline for article submissions is 14 March 2014.
- July–September 2014, *INSCOM 2020*. The deadline for article submissions is 14 May 2014.

MIPB is your publication also, so we need you to submit articles throughout the year on the most critical issues for intelligence professionals and provide feedback on how we can continue to make MIPB better. I am confident that we will succeed in tackling the many complex issues we face through cooperation and "teamwork."

Always Out Front!

Lessons Learned: Integrating RQ-7B UAS Capabilities and CoIST Training into FORSCOM Pre-Deployment Training at No Cost

by Captain Clay Murray and Captain Michael Cabic

Introduction

At the Camp Shelby Joint Forces Training Center in Mississippi, deploying Army National Guard units are now getting intelligence training nested with counter-improvised explosive device (CIED) training. Pre-deployment CIED training starts at the First Army CIED Center of Excellence (CoE) which is operated by the 3-315th Engineer Battalion, 158th Infantry Brigade. In March 2013, the 3-315th introduced a complete Company Intelligence Support Team (CoIST) workstation to allow CoIST operators the opportunity to support their companies during CIED lanes training. With the installation of a CoIST workstation, commanders and Soldiers gain a clearer picture of the enemy which helps them accomplish their mission more safely.

It is the goal of this article to share best practices of how training support units around the Army can thoroughly and efficiently train the Intelligence Warfighting Function at the company level. From March to October 2013, 43 companies and battalion headquarters elements (3,614 Soldiers) used the CoIST workstation. The types of units ranged from Security Force Advise and Assist Teams, known as SFAATs, to Security Force (SECFOR) units, and route clearance units to CENTCOM Material Recovery Elements (CMRE) units. Over this last year, it became evident that there is much training value in integrating unmanned aerial systems (UAS) and CoIST operations into CIED training. In fact, with good coordination and planning this kind of combined training can be executed at no additional costs to all units involved.

Doctrinal Basis for the CoIST Workstation

At the CIED CoE, the CoIST workstation comes pre-built based on Training Circular 2-19.63, Company Intelligence Support Team, and recommendations listed in the Army CALL Handbooks 10-20 and 13-09, CoIST. Mentorship from First Army Observer Controller/Trainers (OC/Ts) is validated using Army doctrine publications and references such as FM 2-0 Intelligence, FM 2-01.3 Intelligence Preparation of the Battlefield, ADP 2-0 Intelligence, and ADP 3-0 Unified Land Operations, among others. OC/Ts stay current on trends in training through *milSuite* books, MISpace, and S3-XO Net which captures the latest best practices and lessons learned. Some of the most beneficial information, though, comes from after action review summaries published by the National Training Center and Joint Readiness Training Center.

CoIST Workstation Components

The workstation comes equipped with a One Station Remote Viewing Terminal (OSRVT), a Tactical Ground Reporting system, standard operating procedure (SOP) samples, blank patrol form templates, and poster-sized laminated Attack-the-Network tools such as a plot wheel, time-event chart, event matrix, association matrix, and link diagram chart. These tools allow the CoIST opera-

CoIST members (1151st En Co) using CoIST created products.

tors to immediately assess their operational environment (OE). The workstation also comes with a traditional map board with see-through overlays to show the current enemy situation. To further assist CoIST operators, more enemy information is detailed through an intelligence summary, a Be-On-the-Look-Out list, an intelligence collection plan, the commander's critical information requirements, and an acronym chart.

CoIST Workstation as a Force Multiplier

To allow CoIST operators to make use of all available assets, real-time aerial reconnaissance video from RQ-7B Shadows is piped into the workstation through the OSRVT. Live Shadow video of the convoy route is displayed on a 42-inch flat screen TV for enhanced viewing. Interestingly, it was discovered over the last year that a CoIST operator getting hands-on experience with live footage and real-time intelligence is rare; making the CIED CoE a critical training venue for the application of the CoIST concept and UAS integration.

1151st CoIST views live Shadow video downlinked from an OSRVT.

"UAS feed gives units patrol-overwatch. This is crucial for early warning of threats and is effectively a force multiplier," according to Sergeant First Class Jason Thomas, a senior CIED OC/T and the NCOIC of the CIED CoE. Intelligence teams are able to communicate with the UAS operator and the convoy patrol leader via VHF comms (or other organic system).

Captain Hunt Frazier is the former officer-in-charge (OIC) for the CIED Team at the 3-315th Engineer Battalion who ran the CIED CoE for nearly two years. During his tenure, Frazier remained enthusiastic about the synchronization of assets and making training more realistic. Frazier explained, "Having the live Shadow video and the CoIST workstation reinforces the fact that units need to utilize all the tools at their disposal. We show them a way of doing things that has worked for many units, but the big take away is how much it can help their operations and improve their mission success."

Given a complete workstation with live UAS overhead, CoIST operators are empowered to give a threat update brief to their commanders prior to starting any patrol. The CoIST threat brief explains the OE to the commander. Based on all the information pre-posted in the CoIST workstation, operators can quickly synthesize the information into a complete intelligence brief that describes terrain and weather effects, and the enemy forces. CoIST operators provide commanders and Soldiers specific indications and warning about IEDs, insurgent movements in the area, and threat organizations.

1-214 FA Bn CoIST studying Shadow imagery of an objective.

1151st CoIST displays current intel picture during mission pre-brief.

Not all convoys in theater are able to have UAS overwatch; however, integrating UAS into CIED training demonstrates to company and battalion leaders what assets may be available for them to request and how UAS can be utilized to support operations. "Camp Shelby is rich with training assets and resources, but units are unaware how easily things like RQ-7s and OSRVTs can be requested and used," according to Mr. Andres Abreu, the 3-315th Engineer Battalion CIED Integration Cell senior consultant from Booz Allen Hamilton.

The Shadows are owned and operated by the Mississippi Army National Guard (NG) UAS Regional Flight Center located at Camp Shelby. The center is federally funded and those funds are executed through the Mississippi Army NG. The primary mission of the center is to support NG units from 30 states and territories across the U.S., to include active duty units such as the 3rd Infantry, 10th Mountain, and 25th Infantry Divisions, as well as other units from Germany, Korea, and, Hawaii. While providing UAS support to First Army training is not the primary mission of the center, First Army is able to directly benefit from the live feeds over Camp Shelby. In fact, the center is most often able to integrate existing First Army training events into their already planned and programmed UAS missions at no additional cost to the center.

"Essentially, it is a mutually beneficial and enduring relationship that we have forged with the 158th Infantry Brigade," explains Major James Birmingham, who took over as OIC of the Center in September 2013. "It's another example of how the Total Army concept of Active, Reserve, and NG components working together towards a common goal results in a stronger Army team."

Therefore, the 158th Infantry Brigade is able to get Shadow support, also at no cost. Intelligence planners at the 3-315th lead monthly UAS synchronization meetings to coordinate between the Center's existing missions and their own up-coming First Army training. In the end, Shadow operators at Camp Shelby have the opportunity to gain additional mission-focused experience with ground units and Reserve Component Soldiers have the opportunity to get hands-on training with real-time intelligence.

A live Shadow feed used by an 858th En Co CoIST member to observe his unit conducting a MEDEVAC 20 km away.

858th EN Co CoIST member observing his unit conducting a KLE.

Shadow operators also benefit. When working with the 158th Infantry Brigade, UAS operators receive more realistic tasks and purposes for each flight mission. Shadow operators attend battalion operations/mission planning meetings–it's the battalions and companies who are running ground missions and using the live UAS. When UAS operators are involved in mission planning, they gain experience with briefing UAS capabilities and limitations, and gain experience in helping those units to best plan how to integrate and synchronize reconnaissance and surveillance assets. Results from mission planning meetings include such tasks as finding buried and hidden IEDs, detecting hostile vehicles, and detecting potentially hostile individuals to provide warning of possible attacks–and then relaying that intelligence information to the ground units.

"Mission planning with ground units is often absent from UAS operators' mission planning and prep at Camp Shelby," according to the then UAS Regional Flight Center OIC, Major Jay Lovelady. "Providing First Army our UAS coverage on training lanes at Camp Shelby is a perfect opportunity for our UAS operators to get more realistic experience in mission planning and direct support to ground units while flying. Importantly though, face time with the guys who are on the ground is paramount to fully understanding a mission," Lovelady added.

To get UAS coverage for First Army training, 3-315th collects standardized requests from across the 158th Infantry Brigade, then validates and submits the requests to the UAS Regional Flight Center. Coverage is confirmed or denied during the monthly UAS synchronization meeting, which also replicates the way surveillance assets are allocated in theater. Scheduled 6 to 10 weeks in advance, UAS coverage is also integrated into Base Defense and counterinsurgency training which is also conducted by the 158th Infantry Brigade.

CoIST-Reinforcing Intelligence in Company Operations

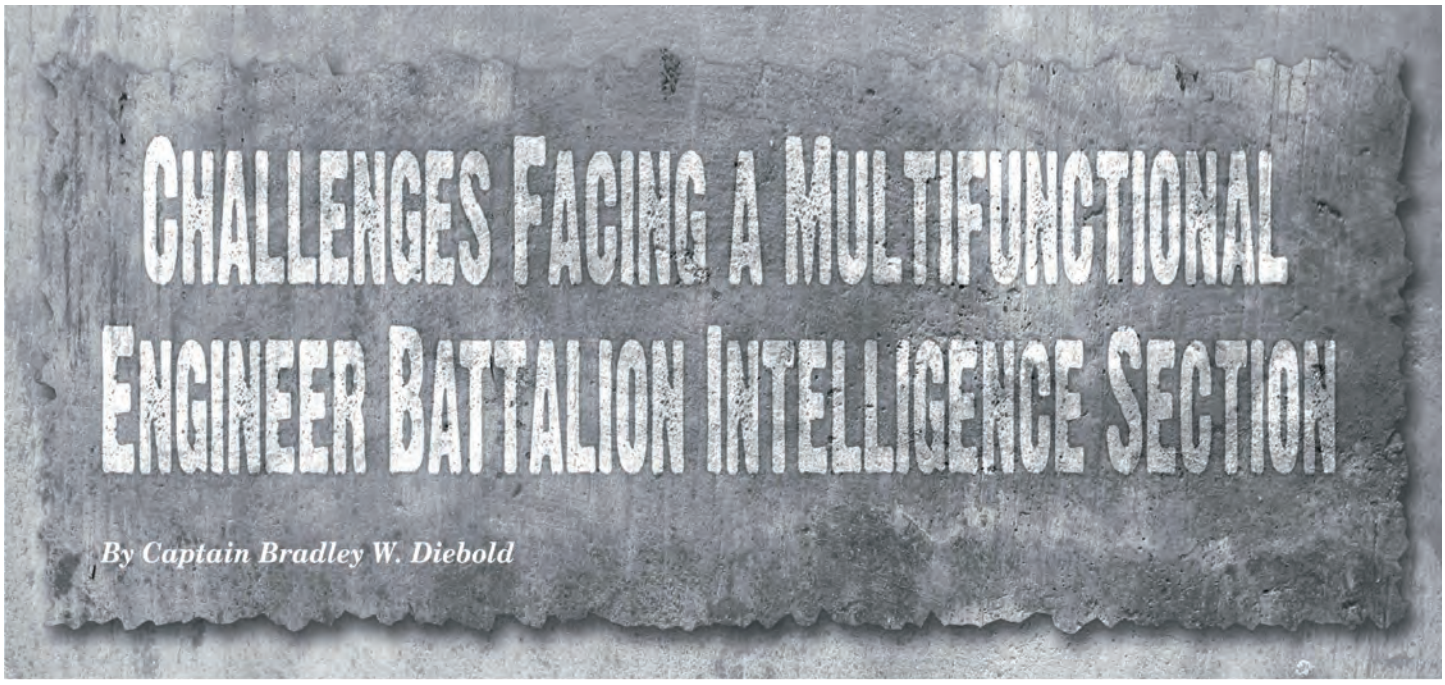
Overall, the introduction of CoIST training into CIED training reinforces the importance of intelligence in company operations. The company is forced to use its organic intelligence team to produce relevant information about the enemy threat, which pushes the unit to a higher state of readiness earlier in their pre-deployment training at Camp Shelby. Already, the 3-315th has seen that units realize they need CoIST SOPs, while others simply refine their existing SOPs with lessons learned. In every case, though, commanders leave CIED training with a new respect for their CoIST operators and more aware of ways to use their CoIST.

Lieutenant Colonel Chris Kuhn, 3-315's Commander, is satisfied with the outcome. "Our new CoIST workstation has proven to be extremely valuable as a way to reinforce the Intelligence Warfighting Function at the company level." He went on to say that, "CoISTs are able to do some initial pattern analysis based on the last 30-days of significant activities in the area of operation. The prebuilt workstation enables CoISTs to immediately begin plotting new data and analyzing that data for the current situation." LTC Kuhn went on, "the trick now is to determine how the CoIST concept is applied to Rotational Force Pool–Non-Deployable (previously Contingency Expeditionary Force) training for decisive action in combined arms maneuver warfare. The questions we are asking ourselves now: Where does the CoIST sit in a traditional armored troop designed to move 500 kilometers per day? How can a CoIST maintain digital comms robust enough to handle large amounts of data during decisive action on the move?"

CPTs Clay Murray and Michael Cabic have served as Intelligence Plans Officers for the 3-315th Engineer Battalion since November 2012 and January 2013, respectively.

CPT Murray's key assignments include Commander, HHD, 158th Infantry Brigade; XO/Operations Officer at the Defense CI and HUMINT Center of the Defense Intelligence Agency, and Commander, B Det of the Joint Interrogation and Debriefing Center, Iraq. CPT Murray is a DMG from the University of Louisville, and Graduate Fellow of the Hebrew University Rothberg International School. His military training includes the Basic Airborne Course, the S2X and J2X Operations Courses, and the Defense Strategic Debriefing Course.

CPT Cabic's key assignments include S2 Advisor to the Operation Coordination Center-Provincial (OCC-P) Kabul Province, Afghanistan; Prophet Platoon Leader D Troop, 5-1 CAV, 1-25 SBCT; Executive Officer D Troop, 5-1 CAV, 1-25 SBCT, and Assistant Brigade S2 for 1-25 SBCT. CPT Cabic graduated from the University of Michigan and was commissioned through the Officers Candidate School, Fort Benning, Georgia. His military training includes the Military Intelligence Captain's Career Course and the Signals Intelligence and Electronic Warfare Officers' Course. He holds a secondary AOC 35G (Signals Intelligence Officer).



Challenges Facing a Multifunctional Engineer Battalion Intelligence Section

By Captain Bradley W. Diebold

As the war in Afghanistan concludes, more is being asked of the units still fighting there—a phenomenon that is typical near the end of a long military campaign. This article describes the effects of this phenomenon on one engineer unit from the perspective of its intelligence (S-2) section, with a focus on how engineer battalions can better prepare deploying personnel who will be working with S-2 sections.

As a combat effects engineer battalion headquarters, the 20th Engineer Battalion has adapted its training and equipment to prepare for a deployed mission that is different from its original mission. Deployed with short notice to Regional Command–South to support Operation Enduring Freedom, the battalion mission became that of a multifunctional engineer battalion responsible for construction effects and mobility assurance for theater level-controlled and operational environment (OE)-specific routes. For a small S-2 section, which was authorized only two military intelligence specialists, this new mission set translated to the OE equivalent of a division. While the battalion S-2 section did not have the full responsibilities or resources of a 90-member division analysis and control element, functioning with a staff of only two school-trained military intelligence specialists was a distinct disadvantage. The section was able to acquire another lieutenant to help increase the analysis and overall capacity of the section. It is highly recommended that other engineer battalions acquire more intelligence capacity before deploying.

The company intelligence support team (CoIST) offers intelligence support at the company level, which is a huge advantage when companies are not colocated with their higher headquarters. Among its functions, CoISTs provide routine intelligence requirements such as patrol prebriefs and debriefs at remote locations. Formulated at the battalion level, prebrief and debrief formats become a collaboration of efforts throughout the OEs as additional threats are identified and disseminated. CoIST training before deployment presents its own challenges, especially for separate brigades and Army National Guard units. While units within brigade combat teams usually have CoIST training scheduled well before deployment, individual company deployments often require an ad hoc training schedule. CoIST training for these units is often scheduled whenever time is available, rather than in conjunction with significant predeployment training exercises. The result is that a new and perishable skill may not be used for several months between conducting the training and performing the mission in-theater. Predeployment planners should try to incorporate CoIST training into their major training exercises to improve their teams. When this is not possible, smaller CoIST training sessions are offered in-theater. Team members should attend these sessions whether or not they conducted predeployment training.

"The company intelligence support team (CoIST) offers intelligence support at the company level, which is a huge advantage when companies are not colocated with their higher headquarters."

There are multiple Internet-based, data-mining tools to assist intelligence analysts and CoISTs. While the military intelligence program of record remains the Distributed Common Ground System–Army, it is rarely available in engineer battalions and is nonexistent at the company level. Because this system requires extensive training and is lacking in many units, intelligence collection requires a more practical

A CoIST member briefs a battlefield circulation team in Afghanistan.

approach. There are civilian intelligence analysis systems that can be learned quickly and used by personnel without prior intelligence training. Some of these programs are built to enhance collaboration between the battalion S-2 section and CoISTs. This increases, streamlines, and enables the intelligence warfighting function within the engineer battalion. Field service representatives for those systems are available to conduct training and assist CoISTs during the relief-in-place process.

Another useful force multiplier has been the addition of a contracted civilian counter improvised explosive device (C-IED) analyst team that was developed for the Afghanistan theater of operations in 2010. The team provides the warfighter with multiple sources of expertise in C-IED and counterinsurgency analysis and operations. It is usually composed of an all-source analyst, a human intelligence analyst, and a collection manager. While not all teams are fully staffed, the addition of their experience increases the knowledge and productivity of the entire section. The team's combined expertise and knowledge of data-mining systems increase understanding of the dynamics involved along the routes. This increases the capability for predictive analysis, which is fundamental to assured mobility. The presence of the C-IED intelligence analysis team quickly ramped up the organic analyst capabilities of the 20th Engineer Battalion. This resulted from the team method of training the complete process of multidiscipline intelligence operations and the resulting analysis, rather than simply providing a "black box" product.

Surveillance is an integral and often contentious component of the intelligence collection process which presents additional challenges for an engineer battalion that provides general support at the regional level. As a multifunctional engineer battalion operating in numerous OEs, the 20th Engineer Battalion was not an OE owner. Therefore, it was near the bottom of the queue for acquiring surveillance assets. Optical change detection assets allow predicative analysis before route clearance patrols conduct missions. Likewise, persistent surveillance and overhead collection platforms allowed the battalion to hold ground by ensuring that routes remained clear for longer times after missions were complete. The extensive experience with collection management and the overall asset awareness of the C-IED intelligence collection specialist allowed the battalion to acquire surveillance outside the experience level of the usual battalion S-2 section. To meet routine surveillance requirements while on patrol, route clearance patrols used theater-provided equipment such as Puma™ and Raven® unmanned aircraft to enhance their situational awareness of the battlefield. Since these assets are not part of normal engineer company equipment, the operator's introduction to them is usually during a deployment, which means that training must be scheduled and conducted after arrival in-theater. While this is an inefficient method, the dividends to commanders and patrol leaders are worth the investment of time and personnel. Units should ensure redundancy in trained personnel for each route clearance patrol since it is

such a laborious process to become proficient at operating these assets.

While thorough coordination between internal components is critical in any S-2 section, it is especially important in a multifunctional engineer battalion. Because of the support relationships that the battalion has with numerous OE owners, short-notice taskings appear far more frequently than in other units. As enemy targets on the battlefield appear and disappear, so do time-sensitive missions. Thorough intelligence analysis and product development are required for the intelligence preparation of the battlefield. The S-2 section must be integrally linked with the battalion operations and construction management sections. Construction project activities constantly shift as priorities change because of evolving requirements in multiple OEs. Standard meetings are not enough to meet the requirements; it is necessary to conduct constant dialogue with these sections and to maintain a presence on countless distribution lists to stay informed of changes. This allows the S-2 section to manage its own internal production to ensure that commanders have timely and accurate intelligence to use in planning and executing their missions.

A vast amount of information is learned during a deployment, sometimes at a high cost. It is essential that these lessons, products, architectures, systems, and processes continue during the handover from one unit to the next. The outgoing unit must have a systematic knowledge management system in place to ensure that incoming personnel can pick up the mission in stride. Knowledge management is an ongoing process that requires finesse, deliberate organization, and constant supervision. Armed with tools such as Palantir®, Microsoft SharePoint®, and a shared network computer drive, the S-2 section must store this information in a way that is easy to locate, access, and understand. Naming conventions, proper classifications, and standing operating procedures are needed to create this organizational framework.

However, knowledge management is not the job of one person. The entire team must understand its importance and execution to ensure that the next unit can maintain the processes that work and to preserve institutional knowledge. Another recommendation is to ensure that information is stored (or at least a copy is maintained) on networks accessible to follow-on units before deployment. While most business in Afghanistan is conducted on the Combined Enterprise Regional Information Exchange (CENTRIX) system, most engineer units do not have access to CENTRIX in garrison. It is crucial to ensure that products, situational reports, and formats are transferred to networks that these units can access, ensuring that they understand the situational environment before they deploy.

Captain Diebold is the intelligence officer for the 20th Engineer Battalion. He holds a bachelor's degree from Western Illinois University and is a graduate of the Intelligence Captains Career Course.

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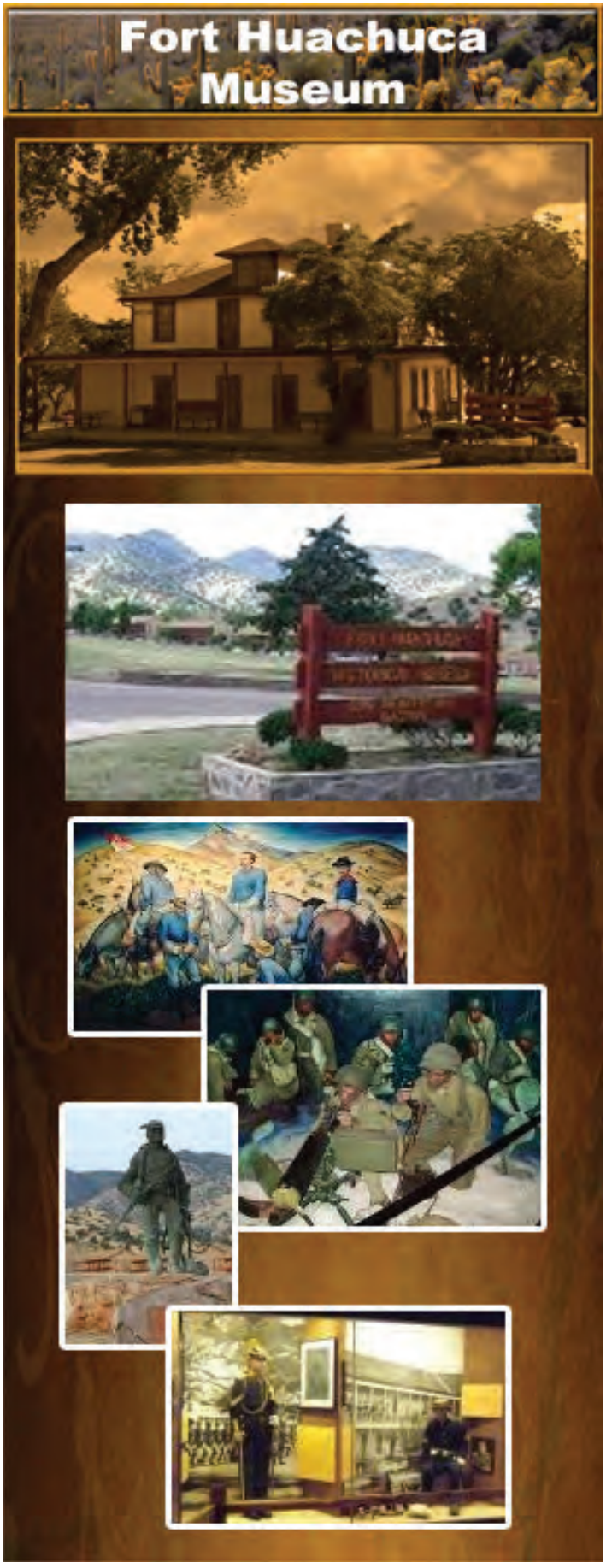
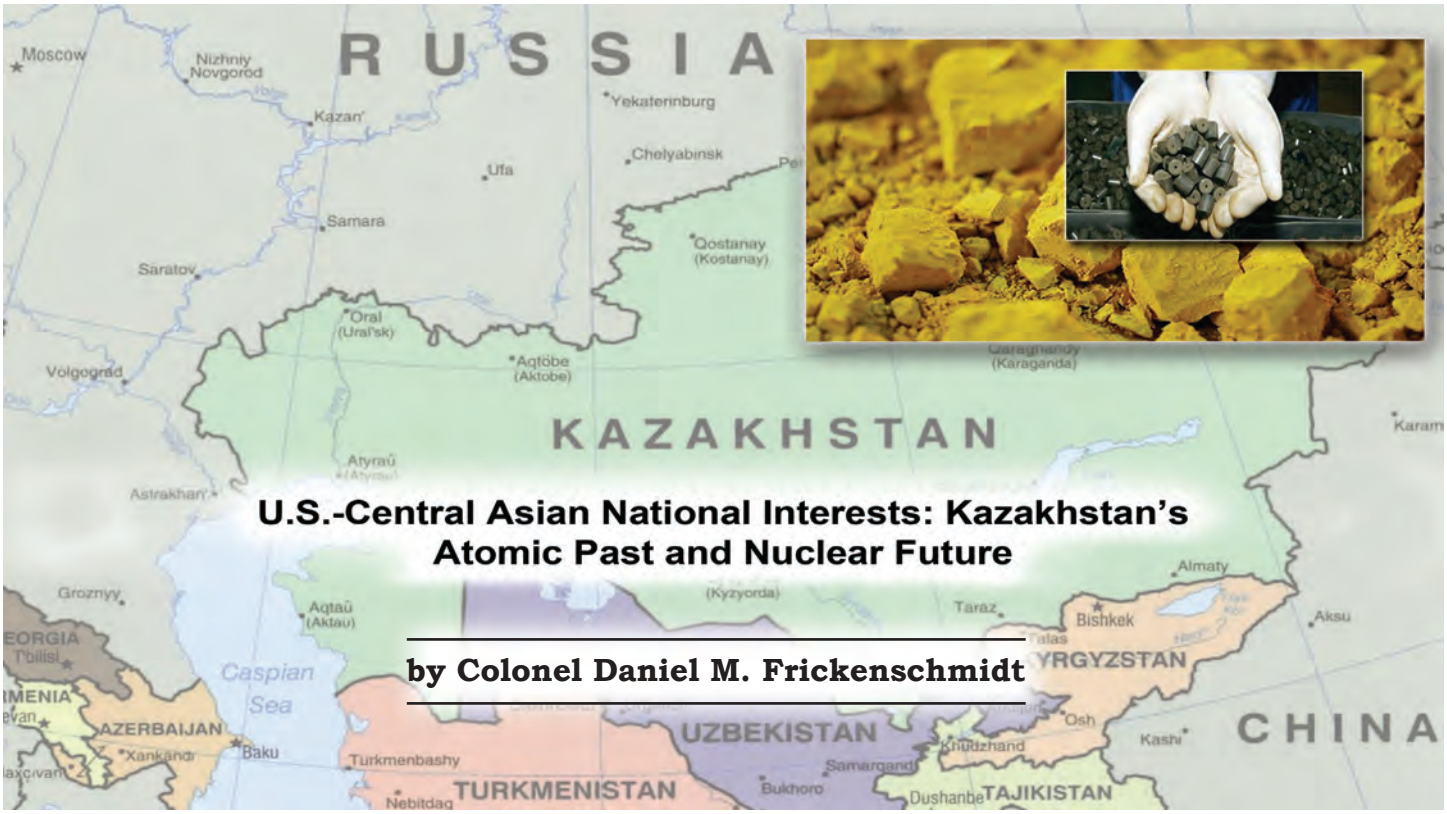




U.S.-Central Asian National Interests: Kazakhstan's Atomic Past and Nuclear Future

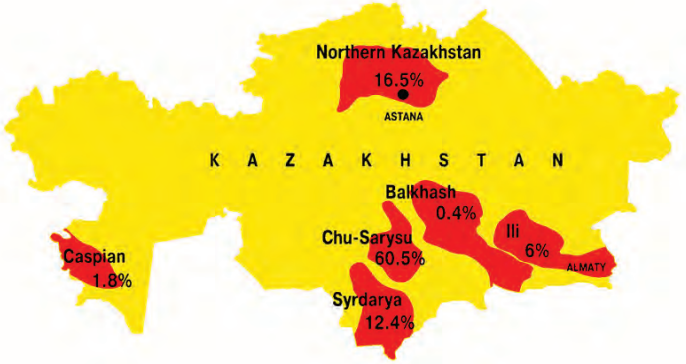
by Colonel Daniel M. Frickenschmidt

Introduction

The U.S., its international partners, and the Kazakh government are cooperating to build a cleaner and more efficient atomic energy sector in Kazakhstan. Environmental pressures, such as water scarcity in Central Asia, are exacerbated through crude atomic energy production. Through improved atomic research it is hoped that the energy production sector can manufacture cleaner and more efficient nuclear energy. Environmentally focused atomic joint ventures such as the European Union's (EU) project at Myrrha and the U.S. project at Alatau are examples of research and production improvements for Kazakhstan. In the near term, the best interests of the U.S. are for it to continue to work with its partners to grow Kazakhstan's economic and atomic energy sectors through environmentally sound initiatives that do not poison and further destabilize Central Asia.

Currently, Kazakhstan accounts for fifteen percent of the earth's known potential uranium resources. In 2011 it produced approximately 20,000 tons of uranium which accounted for about thirty-five percent of the world's production. By aggressively capitalizing on its vast resources Kazakhstan is now the world's leading producer of the uranium.[1] However, the country's President-for-life Nursultan Nazarbayev leads an authoritarian kleptocracy which maintains most of the nation's wealth for itself.[2] Consequently, U.S.-Kazakh diplomatic relations have been strained over the perceptions and realities of democracy levels and the nature of economic opportunities that should, will, and do exist between the two nations.

In order to understand the current state of the uranium extraction sector it is important to briefly examine the evolution of mining in Kazakhstan. Historically, hard rock deposit uranium exploration under the former Soviet Union commenced in modern day Kazakhstan in 1948. As of today reports indicate that there are 50 known uranium deposits in six of the country's fourteen provinces (See map below).[3] In 1970 tests of sedimentary rock known as



Kazakhstan's Uranium Deposits.

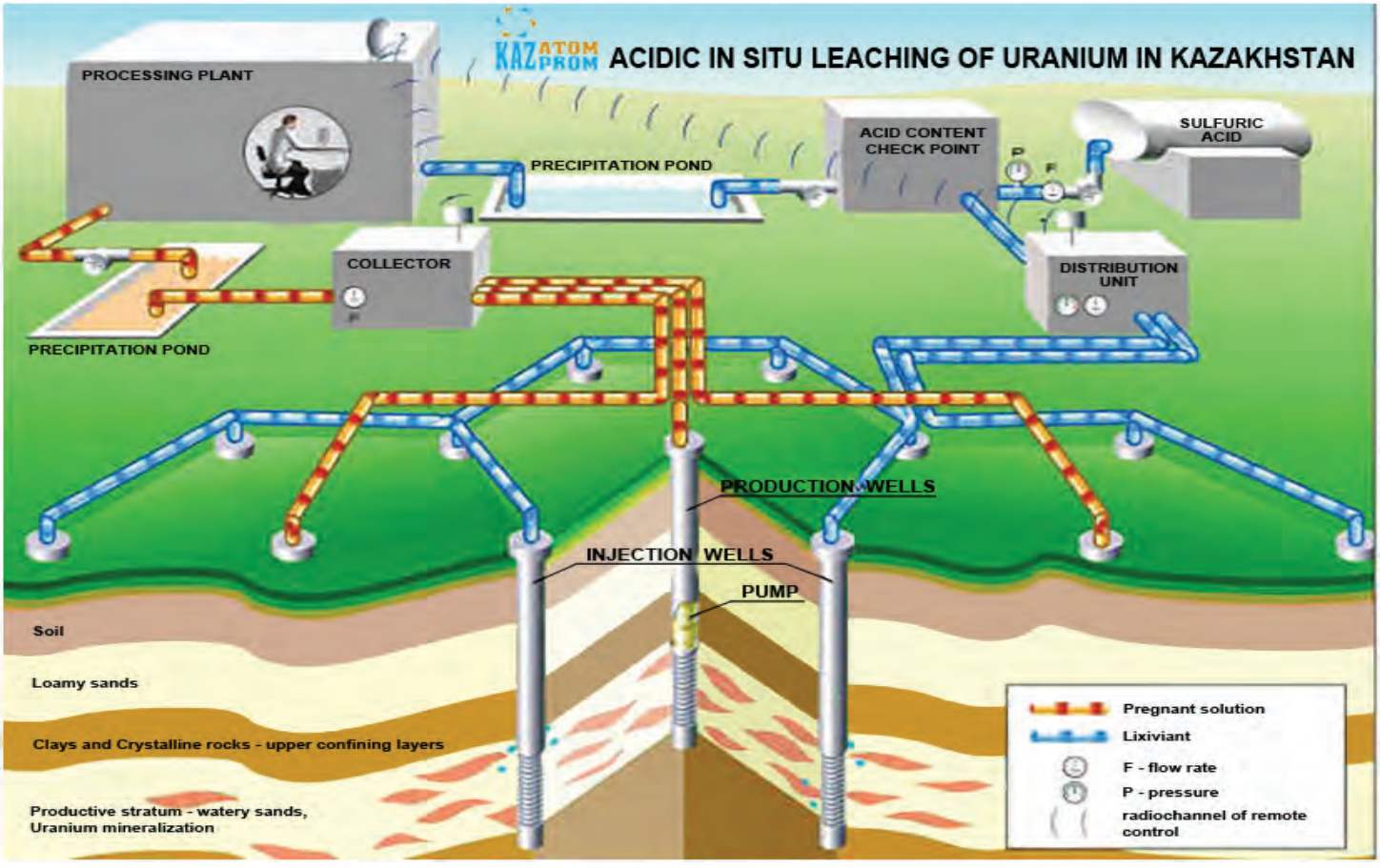
'In Situ Leach' (ISL) mining were successful, which led to further exploration. By the year 2000 ISL had almost completely replaced Kazakhstan's original hard rock deposit uranium mining production method.[4]

Strategic Impact of Kazakhstan's Uranium Wealth

In 2011, forty-five percent of the world's uranium was mined using ISL methods.[5] The U.S. considers ISL as the most cost effective and environmentally acceptable form of uranium mining and most global uranium mining is now done through these methods.[6] Technically, ISL is a process that uses a grid of injection and production wells. The wells employ sulfuric acid circulated through the aquifer and into the ore bed at 300 to 1,000 feet below the surface to dissolve the uranium. The uranium-bearing water solution is pumped to the surface processing facility which removes the uranium.

Concerns over environmental damage, especially to ground water that drains into what is left of the Aral Sea, forced the industry to improve techniques for ISL mining. Best practices, especially by the Australians, have evolved to the point that ISL is a controllable, safe, and environmentally benign method of mining. Technically, there are two different water solutions used for ISL mining which are determined by the groundwater and the local geology. In either case, the leaching solution has a pH of 2.5 to 3.0 which is approximately the same as vinegar.[7] A low pH is a very good thing as it will not contribute to the environmental damage and agricultural mismanagement that has been the case in the five Central Asian nations. Fortunately, due to the low capital costs relative to conventional mining, ISL promises to remain Kazatomprom's only method of mining uranium deposits and will aid in preserving the fragile aquifer.

Kazatomprom was established by the government in 1997 as Kazakhstan's state owned corporation for mining uranium. It owns all but one of the nation's operational uranium mines. It also controls all uranium exploration and mining as well as other nuclear activities, including imports and exports of nuclear materials. In 2008 Kazatomprom announced that its goal was to supply thirty percent of the globe's uranium by 2015. The break-down by sector is as follows: twelve percent of the planet's uranium conversion through joint ventures; six



percent of the earth's total enrichment market; and thirty percent of the total nuclear fuel fabrication market.[8]

Kazatomprom announced a cap on production of uranium at 20,000 tons per year in October 2011, assumedly to control global uranium prices.[9] The company has also established important strategic partnerships with Russia, the EU, Japan, the U.S., and the international nuclear company Westinghouse. It should be noted that France and Canada are also involved in mining uranium in Kazakhstan and are moving forward in other aspects of the enrichment of the fuel cycle.[10]

In July 2006 Russia and Kazakhstan through Kazatomprom completed three joint nuclear agreements in excess of $10 billion (USD) for uranium production, enrichment, and new nuclear reactors. Also, since 2006 Kazatomprom and the China Guangdong Nuclear Power Group Holdings (CGNPC) have signed several strategic cooperation agreements on uranium supply, fuel fabrication, and mining joint ventures for China's nuclear power industry. This is a significant strategic move for both companies as Kazatomprom could become the main uranium and nuclear fuel supplier to CGNPC and potential Chinese reactor construction. A CGNPC subsidiary, Sino-Kazakhstan Uranium Resources Investment Company, is reportedly planning to invest in two new Kazakh uranium mines as part of a joint venture.[11]

In order for Kazakhstan to maintain its control of the international pricing of uranium, it must control production. A strategic cooperative agreement between China and Kazatomprom estimates that only 20 percent (approximately 5,000 tons) of its current annual uranium output goes to China. However, without a national mining and enrichment increase (which would affect the global pricing) China's annual projected uranium demands of 25,000 tons could mean that 100 percent of Kazakhstan's uranium could go exclusively to China by 2015.[12]

Kazatomprom signed agreements in 2009 with CGNPC and India's Nuclear Power Corporation (NPCIL) for the establishment of a corporation for the construction of nuclear power plants in China, India, and Kazakhstan. Further, in April 2010 Kazakhstan signed an agreement for nuclear power cooperation with the Republic of South Korea. In addition to these international agreements, Kazakhstan, the U.S., and the European Atomic Energy Community (Euratom) have signed nuclear energy cooperation agreements.[13]

Kazatomprom owns ten percent of the Westinghouse Corporation which provides the company with a solid position in the mainstream fuel fabrication industry. Since 2008 Japanese companies such as Toshiba, Toyota, and Marubeni have invested in a nuclear energy institute in Kazakhstan as a research and development facility for rare earth metals exploration, the fuel life-cycle, improvements in reactor technology, and the reduction in hazardous pollution.[14]

Domestic Problems and Regional Concerns

One of Kazakhstan's domestic success stories since its departure from the Soviet era includes the decommissioning of the BN-350 nuclear reactor at Shevchenko. According to the U.S. National Nuclear Security Administration, the BN-350 reactor was used by the Soviet Union to produce plutonium for weapons. The used fuel products, 1,000 tons of radioactive sodium, had been stored at that site since the facility closed in 1992. In 1997, the U.S. and Kazakh governments agreed to an intergovernmental project to improve safety and security for the plutonium bearing spent fuel. By late 2001,

all of this material had been inventoried and put under International Atomic Energy Agency (IAEA) safeguards, thereby making the fuel elements far more difficult to steal.[15]

However, there are domestic problems and regional concerns for Kazakhstan's aggressive future plans for uranium production. National ambitions are aided by the reality that Kazatomprom ignores ground water pollution concerns and regulatory hurdles more easily than in most western countries. Mine exploration and resource exploitation are two to three times more cost effective than other ISL competitors such as the U.S. and Australia because of lax regulation.[16]

Further, Kazakhstan has an ominous central Asian legacy of radioactive wastes from uranium mining, nuclear weapons testing, nuclear reactors, industrial issues, coal mining, and oilfields. During the Soviet era, Kazakhstan hosted 470 nuclear weapons tests which left it with significant environmental damage. Further modern environmental challenges exist, such as with ISL uranium production. ISL requires large quantities of sulfuric acid which is used to break down the carbonates from the ore, and if not managed/reclaimed carefully, can contaminate ground water with disastrous results for all of its downstream neighbors.[17]

Following independence in 1991 the country made three significant atomic decisions. First, it became a party to the Nuclear Non-Proliferation Treaty; secondly it became a non-nuclear weapons state by destroying or transferring its 1,300 nuclear warheads; and thirdly the National Nuclear Center (NNC) was established by President Nazarbayev in 1992. Located in the town of Kurchatov, the NNC addresses historic and potential environmental damage and destruction. It employs 2,700 research analysts and scientists who are responsible for research into peaceful uses of nuclear energy, improvements in radiation safety, and the management of all of Kazakhstan's nuclear research reactors. The NNC is also solely responsible for the evaluation of the effects of many years' worth of nuclear tests at the highly contaminated former Semipalatinsk 21 (S-21) Test Site.[18]

The NNC signed a thirteen year international agreement in October of 2010 with the StudieCentrum voor Kernenergie Centre d'Etude de l'Energie Nucleaire (SCK-CEN), or as it is known in English, the Belgian Nuclear Research Center. The purpose of this nuclear energy research collaboration is focused on the multifaceted Belgian Myrrha Project. Technically, Myrrha is a multifunctional lead-bismuth-cooled subcritical reactor with an accelerator-driven system for the incineration of radioactive waste. In addition to incineration, the Myrrha project will perform research and radioisotope production. Primarily funded by the EU, it is currently projected to ready to commence operations in 2023.[19]

The NNC headquarters, located at Kurchatov, hosts the Institute of Atomic Energy which currently operates two research reactors at S-21 but owned by NNC.[20] Another active reactor, also owned by NNC, is in Alatau which is a short distance south of the large metropolitan area of Almaty.[21] Alatau is operated by the Institute of Nuclear Physics and produces radioisotopes. In a combined effort between the Kazakh government, the IAEA and the NNSA the facility at Alatau 'down blends' enriched uranium which is then sold for export use as reactor fuel, primarily to Russia.[22]

The future of a successful Kazakh atomic energy sector means that the scientific projects and advancements as mentioned above must be sustained. Environmental destruction through careless pollution and free-market exploitation has been unfortunate. Kazakhs and a cooperative international community must continue to work together to find better environmental procedures to achieve national economic goals or Kazakhstan will poison its environmental and economic futures.

Initiatives for the Future

Economically, Kazakhstan ranked fifty-third in the world in 2012 with a Gross Domestic Product (GDP) of $230B (USD). Extractive metal revenues (to include uranium) comprised thirteen percent of the nation's economy. According to its projected increase in uranium extraction and nuclear energy production, Kazakhstan should see a significant increase in GDP by 2020.[23] It is still too early to determine whether the government will be willing or able to export atomically produced electricity to the Eurasian neighborhood and more importantly, at what price.

It is clear that a spirit of cooperation will be necessary if Kazakhstan is to achieve its impressive eco-

nomic goals in an environmentally safe manner by 2020. Kazakhstan will have to address its significant financial, construction and production challenges. Nation-wide infrastructure construction of nuclear power plants, power transmission lines, and water management capabilities with sufficient capacity all require significant external investment, experience, and expertise. But this means that there will have to be tradeoffs with foreign governments and the private sector which will demand certain controls and guarantees prior to deeper investment.

Joint ventures with capital investing partners such as Russia, the EU, Japan, India, China, and the U.S. are anticipated to ease the financial burdens of Kazakhstan's rise as the world's dominant atomic energy partner. Only time will tell if the tradeoffs were worth the costs of the government's plans for nuclear power through 2030. Currently the plan includes two large light-water reactors to be built by Russia's Atomstroyexport near Lake Balkhash in the south and near Aktau in the west near the Caspian Sea.[24]

According to the plan, the share of domestic nuclear electricity would comprise 4.5 percent of demand, which by 2030 is projected to be 150 billion kWh.[25] Aktau still possesses infrastructure and experienced personnel remaining from the BN-350 reactor which the Soviets operated there from 1973 to 1999.[26] Both projects have passed environmental review and a 2010 financial feasibility study demonstrated that with an electricity price of $0.05 (USD) per kWh, the plants would be paid off in 12 years. Kazatomprom's proposal to the government for the power plants was accepted in March 2013 and Atomstroyexport expects to complete the initial pair of plants by 2017.[27]

Completion of the power plants and the successful production of nuclear energy in the next four to five years mean that the U.S. needs to remain actively engaged with Kazakhstan, even if the Russian government disagrees. Russia has opposed the development of any form of a Central Asian union, preferring instead to conduct bilateral negotiations with each of the five former Soviet Republics.[28] An increase in U.S. scientific projects and Track II style diplomacy between scholarly communities will also continue to help the heads of state maintain better perspectives and understandings.[29]

Conclusion

The U.S. near term energy strategy for Kazakhstan through 2020 will remain complex due to the political delicacies that surround Kazakh President Nazarbayev, his regime, and its relationship with Russia. Therefore it will be important for the politicians of both countries to maintain a distinct separation between the scientific necessities and the diplomatic concerns over democratic institutions in Kazakhstan. Only through working together can the international community help build a cleaner Kazakh energy sector and reduce contamination through projects like those at Myrrha and Alatau. In the near term, the strategic best interests of the U.S. are for it to continue to work with its partners to grow Kazakhstan's economic stability through an environmentally sound enlargement of its atomic energy sector that does not poison and further destabilize Central Asia.

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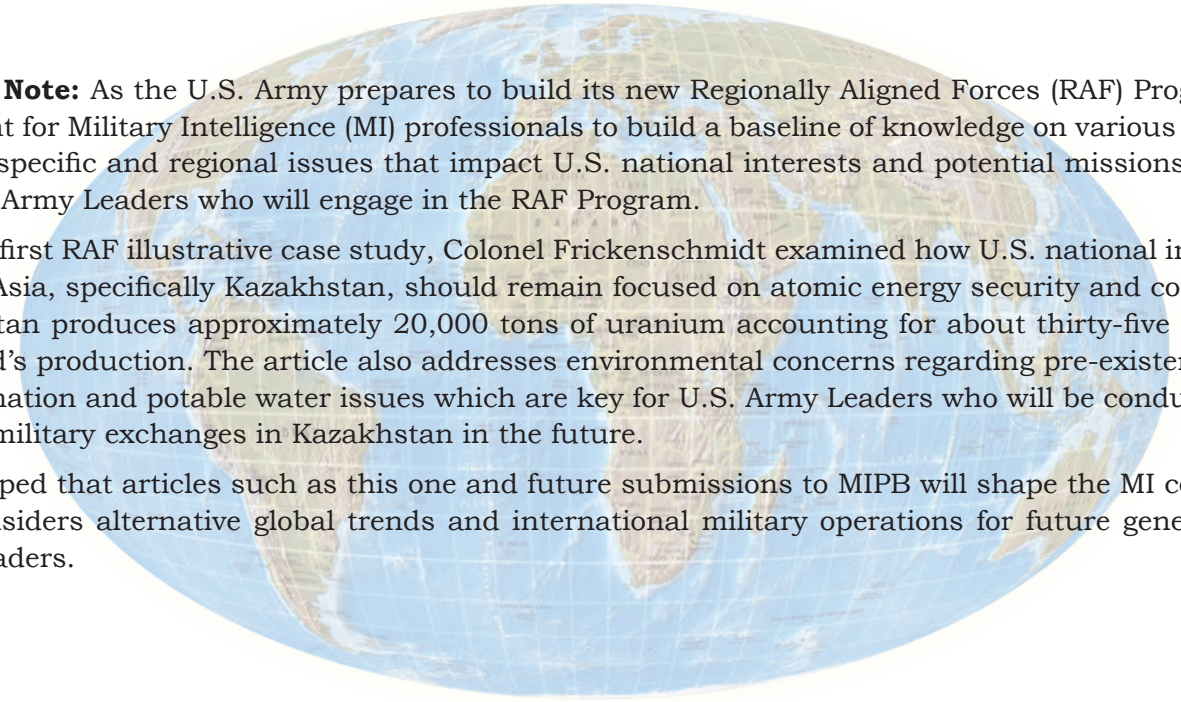

Editor's Note: As the U.S. Army prepares to build its new Regionally Aligned Forces (RAF) Program, it is important for Military Intelligence (MI) professionals to build a baseline of knowledge on various aspects of country-specific and regional issues that impact U.S. national interests and potential missions or conditions for Army Leaders who will engage in the RAF Program.

In this first RAF illustrative case study, Colonel Frickenschmidt examined how U.S. national interests in Central Asia, specifically Kazakhstan, should remain focused on atomic energy security and cooperation. Kazakhstan produces approximately 20,000 tons of uranium accounting for about thirty-five percent of the world's production. The article also addresses environmental concerns regarding pre-existent nuclear contamination and potable water issues which are key for U.S. Army Leaders who will be conducting military-to-military exchanges in Kazakhstan in the future.

It is hoped that articles such as this one and future submissions to MIPB will shape the MI community as it considers alternative global trends and international military operations for future generations of Army Leaders.

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Strategic Landpower for the Company Commander

Leading the U.S. Army into the 21st Century

GEN Robert W. Cone
CPT Jon D. Mohundro

6 November 2013

CAPSTONE

Strategic Landpower for the Company Commander

In Iraq and Afghanistan, a generation of officers grew up solving strategic dilemmas at the company and platoon levels. Well-versed in the requirements and responsibilities of an Army at war, this generation must guide the Army into an ever-evolving and uncertain future. In order to navigate through the complexities in front of us, the Army needs capable, adaptable leaders now more than ever who champion the Army's strategic purpose and goals. With that, one of the most important discussions over the next few years will be how company commanders understand and implement the Army's central role in strategic landpower.

Over the last two years, the Army has put a lot of great people to work examining every facet of our training, doctrine, and warfighting capability. We did not do this to examine where we stand today. Rather, all of this effort was aimed at figuring out two things: what kind of Army we will need to meet future challenges, and what we have to do to build that Army even as we continue fighting in Afghanistan and remain engaged throughout the world. Much of what we concluded is available in a single brief document–TRADOC Pamphlet 525-3-0, The U.S. Army Capstone Concept, http://www.tradoc.army.mil/tpubs/pams/tp525-3-0.pdf. If you have not read it yet–please do so.

We won't summarize an already brief document in this article. Instead, we will discuss how the newest and most vital ideas relate to the execution level–

the company. While things have been written about strategic maneuver, nothing has been written about its application at the tactical level. Although some ideas may be new, much of what must be done remains the same–training, standards, and understanding the human environment. This is a result of the unchanging character of the Army's basic strategic problem and mission. As in previous eras, as part of the joint force, our Army must retain its ability to protect U.S. national interests, execute any mission assigned to us, and win on any battlefield around the world.

Given our national strategy, we are required to field an Army capable of waging war decisively. Fielding a ready and responsive force with sufficient depth and resilience to wage sustained land combat is central to our mission, and that force must be able to conduct both combined arms maneuver and wide area security operations. A ready, robust, responsive force deters adversaries, reassures allies, and when necessary, compels our enemies to change their behavior. Maintaining such a force requires high levels of adaptability throughout each echelon of the Army. Only Soldiers with tactical skill and operational flexibility can effectively respond to changing tactical situations in support of our nation's strategic goals and interests.

This is where the company commanders fit into the concept of strategic landpower. Much like company grade officers did in Iraq and Afghanistan, the company commander of the future must be mentally agile enough to thrive within the parameters of mission command. Developing leaders who can do so, while providing clear task and purpose to their subordinates, will be critical to the success of any mission across the range of military operations. Effective Army commanders, including those at the company level, do not use fiscal constraints as an excuse for failing to develop the best possible mix of training, equipment, and regional expertise they can within their formations. Rather, they motivate their people and guide their units in a way that makes optimal use of available resources to create adaptive, effective forces.

Our Army has three primary and interconnected roles: prevent conflict, shape the international environment, and win the nation's wars. The company commander has important responsibilities in each of these.

Prevent Conflict

It is prudent here to define what a conflict is. Since the term gets thrown around a lot and attached to a lot of different situations, it is easy to misunderstand the doctrinal meaning. Conflict is an armed struggle or clash between organized groups within a nation or between nations in order to achieve limited political or military objectives. Irregular forces frequently make up the majority of enemy combatants we face now, and may continue to do so in the future. Conflict is often protracted, geographically confined, and constrained in the level of violence. Each one also holds the potential to escalate into major combat operations.

Many of the contingencies to which the United States responded militarily in the past 50 years have been appropriately defined as "conflicts." The same can reasonably be expected in the future, but with the addition of cyberspace.

As was true during the Cold War, many of our greatest successes in the future will not occur on the battlefield; rather, maintaining peace may be our greatest achievement. This will be no easy task, as global tensions and instability increase in ungoverned or weakly-governed spaces around the world. History has taught us that without a capable, highly trained land force the United States has little influence in many of those spaces. That land force, our Army, must remain the best equipped, best trained and most combat ready force in the world if it is to have the strategic effect we seek. That readiness is built from the bottom up.

This is the first critical point where company commanders must help shape the future. As owners of the training schedule, commanders have the critical role in developing team, squad, and platoon skills. Commanders ensure that broadening training such as language, geographical, and cultural familiarization is done effectively, and in a rigorous manner. Soldiers from the generation that fought in Iraq and Afghanistan will not be satisfied with training focused on artificial scenarios and made-up adversaries, so their commanders need to be innovative about preparing well-coordinated, realistic training. Subordinates must be challenged, and they have to feel their challenges have a direct linkage to future operations. In order not to lose 12 years of combat-proven leader development, company grade officers must find a balance between building an Army pre-

pared for the range of military operations and succumbing to pressure to "get back to the way it used to be."

Unfortunately, possession of such a trained and ready force is useless if it cannot affect regions where trouble is brewing. As units reposition from overseas bases and return to the United States, it becomes more crucial than ever for the Army to adopt an expeditionary mindset and improve its expeditionary capability. To do so the Army is aligning units to specific geographical regions and arranging them into scalable and tailored expeditionary force packages that meet the needs of the Joint Force Commander across the range of military operations. In short, our Army will be better postured to generate strategic influence anywhere in the world, and as part of the joint force, deter aggression.

In this construct, company commanders must conduct operational environment training specific to their region. Becoming familiar with the people, cultures, and languages of the region in which one's unit will operate is critical to the success of a CONUS based Army. Conventional-force companies learned much over the past 12 years as they executed missions historically reserved for Special Forces. War is fundamentally a human endeavor, and understanding the people involved is critically important. Company commanders cannot now ignore the hard-won lessons of their predecessors by ignoring one of the Special Forces' key tasks of understanding the operational environment. Those who meet this intent and enforce standards during this training will ensure we pay those lessons forward to the next generation.

Shape the Operational Environment

During peacetime, the Army is continuously engaged in shaping the global environment to promote stability and partner nation capabilities. We do this for several reasons, the most important of which is maintaining peace in pursuance of American national security interests. Where conflict has already broken out, engagement helps keep it contained and may even lead to a peaceful resolution. By helping to build partner capacity and trust, forward engaged Army units greatly add to regional and global stability. Moreover, by building strong relationships of mutual trust we facilitate access and set the conditions for success in any future combined operation in a particular region or country.

But what are shaping operations, and how are they executed at the company level? Shaping operations are defined as those operations, occurring at any echelon, that create or preserve conditions for the success of the decisive operation. Thus, engagement by regionally aligned forces positively shapes the environment in which the Army operates throughout the range of military operations. This aligns with the notion of the "strategic corporal," which recognizes that in the information age the actions of individuals and small groups can have widespread impact well beyond what was intended at the time. Every action has a reaction, and it is necessary for junior officers to be aware of the role their Soldiers and unit play in the overall strategic goals of our nation.

As part of regionally aligned shaping operations, the Army will employ a careful mix of rotational and forward-deployed forces, develop relationships with foreign militaries, and conduct recurring training exercises with foreign partners to demonstrate the nation's enduring commitment to allies and friends. Where we share mutually beneficial interests with an ally, the Army enhances that partner's self-defense capacity and improves its ability to serve as a capable member of a future military coalition. More capable allies generate a stabilizing influence in their region, and tend to reduce the need for American military interventions over time.

Shaping operations do not end with planned training engagements by forward deployed units. Other actions the units or even small groups of individual Soldiers take can have a shaping effect. Those actions will run the gamut from brigade–or division–sized assistance after a natural disaster to a single act of kindness to a foreign student in an Army school who later rises to high levels in his nation's armed forces. Regardless of the specific activities that have a shaping effect we conduct, all should convey to our intended audiences the clear message that while we are committed to peace, our nation protects its friends and defends its interests. Instilling this understanding among our Soldiers and junior NCOs is one of the vital roles the company grade officer plays in the execution of strategic landpower.

But there is a caveat. What may be the standard for us is not necessarily useful or welcomed with our host nation partners. So, shaping also entails

tailoring our delivery of security assistance to our counterparts in ways appropriate for their culture and military capabilities. Company commanders can gain great success here by applying key interpersonal skills to know, understand, and be humble when dealing with officers, NCOs, and Soldiers from other armies.

Win the Nation's Wars

Despite our best efforts to shape a stable global environment and prevent conflict, violence is likely to remain endemic to the human condition. As been said, "Only the dead have seen the end of war." While we do everything possible to prevent the outbreak of war, we must ensure there never will be a day when the U.S. Army is not ready to fight and win wars in defense of our nation.

What is a war? Historically, war has been defined as a conflict carried out by force of arms, either between nations or between parties within a nation. However, as we consider hostile acts in cyberspace, the definition of war and acts of war will continue to evolve. For example, large-scale cyber attacks against government operations or critical infrastructure–such as in the 2008 Russian-Georgian conflict–can reasonably be considered acts of war. Leveraging the technological savvy of today's Soldiers requires leaders with an engaged interest in their development. This will require junior leaders from the same generation who are as adept at leader development as they are technologically competent.

To defend our Nation, the Army must maintain the capacity to conduct strategically decisive land operations anywhere in the world. Though we will always conduct such operations as part of a joint force, we also acknowledge that war is a clash of wills that requires the ethical application of violence to compel change in human behavior. Here, company commanders make a dramatic contribution to the application of strategic landpower by being tactically and technically proficient in the execution of combined arms maneuver and wide-area security. Without successful tactical execution, the best strategic concepts are doomed to failure.

The U.S. Army Capstone Concept lays out the details of what capabilities the Army must sustain, as well as provides some guidance on how the force may be employed in the future. But it all boils down to one crucial point–an Army that cannot win on the battlefield is of little worth to the security of the nation. As everyone is aware, we are facing austere times ahead. This fiscal reality cannot be an excuse for not doing our duty or losing sight of our purpose. In the final analysis this country will one day, maybe soon, ask us to deploy to some distant land, close with and destroy an enemy, and then build a secure and lasting peace. Our Army is uniquely qualified to ensure the training necessary to make those things happen, thanks to the strength of our NCO Corps. Commanders must leverage the experience of their senior NCOs and find creative ways to properly train the fundamentals, despite resource constraints. We've successfully done it before in our Army, and we are counting on our young leaders to do it again.

Conclusion

It was often platoon and company leadership who took the lead solving strategic issues in Iraq and Afghanistan. It will continue to be platoon and company leaders who keep the Army the well-trained and globally responsive force our Nation needs to deter our adversaries, protect our friends, and defeat our enemies in the 21st Century. The U.S. Army must have company commanders who understand Strategic Landpower and their role in it. Seek out opportunities to ingrain your training events within the framework of Strategic Landpower. Write articles for your branch's professional journal discussing the impacts of Strategic Landpower for your specialty.

You can find the Strategic Landpower White Paper on the TRADOC internet homepage at http://www.arcic.army.mil/app_Documents/Strategic-Landpower-White-Paper-06MAY2013.pdf, and on Company Commander discussion forums. This White Paper is the primary reference for Strategic Landpower concepts and the one jointly approved by the Army Chief of Staff, the Marine Corps Commandant, and the Commander of U.S. Special Operations Command.

It is the responsibility of senior Army leaders to set the conditions to make you, and our Army, successful. Your senior leaders appreciate what you do every day. These will be challenging, but exciting times, and I thank you for your service and sacrifice as we move towards making the Army of 2020 and beyond the best in the world.

Intelligence Preparation of the Battlefield: A Historical Perspective of a Critical Planning Tool

by Major Craig T. Olson

Introduction

Napoleon Bonaparte once stated, "If I always appear prepared, it is because before entering on an undertaking, I have meditated for long and foreseen what may occur." While seemingly visionary in his time, this battlefield wizardry known in today's Army as intelligence preparation of the battlefield (IPB) was practiced by successful leaders before Napoleon and continues to remain an integral planning aspect of warfare to this day. While IPB was not codified in a French field manual in Napoleon's day, this planning tool has proven to withstand the test of time over three centuries of military revolutionary warfare and across the spectrum of conflict.

Leaders over time have relied on IPB to defeat the enemy by visualizing the opponent based upon his capabilities and resources in conjunction with the battlefield terrain, weather, demographics, and other factors. IPB has remained a significant and constant aspect of operational warfare since the 1700s because this planning and visualization process has proven to be highly effective for leaders at all levels who embrace the process to defeat the enemy. It has proven to be adaptable in the face of military revolutions and it is flexible enough to be utilized across the spectrum of conflict.

In today's U.S. Army, IPB is defined as a "systematic process of analyzing and visualizing the portions of the mission variables of threat, terrain, weather, and civil considerations in a specific area of interest and for a specific mission. By applying IPB, commanders gain the information necessary to selectively apply and maximize the operational effectiveness at critical points in time and space."[1] IPB is an essential component to the staff-planning process because the endstate of the process allows the commander to minimize chance in a mission by visualizing the battle, war game likely decision points, and synchronize and coordinate decisive actions by his units in the time and place of his choosing.

The four steps of IPB, which are continuously performed or assessed and refined, include:

1. Define the operational environment in order to identify the characteristics of the environment that influence friendly and threat operations.

2. Describe environmental effects on operations, to include the evaluation of all aspects of the battlefield such as terrain, weather, infrastructure, and demographics.

3. Evaluate the threat by analyzing current intelligence to determine how the enemy normally arrays and fights.

4. Determine the threat's possible courses of action and arrange them by probability in order for the commander to war game against the enemy.[2]

IPB–A Constant in Warfare

IPB has remained a constant aspect of warfare over time because it has proven to be effective. IPB provides an operational and tactical advantage to leaders who use the process to drive their operations by taking advantage of the terrain, weather, and enemy capabilities and array. The effective use of IPB operationally and tactically has characterized successful leaders over time and across wars, from Frederick the Great in the mid-1700s to the American leaders fighting today's insurgencies.

Napoleon was an exceptionally astute student of IPB during his actions in the French Revolution. He studied enemy order of battle; capabilities; method of fighting, and strengths and weaknesses to exploit. He was able to visualize the battlefield and select the time and place of the fight. He also had a decisive battle in mind for all of his strategic plans and he visualized the battle as it would be fought in the terrain of his choice. Prior to each campaign, he would visualize fighting scenarios given the known strength, alliances, and penchants of the possible adversary. His strategic vision capitalized on his intimate analysis of terrain, wherein he selected the shortest and most practicable routes of march to a defining battle.

Terrain analysis allowed him to significantly decrease the amount of marching time, he would often surprise the enemy commander when he showed up days ahead of that commander's best guess (a miscalculation in enemy IPB by this forlorn commander).[3] Napoleon also practiced operational security to prevent the enemy from performing IPB against his army. He controlled the press to deceive the enemy, closed his frontiers to foreigners, and increased his counterintelligence efforts to root out spies amongst his own people. He then used deceptive feints and movements to further cloud the enemy's intelligence collection efforts.[4]

The second reason that IPB remains a constant aspect of warfare over three centuries is because it has adapted and guided operations over three centuries of revolutionary military change. While many intelligence collection methods, which form the basis of IPB, have remained in use throughout this time, other methods have kept pace with changes in warfare as history evolved from the advent of the modern nation state to the French Revolution, the Industrial Revolution, the Cold War, and into today's environment characterized by small wars.

Information Collection

Some of the information collection methods that have remained the same over time are the use of scouts, cavalry, spies, and the civilian populace (such as the coast watchers during American involvement in Guadalcanal during World War II). The use of maps to study terrain and infrastructure has been a basic IPB tool since Frederick the Great used them to identify defensible camps that offered foraging opportunities along the routes of march, obstacles posed by rivers, fords, and marshes, and the size of roads and trails that would limit troop movement.[5]

Today's collection method of Open Source Intelligence (OSINT) uses the same resources used by Napoleon and General Robert E. Lee. The first action that Napoleon took when facing the possibility of war with a European power was to send for his librarian and intellectually devour every book he could find about the enemy and the land. General Lee utilized OSINT through the local Philadelphia paper to acquire knowledge of the impending battlefield departure of the Pennsylvania Reserves during the Overland Campaign of 1864.[6] Then there is the unchanged analytical collection method that relies on intuition and common sense–Frederick the Great predicted the distance and number of days that the enemy would be marching when he observed smoke from their camps between the hours of 0500-0800, as the Austrian cooks would prepare for hours to send the soldiers off with full stomachs.[7]

Information collection methods and resources have also adapted along with technology to supple-

ment these basic techniques. In World War I, when war became a large scale, high-intensity conflict across several theaters, intelligence focus turned to targeting and maneuver in the deep battle. Later, IPB was greatly enhanced by technical improvements that created aerial, electronic, acoustic, and optical intelligence collection methods that allowed the commander and staff to collect information in depth.[8] These systems developed throughout the 20th century to yield the powerful U-2 reconnaissance aircraft to spy against the Soviet Union in the Cold War in the 1950s and eventually the current U.S. systems that include the Global Hawk, Joint STARS, and numerous unmanned aerial system platforms, all of which provide intelligence worldwide and around-the-clock. Despite the method of collecting information over time, the end result remains the same—providing the commander with combat information and intelligence to allow him to visualize the battlefield and capitalize on the enemy's weaknesses.

IPB in Counterinsurgent/Insurgent Operations

Lastly, IPB remains a critical aspect of operational planning over the past three centuries because the process is flexible. It is highly adaptable across the spectrum of conflict, from conventional state-on-state warfare to irregular warfare highlighted by counterinsurgency operations. Field Manual 3-24, Counterinsurgency, was published in December 2006 to assist U.S. and allied forces in the global fight against terrorism and insurgents across the world. One chapter is solely dedicated to IPB wherein the four steps of IPB were simply altered to provide a process to visualize and war game an enemy insurgent group or cell operating in a social versus a conventional battlefield. These steps are adjusted to include the tribal, economic, demographic, religious, linguistic, and cultural aspects in terrain analysis and to consider social and ethnic networks, structures and institutions, and local values and belief systems in the analysis of the operating environment.[9] Again, while the IPB process in a counterinsurgency is formalized in today's U.S. military, the basics of this process had already been in use for centuries.

During the Mexican War of 1846, American Major General Winfield Scott practiced counter-guerrilla and pacification strategies that targeted the population in Mexico City. Scott protected the population and property, respectfully courted the religious hierarchy (his soldiers even saluted the priests), and kept the local governing officials in office. His soldiers developed the infrastructure, schools, and hospitals. These were carefully planned actions that arose from Scott's study of European practices built upon the basis of knowing your enemy, the enemy terrain, and the battlefield environment and population.[10]

Arguably, one of the preeminent practitioners of IPB in an insurgent setting was T. E. Lawrence, better known as Lawrence of Arabia. Lawrence was a student of Arab history, culture, and languages and sought to assimilate into the Arab culture. He was assigned as a British liaison during the insurgency against the Ottoman Empire in 1916 and used his knowledge of the enemy and cultural skills to gain the respect, trust, and favor of the Arab insurgency leader, Emir Faisal. Of his experience assimilating into the culture, Lawrence writes that "the effort for these years to live in the dress of Arabs, and to imitate their mental foundation, quitted me of my English self and let me look at the West and its conventions with new eyes."[11]

Although the application of IPB is adaptable, this does not mean that great leaders over time have always capitalized on the process to understand the enemy in an insurgency. After all, Napoleon abolished the Spanish church and destroyed the countryside when he attempted to conquer Spain in 1807 (this being the land of a proud people who lived in a terrain conducive to insurgent operations).[12] General Scott destroyed his own efforts by conducting a harsh campaign against Mexican guerrillas that included burning villages and confiscating property.[13] Neither strategy was conducive to protecting the population or stabilizing the area of operations. On the flip side, however, the enemy insurgent leaders in each case used IPB to take advantage of the much stronger enemy's weaknesses. In the U.S. Civil War, Southern practitioners of irregular warfare employed IPB to target Union weak points with carefully planned ambushes that disrupted Union lines of communication. The irregulars used their intimate knowledge of local terrain (forests, mountains, and swamps) to select ambush sites to their advantage. They severely hampered Union efforts in the South, tying down as much as one third of the Union force at certain stages of the war.[14]

Conclusion

IPB has endured as a constant aspect of war over the past three centuries because the process has proven to be effective by commanders who truly adopt the process and use it to drive operations. It remains adaptable to revolutions in military and technology over time, and it remains flexible across the spectrum of military conflict from conventional to irregular warfare. IPB has grown from an informal visualization process during the Napoleonic Wars to a formal practice in the military decision making process for today's Western armies and, by extension, the partner nation armies that we train. The fact that IPB has remained an essential component of battlefield success ensures that this planning process will continue to play a critical role in future conflicts across the dimensions of space, time, location, and changes in revolutionary warfare.

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What is the UMI? Where is it? How do I use it?

The University of Military Intelligence (UMI) is a training portal of MI courses maintained by the U.S. Army Intelligence Center of Excellence at Fort Huachuca, Arizona for use by authorized military (Active, Reserve, National Guard) and non-military (e.g., DOD civilian, Department of Homeland Security, other U.S. Government agencies) personnel. UMI provides many self-paced training courses, MOS training, and career development courses. In addition, the UMI contains a Virtual Campus that is available to users with an abundance of Army-wide resources and links related to MI: language training, cultural awareness, resident courses, MI Library, functional training, publications, and more.

UMI online registration is easy and approval for use normally takes only a day or two after a user request is submitted. Go to http://www.universityofmilitaryintelligence.army.mil, read and accept the standard U.S. Government Authorized Use/Security statement, and then follow the instructions to register or sign in. The UMI Web pages also provide feedback and question forms that can be submitted to obtain more information.

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Warfighters overwhelmed by the vast amounts of imagery available from unmanned aerial systems and other sensors may soon rely on Persistics, a revolutionary system that compresses data while maintaining vital image quality.

Coping With the Big Data Quagmire

A prototype system compresses surveillance imagery by a factor of 1,000 while keeping critical data quality.

BY GEORGE I. SEFFERS

Researchers at one of the premier national laboratories in the United States are prepared to hand the Defense Department a prototype system that compresses imagery without losing the quality of vital data. The system reduces the volume of information; allows imagery to be transmitted long distances, even across faulty communications links; and allows the data to be analyzed more efficiently and effectively.

The Persistics computational system developed at Lawrence Livermore National Laboratories (LLNL) derives its name from the combination of two words: persistent surveillance. The system is designed to revolutionize the collection, communication and analysis of intelligence, surveillance and reconnaissance (ISR) data so that warfighters do not find themselves drowning in a swamp of too much information. The ground-based system has demonstrated 1,000 times compression of raw wide-area video collections from manned and unmanned aircraft and a tenfold

Persistics will soon transition to the Defense Department, but researchers believe it could also assist in homeland security missions such as border patrol and illegal immigration.

reduction of pre-processed images. Standard video compression can achieve only a 30 times data reduction.

The existing data processing infrastructure for national security is not designed for the amounts of information being generated by unmanned aerial systems and other platforms. In addition, the communication bandwidth supporting data transmission for air to ground and the archive storage capability are too slow to support fast-turnaround human analysis, according to LLNL researchers. "These [ISR] cameras are picking up more data than we know what to do with, and there are not enough humans on the ground to analyze every pixel," explains Sheila Vaidya, deputy program director, defense programs, Office of Strategic Outcomes, LLNL.

The Persistics concept is relatively simple—to compress the data so it is more manageable without losing image quality that would prevent warfighters from spotting suspicious activity. But meeting the challenge has been anything but simple. "Livermore got involved about 10 years ago in a small research initiative, specifically with these large-format motion imagery video cameras, which are the largest culprit from a data perspective, to help mitigate the burden on the ground analyst," Vaidya reports. "And it has expanded from just looking at wide-area motion imagery, which can cover larger swaths of territory in a single image, to including other forms of sensing as well. Persistics is not about the camera—it's all about the data."

Imagery must be compressed to be quickly and efficiently transmitted, and that compression results in a loss of data quality. Vaidya compares ISR imagery to Internet videos. "If you look at video, for example, on YouTube, it's compressed because video has so much data in it, but the user is willing to accept that compression because the information has quality that the user is happy with. But in surveillance video, you really want to look at the needle in the haystack, so you cannot compress that and lose detail in noisy environments," Vaidya explains.

The genius behind Persistics is that it compresses only the irrelevant data, such as nonmoving background images, the jitter and movement of the camera or of the airborne platform the camera rides on, and atmospheric aberrations, including smoke and, to some extent, clouds. Compressing or eliminating the irrelevant data allows the system to maintain the image quality on everything that matters to the warfighter. "Persistics comes up with a revolutionary capability that allows you to save useful information that is pertinent but to compress irrelevant information so that the next data product is much smaller in volume and can be communicated across the globe, if necessary, along standard data links," Vaidya says. "It reduces the data only where you don't care."

The system uses a technique called pixel-level dense image correspondence to stabilize video; compress background; eliminate slight differences in the apparent position of objects viewed from different cameras; and provide superb subpixel resolution of moving objects of interest. "The next product is an order of magnitude, or more reduced from what it was at the sensor. It can be communicated across narrower pipes—long-haul links that are inherently high-latency and corrupt and have all kinds of dropped bits. It compensates for that. And it gives a product to the end user that allows the use of machine learning and automation algorithm for analysis," Vaidya says. "So, let's say you're trying to track a guy on a motorcycle who is going on roads that are not necessarily mainstream roads, and he is going to do something odd or abnormal. We've got algorithms now that look for normalcy versus the suspicious."

> "Persistics is not about the camera—it's all about the data."
>
> —*Sheila Vaidya, deputy program director, defense programs, Office of Strategic Outcomes, LLNL*

The LLNL has worked with the National Geospatial-Intelligence Agency, the Defense Advanced Research Projects Agency, the Air Force, Army and several military laboratories to incorporate the Persistics pipeline into data processing ground stations receiving video feeds from Constant Hawk cameras aboard both manned and unmanned aircraft. Persistics also has been integrated into the Air Force Research Laboratory-developed Pursuer viewer, which allows analysts to pan, zoom, rewind, query and overlay maps and other metadata, according to LLNL documentation. Analysts can ask to see all of the vehicles stopping at a specific loca-

Persistics compresses irrelevant data while data critical to warfighters maintains image quality. When teamed with the Air Force Research Laboratory-developed Pursuer viewer, analysts can pan, zoom, rewind and overlay maps and other metadata on images such as this overhead view of terrain and buildings in Afghanistan.

tion during a particular time frame, for example.

Vaidya cannot say exactly when the system will transition to the Defense Department, in part because of budget uncertainties. But it will be "soon," she vows. It will transition through an intermediary that will support, maintain and sustain the system. "That's where contractors come in," she points out. Furthermore, researchers believe it could assist in homeland security missions, such as border patrol and illegal immigration. Meanwhile, LLNL researchers already are planning improvements to the system. The prototype is ground-based, but LLNL researchers say they intend to reduce the size, weight and power so that it can be deployed on manned or unmanned aerial platforms. "The ultimate goal is to fly it in the air. Right now, Persistics is a ground cluster, so the data is brought to the ground, but the goal is to do all that we do in the air," Vaidya says. "The size, weight and power requirements will depend upon which platform it flies on. If it is on a Predator, that has a certain size, weight and power capability; and if it is on a bigger cargo plane, that will have a different requirement," Vaidya offers.

Although Persistics is considered revolutionary, Vaidya says there is always more to be done. "Compression by a factor of 10 or a factor of 100 or even 1,000 is not good enough because the volume of data collected by sensors is increasing exponentially. So, we have to keep improving our trajectory so that we can take several orders of magnitude leaps in what we do with the data collected," she declares.

And today's technology can only do so much. "No machine can really solve the full problem yet. Maybe some day we will have HAL sitting there telling us what to do," she says referring to the fictional computer in Arthur C. Clarke's *2001: A Space Odyssey*. "But we don't have that yet. We can only help the end user by making his job easier, and that is what Persistics is providing."

Going forward, the ISR community must learn to collect smaller amounts of data. "The next step will be to collect smartly—not to collect every bit of information. Let's be clever about what we ask our sensors to do so that in the end, when we have to process it all, it is all relevant information," Vaidya proposes. "Smart collection is part of the projection of ISR because, otherwise, we're never going to get out of this large data quagmire."

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The MI Professional in Tomorrow's Army

by Lieutenant Colonel Candice Frost

Smaller Force, Unknown Threats, and the MI Professional

As the Army becomes leaner, how will the Military Intelligence (MI) Branch maintain its effectiveness with fewer professionals and a smaller budget? As with every other branch, MI must learn to do more with less. Driven by budget cuts and the Army's own internal reflection, the Army is already becoming leaner. The mandated decrease in active duty service members to 490,000 Soldiers and officers by 2017 means that reductions will occur one way or another. How can the MI Branch become smaller and more capable at the same time? Over more than a decade of war, MI professionals have learned valuable lessons and developed new and necessary skills that should help guide the way. Now the challenge is to build on this hard-earned experience to create the force of the future.

The goal of this article is to advance the dialogue on how to go about reducing the size of the force without reducing its effectiveness or readiness. My focus is on MI and the impacts to the MI Corps, as well as our conception and methods of training and professional development. I argue that there are two essential issues that must be addressed before considering the path forward. The first step is to identify the attributes of a successful MI professional, particularly with respect to skills and characteristics. What do we want MI professionals to be able to do and, more importantly, how do we want them to think?

Second, once we have identified these attributes, how can the MI Branch ensure that all Soldiers and officers have these skills and characteristics? The answer to this question is the heart of this article. I propose that it is possible to identify, support, and reward nimble and adaptive thinkers by empowering MI professionals through the Army's assignment, training, and reward systems within this field. In the end, this article shows that it is possible to inculcate the important values and impart the necessary skills to ensure that the MI Branch becomes both better and leaner in the future.

The Attributes of a Successful MI Professional

The starting point begins with what the MI branch does now. It serves the Army by collecting information and determining what that information means and will continue to perform these three essential functions: intelligence synchronization, intelligence operations, and intelligence analysis.[1] Intelligence synchronization is the "art" of integrating information collection and intelligence analysis with operations to effectively and efficiently support decision making.[2] Intelligence operations are the tasks undertaken by MI units and Soldiers to obtain information to satisfy validated requirements.[3] Intelligence analysis is the process by which collected information is evaluated and integrated with existing information to facilitate intelligence production.[4]

Even as the core functions of the MI Branch remain constant, the individual skills and competencies of MI professionals must change. Individuals must proficiently perform the core functions to meet the baseline requirements for a competent MI professional. But the skills necessary for advanced intelligence will change and the personal competencies accompanying these changes must adjust to ensure focus remains on what the branch needs to do. It is likely that in the future the core set of skills of MI professionals will be at least somewhat different than it is today. It is also highly likely that it will be even more important for MI professionals to have the ability to quickly identify and learn these new skills. Mid-course corrections and continual reassessment will be the coin of the realm for tomorrow's MI professionals.

A smaller Army facing bigger and more complex threats demands nimble, adaptive MI professionals. Focusing on specific rote-learned skills alone will not meet the challenge. A recent example of this approach was highlighted in Major General Flynn's

2010 paper, *Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan.* In that paper, he recommended sweeping changes in the way the intelligence community thought about its role in Afghanistan.[5] Instead of focusing solely on the enemy and its forces or tactics, he advocated a focus on the people of Afghanistan as a way to force the intelligence community to ask and answer a number of new and important questions about the environment in which allied forces were operating.

This recommendation was a call to broaden the focus of MI to include the society and environment in which the conflict was occurring. What is significant about this is that MG Flynn's approach used the core set of skills common to MI professionals while also recommending that analysts take the risk of focusing on governance, development, and stability. This shift, which might in hindsight appear obvious, would represent a significant change in the way MI operates. It would call for the identification of new skills and the creation of analysts with a deeper understanding of the environment and a better ability to face changing needs.

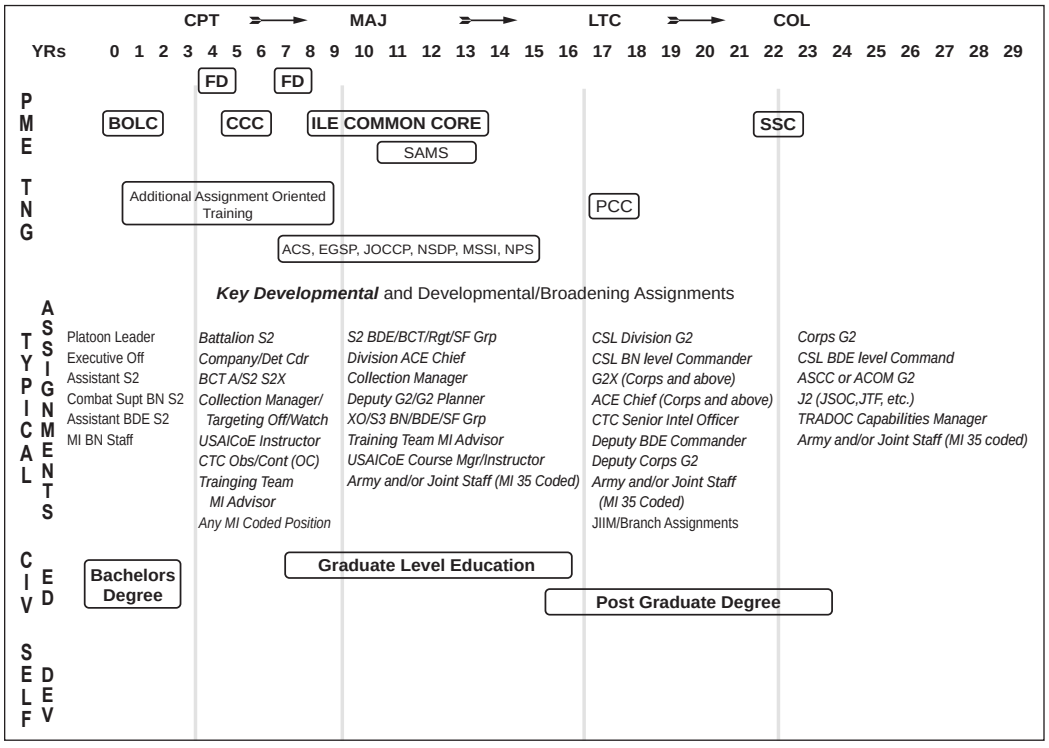
Even more important, what will be different in tomorrow's MI Branch is the importance of personal characteristics–the habits of mind that allow MI professionals to quickly and efficiently develop new skills to adapt to the changing threat environment. Three characteristics in particular will be essential: self-instruction, intellectual curiosity, and growth from experience. Self-instruction requires critical thinking and the ability to utilize the disciplined skills of reflection and study to arrive at unbiased decisions and recommendations for commanders. Intellectual curiosity charges each officer to remain open to new ideas that he or she had not considered in previous training, even if those ideas have not yet made their way into the standard MI doctrine. Lastly, growth from experience requires mature and nimble officers to recognize that learning from experience, even from failures, leads to a more professional Corps.

An example of this comes from Brigadier General(R) Wayne Hall's book, *Intelligence Analysis: How to Think in Complex Environments.* BG Hall challenged the profession of analysts to consider "how to think" rather than the traditional "what to think." This is a shift in MI's view of analytic tradecraft and the future of the profession is a major one.[6] But refocusing is just the first step. As the profession evolves the next step is to identify ways to reward creativity and factor it into assignments.

Training for the Skills; Inculcating the Characteristics

In this section, I move from theory to practice. What are the practical steps the Army can take to impart the necessary skills, put those who have the skills in the position to do the most good for the Army, and provide incentives for officers and Soldiers to develop and demonstrate the necessary characteristics to be innovative and adaptive MI Professionals?

Training. Training starts with the U.S. Army Training and Doctrine Command (TRADOC). To be clear, this article does not address the development of doctrine. Instead, the focus is on how the training provided through TRADOC assists in the indi-



Military Intelligence Officer Active Component Career Development Matrix.

vidual development of skills and the characteristics vital to the profession. MI spends a considerable amount of time in training, which makes TRADOC the appropriate place to lead developmental change. The Professional Military Education (PME) instrument (p.29) illustrates that an officer spends between 27 to 45 months in the Basic Officer Leader Course, Captain's Career Course, Intermediate Level Education, and Senior Service College as he or she moves from lieutenant to colonel. Spending 30 months, or an average of 13 percent during the course of a career, in PME speaks to a profession devoted to focusing on individual skills. What requires changing is motivation for continued learning.

As stated in Richard Kohn's recent article, *First Priorities in Military Professionalism,* "military schools, even if strengthened, cannot suffice to prepare officers for the highest responsibilities. They must engage in self-study and lifelong learning. Other professions put the obligation on each practitioner to read their journals and choose among a variety of specialized seminars, workshops, lectures, and short courses."[7] Kohn's argument for individual initiative fits the needs of the MI profession.

Time spent on developing skills might also be used simultaneously to develop the characteristics of self-instruction, intellectual curiosity, and learning from experience. Learning through self-instruction allows officers to explore intellectual pursuits not common to military training. Intellectual curiosity works well to overcome some of the limitations of the conforming nature of the military. Learning from experience encourages MI professionals to attempt unique and difference solutions to solving problems. Failure to apply the characteristics listed above leads MI officers into thinking traps.

One such example of failing to divergently think about a problem was demonstrated in Iraq from 2004 through 2006. During this period a growing insurgency in Iraq was not exploited to the fullest extent due to a lack of understanding by intelligence professionals about Iraqi society as well as a limited infiltration into the culture hindering intelligence gathering within the insurgency. Learning from this failure led intelligence officials to reframe their view of partnering with indigenous forces leading to better information. Thus, actionable intelligence from these enabling efforts created opportunities for infiltration in targeted areas and focused efforts of safety and security in other areas. This example demonstrates the great gains that can come during a period of urgency, but MI professionals must not wait for the next crisis to implement these lessons.

At issue here is that officers were rewarded when they repeated traditional doctrine without critically analyzing it and were penalized for challenging the orthodoxy. The result was an inability to truly understand the environment. A leaner MI Corps can learn from this history. Future officers can build their collective training from their recent experiences to create a better force of professionals.

Identifying and Rewarding Successful MI officers and Soldiers. Officers who demonstrate the necessary characteristics (and, of course, develop the necessary skills) must be permitted to continue their growth as they move into new positions and are promoted. To accomplish this, the Army must look at both the vertical and horizontal path of officers through units. This would represent an important change in the MI assignment process and would require effective tools to identify those with the appropriate skills, flexibility, and creativity. There are a number of ways to accomplish this.

First, after completion of the Captain's Career Course, officers acquire additional training through Areas of Concentration and additional Skill Identifier (SI) courses within Signals Intelligence (SIGINT), Human Intelligence (HUMINT), Counterintelligence, and Geospatial Intelligence (the Imagery Intelligence Officer Course (SI 1D)). This provides officers with internal opportunities to vertically develop within particular commands. SIGINT officers have the opportunity to intellectually develop themselves in the cyber field at the U.S. Army Intelligence and Security Command or coordinate with a unit's Analysis and Control Element for further training. HUMINT officers could excel working in a multi-cultural environment as an S2 to a U.S. Army Forces Command unit participating in the Regionally Aligned Forces structure. Officers with imagery skills further their development by working closely with the National Geospatial-Intelligence Agency. The interrelationship of thinking in multiple intelligence disciplines provides depth to an officer's skills. Vertical path development is accomplished in a similar model to the processes followed by warrant officers, who achieve vertical advancement through additional SIs and schooling within their field of specialization.

Second, horizontal advancement is accomplished through cultivation and development of the Army's broadening opportunities. Officers displaying the ability for individual growth are offered opportunities for continued promotion and selection. These opportunities are honed through versatile assignments, following command, to ensure horizontal diversity continues to develop an individual building on their solid MI foundation. Examples of such programs offered to officers with exceptional performance are Project Warrior, Junior Officer Cryptologic Career Program, and the School of Advanced Military Studies. The experiences and education gained by placing an officer outside of the initial assignment allows for individual growth within a new environment. The insights gained by placement in such a program allow high performance officers, with potential for growth, to experience a different organizational culture.

Individual officer growth contains aspects of both vertical and horizontal paths to achieve success. How this change is accomplished begins with the MI Corps and management of skilled individuals. Both the Human Resources Command (HRC) and units play a role in this task. HRC manages individuals by year group and can emphasize skill identification during the assignment process. Once an MI officer is assigned to a location the unit is responsible for building on the officer's skills through tough and realistic collective training. Additionally, an increase in an officer's time on station with the decrease in frequency of permanent change of station moves provides more opportunities for training with multiple leaders. This stability and predictability for G2s and intelligence leaders creates an opportunity to grow a well trained field of professionals.

The Rewards Gained

Growth of the professional MI force occurs when it is understood that MI professionals must mentor the efforts of younger leaders. A focused, apprentice-like relationship of MI officers across the ranks is required as novices arrive in units without the experience or knowledge of what is required of them. Successful professionals, who have already walked the path in the profession, must take it as an important part of their jobs to shape the skills of younger professionals. The focus on continuing education, not only formally within PME, but also through diverse means of experience and self-led professional education strengthens knowledge and ensures progression of the right type of officers. Strong MI mentors of all ranks throughout the officer Corps can work through effective leader development strategies to ensure a reward system that truly honors the most talented with the best jobs.

This article seeks to continue the dialogue within MI on how it rewards motivated professionals and improves itself. Individuals are challenged to understand the theory of intelligence synchronization, intelligence operations, and intelligence analysis skills while also displaying the necessary characteristics of self-instruction, intellectual curiosity, and learning from experience. The practical steps in demonstrating these attributes come through training, assignment, and rewards. Rightsizing the force can occur without reducing effectiveness or readiness of the MI Corps through leaders who continue to mentor and encourage professionalism throughout the Intelligence Enterprise. In the end, the payoff for the MI Corps provides the entire Army with professionals who are adaptive and eager to accept the challenges of the future with the skills required to get the job done.

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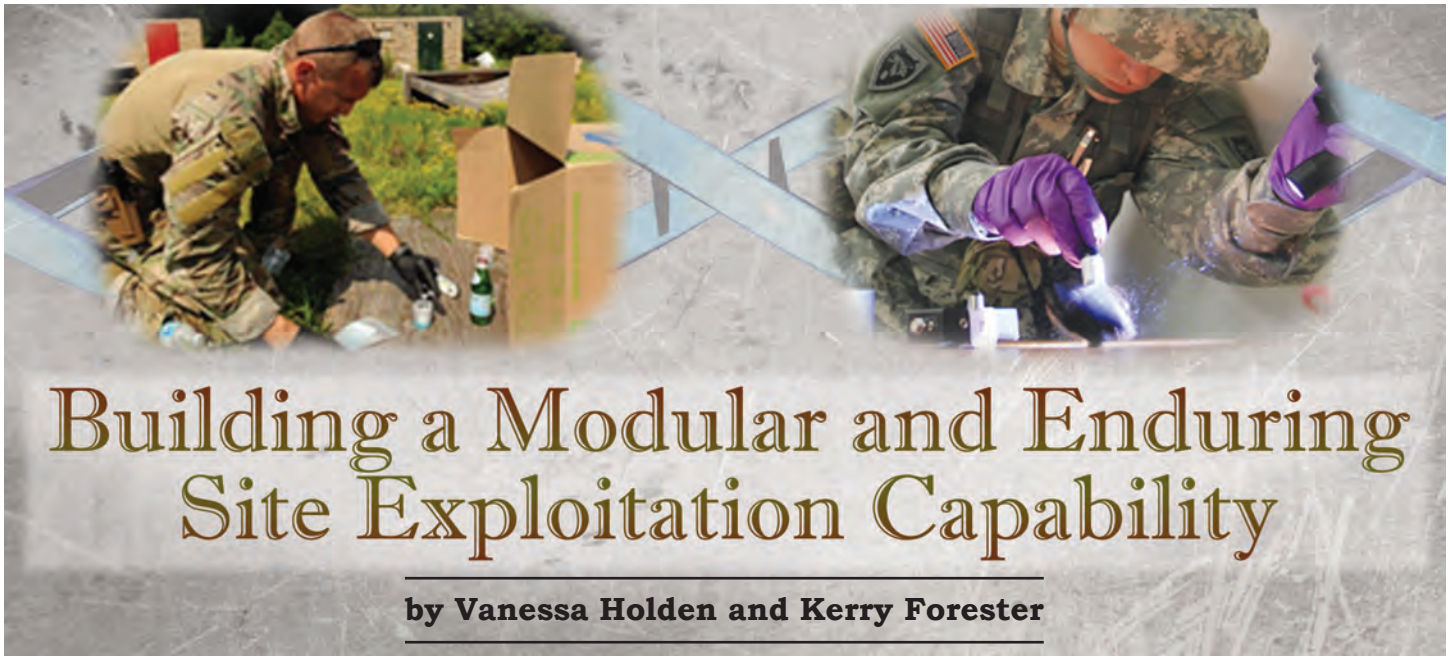
LTC Candice Frost currently serves at HRC as the Operations and Plans Branch Chief for Officer Personnel Management Directorate. She was selected to take command of the 304th MI Battalion in June 2014. Previous assignments include Intelligence Planner in the ISAF Joint Command deployed to Afghanistan, Operations Officer for the 304th MI BN, and Deputy Operations Officer at USARPAC. Her assignments include both the 25th Infantry Division and 82d Airborne Division, along with two deployments to Afghanistan and one to Bosnia. She graduated from the School of Advanced Military Studies, holds two masters degrees and graduated from the U.S. Military Academy in 1998.



Building a Modular and Enduring Site Exploitation Capability

by Vanessa Holden and Kerry Forester

Introduction

Site Exploitation (SE) is defined in Joint Publication 1-02 as "a series of activities to recognize, collect, process, preserve, and analyze information, personnel, and/or materiel found during the conduct of operations."[1] After nearly twelve years of active conflict, existing infrastructure available for SE related collection, storage, analysis, and dissemination is limited, non-standard and in most situations nonexistent. An increasingly asymmetrical threat has greatly amplified the need for coordinated SE capabilities within the Army. SE operations are characterized by the rapid collection, analysis and sharing of biometric, forensic and document/media exploitation (DOMEX), and Technical Intelligence (TECHINT) collected by specialized teams.

The Warfighting Challenge

National and strategic assessments indicate that the future Joint Force (JF) operations will face dynamic formal and proxy challenges from rising competitor states, violent extremists, regional instability, and transnational criminal activity in an unpredictable complex and largely non-permissive operating environment. This threat will likely avoid conventional engagement against an overwhelming joint force, but seek to exploit vulnerabilities of the JF to disrupt its activities.

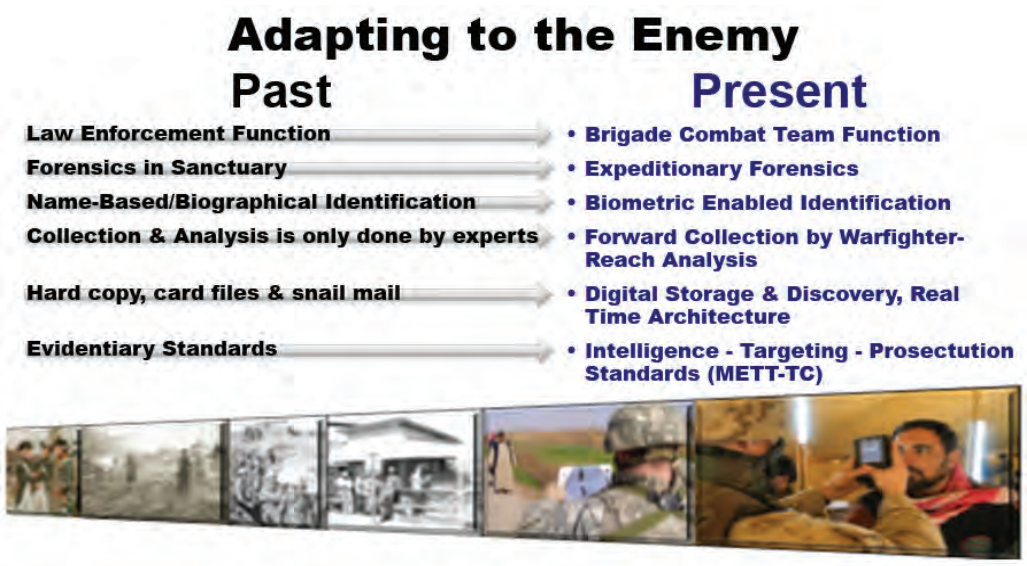
These adaptable enemy combatants will employ asymmetrical tactics. Thus, it will be hard to identify and recognize the threat. Additionally, this asymmetric threat will likely utilize conventional and unconventional weapons and munitions, and possibly other technologies, to include the use of computers and the Internet to its advantage. The Army will need to confront these challenges by rapidly identifying this threat, the network it operates on, and its equipment.

Forensics Enabling a Solution

Today, we are engaged globally against an indistinguishable enemy who seeks to mitigate our military superiority by operating anonymously among the civilian population. In response, we have expanded the traditional role in collecting captured enemy materiel and documents to collecting, processing, and analyzing sources of biometrics, forensics, and technology. These expanded intelligence capabilities are referred to as Biometric Enabled Intelligence, Forensic Enabled Intelligence (FEI), DOMEX, and TECHINT. These capabilities also have enabled Identity Intelligence (I2) in support to Identity Operations.

The use of forensic capabilities techniques and exploitation and analysis of forensic materials on the battlefield advances the overall intelligence picture by providing accurate information with which to identify persons, organizations, and threat materiel, and link them to specific places and incidents. Forensic information expands the threat knowledge base and provides greater situational awareness. FEI answers a commander's or decision maker's information needs concerning events, locations, ideology, persons, networks, or populations of interest.

Various forensic disciplines enhance the development of Weapons Technical Intelligence (WTI) in the exploitation of improvised explosive devices (IEDs), associated components, improvised weapons, and other weapon systems. Document and multimedia forensics are instrumental in extracting information in support to DOMEX operations. Forensic capabilities enable intelligence in identifying and understanding the threat's technological advances (operations and communications) and precluding strategic surprise.



Forensics provides a source of information not obtainable anywhere else, making a major impact on the battlefield. Latent fingerprints or DNA can easily identify an IED bomb maker and IED emplacer. Documents, cell phone, and computer extractions can link financiers, logistics, and cell leaders. Toolmarks taken from explosively formed penetrators can link the component's origins to the lathe upon which it was manufactured. Pieces of electronic components found at a site can be traced back to a specific electronics store. By examining an impact, we can analyze enemy capabilities and limitations and changes to their tactics, techniques, and procedures. By examining blast craters, we can determine the size and type of the ordnance being used by the enemy. By looking at the ballistics gathered at an ambush site, we can determine the size, disposition, tactics, and capabilities of the attackers.

Sharing information, materials, and analysis resulting from this exploitation helps create a fused picture of the operational environment. All of this and more is being done faster and farther forward than ever before imagined.

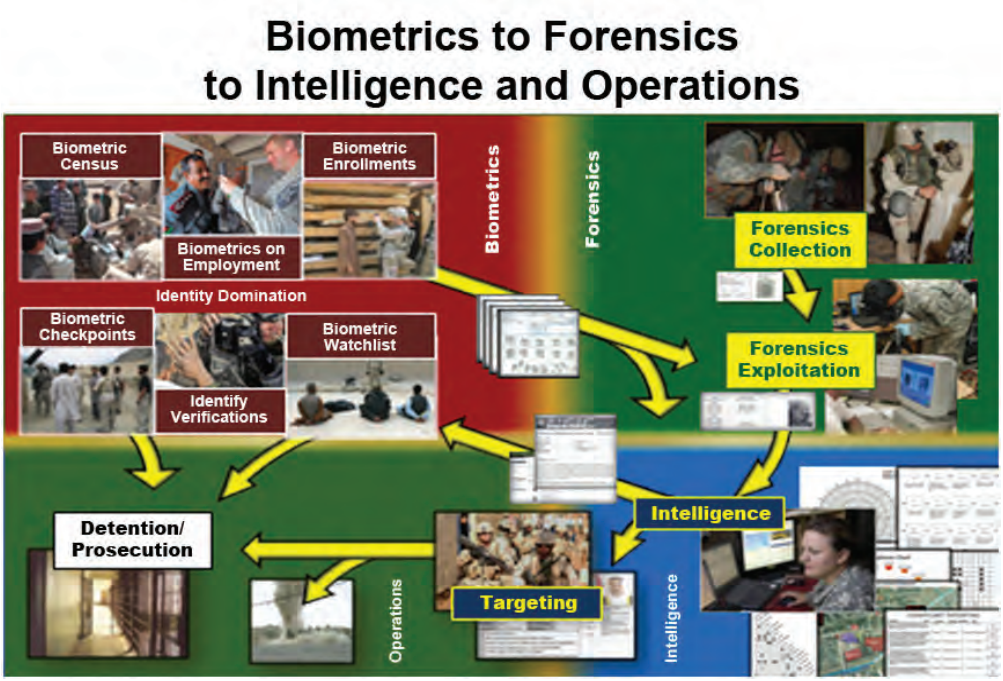
The speed, accuracy, and utility of forensics have significantly impacted military operations. Collected materials are forensically processed and analyzed into forensic information. This information can support one or more missions or activities to include intelligence, law enforcement, medical, and personnel recovery. Intelligence fuses this information with multidiscipline intelligence enhancing battlefield awareness, response to information requirements, targeting process, support to ongoing missions and prompts to subsequent missions, while supporting intelligence, especially TECHINT.

FEI aids in identifying, establishing patterns of life and developing associations on high-valued individuals and their networks. It supports the targeting process with accurate target nomination, evidence for warrant-based targeting, and accurate identification in battle damage assessments. Forensics aids in identifying new or unconventional weapons, munitions, equipment, and advanced or destructive technologies.

Building a Solution

With the success of these capabilities in Iraq, Afghanistan, and other global hotspots, the Department of Defense (DoD) recognized the need to establish an enduring capability for many of the quick reaction capabilities (QRCs) involving biometrics, forensics, DOMEX, and WTI in order to address the need for identity-associated problem sets. In the end, the true risk of not addressing these problem sets is the chance of losing the lessons learned and effectively creating a situation where the DoD would have to start from scratch in a future conflict.

In 2008, the U.S. Army Training and Doctrine Command Capability Manager–Biometrics and Forensics (TCM BF) was charged to develop, staff, and obtain approval for several Joint Capability Integration and Development System (JCIDS) documents in order to transition these QRCs into enduring capabilities. The TCM BF also worked with other



members of the biometric, forensic, and DOMEX community to develop related studies, lexicons, concepts and requirements documentation on WTI and SE subjects.

In 2010, the U.S. Army Intelligence Center of Excellence teamed with the U.S. Special Operations Command (USSOCOM) to address the biometric, forensic, and DOMEX warfighting problems and known capability gaps. They established a combined forum to research, develop, identify, and refine a technically advanced, modular solution to address these problems and gaps. The resultant combined project was an Office of the Secretary of Defense approved effort called the Rapid Site Exploitation (RSE) Joint Capability Technology Demonstration (JCTD).

The RSE JCTD effort is currently ongoing, and its objective is to identify and integrate SE focused digitization and information exchange capabilities that are also compatible with existing and emerging tactical communications gear and networks. The data formats will be compatible with downstream repositories and exploitation tools, while adhering to the form factor, power consumption levels, and environmental conditions set by Special Operations Forces (SOF) and conventional force missions.

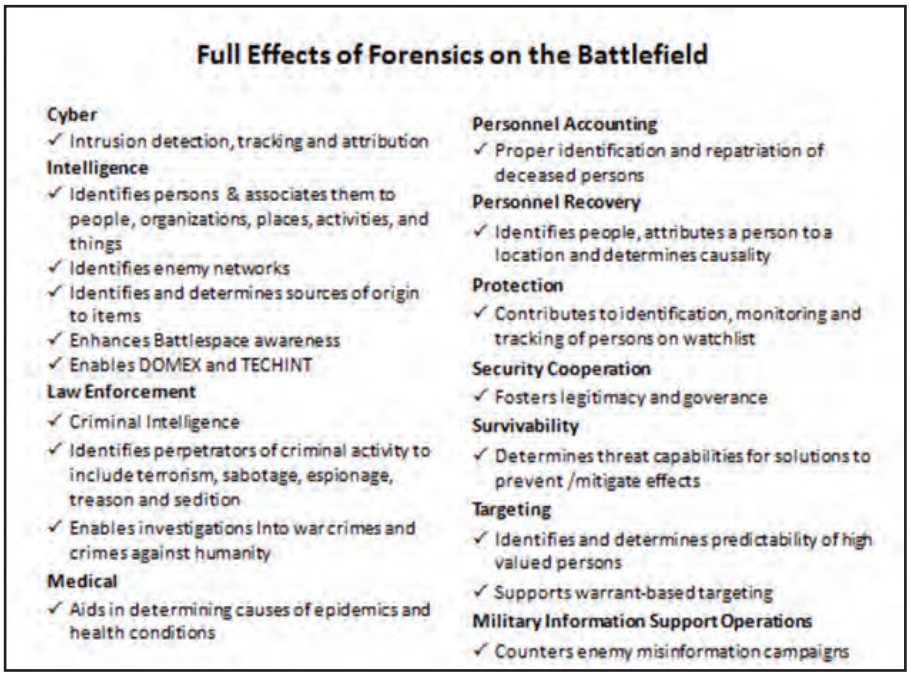
The RSE JCTD identifies, integrates, and assesses technologies to rapidly recognize, collect, preserve, exploit, analyze, store, and share forensics, biometrics and DOMEX materials and information using inexpensive, portable, easy-to-use, technologies that provide timely and accurate information. Timely analysis and feedback of SE-associated information and materials provides the commander with accurate intelligence on the enemy to drive future military operations.

The RSE JCTD capitalizes on innovative technologies that have evolved, making systems less expensive, more portable, and easier to use. The identification, categorization, or classification of materials, a capability once restricted to scientists in a laboratory, can now be accomplished on site, quickly and effectively by the warfighter with appropriate training and materiel. The warfighter will have the capability to conduct presumptive and qualitative testing of materials, enhancing the capability to actively engage and continuously disrupt the enemy network.

The RSE JCTD uses web-based communications architecture to disseminate SE information to intelligence analysts and subject matter experts for intelligence fusion, targeting, and battlespace awareness. It will also establish or supplement and enhance existing biometric, forensic, and DOMEX architectures, which significantly increases the information flow between Service members, forensics laboratories, intelligence and law enforcement communities, interagency partners, and coalition partners. The end result of this collaboration is a single, tiered, modular rapid SE capability that informs technical refresh to the existing USSOCOM Sensitive Site Exploitation (SSE) program of record and is providing the baseline capability for the U.S. Army SE program of record. The RSE JCTD capability has also been deployed by the U.S. Marine Corps, USSOCOM, U.S. Africa Command, and NATO SOF.

Transitioning to an Enduring Capability

When the JCIDS work began in 2008 and the RSE JCTD effort began in 2010, both shared a common objective of establishing enduring, programmed



aseline funded capabilities in the areas of biometrics, forensics, DOMEX and TECHINT. A number of parallel, but separate efforts came together in 2012 to allow the RSE JCTD collection and exploitation kit to provide a baseline capability for the establishment of an Army SE program of record. The DoD validated enduring requirements based on the approval status of several JCIDS documents. It was pursuing an initiative known as the SOF-to-Army transition to inject technically mature, relevant technologies employed by SOF into the conventional force. The USSOCOM established its SSE program in 2006, and was already partnered with the U.S. Army as part of the RSE JCTD. The Army had already made sustain decisions for several, partial SE-type kit configurations for tactical biometrics collection, WTI, and Battlefield Forensics. These efforts provided an opportunity for establishing a U.S. Army program of record for SE through a process called the Capability Development for Rapid Transition (CDRT).

The TCM BF, working with USASOC, USSOCOM, U.S. Army Forces Command, and Maneuver and Support Center of Excellence, made a recommendation during the CDRT Cycle 14 that the various, disparate SE related capabilities should be combined into a single modular, and tiered capability and recommended as an acquisition program candidate. This recommendation highlighted anticipated gains in purchasing, equipping, and training efficiency through a standardized and modular approach to an enduring SE capability. The Army Capability Integration Center and DA G3 requirements gatekeeper endorsed the recommendation, and the program was eventually approved in June 2012 by the Vice Chief of Staff of the Army, General Austin.

The TCM BF is currently working on an increment zero SE Capability Production Document to capture the current capability and support the establishment of this baseline program of record. The tiered and modular approach provides a basic recognition, collection, and preservation capability at the maneuver company level, with a more robust and advanced capability for the battalion SE teams and the brigade combat team Multifunctional Teams. The TCM BF and RSE JCTD are also providing the capability to address the Pursuit and Exploitation (P&E) program SE requirements. The RSE JCTD is providing equipment to support the concept demonstrations, and is working with the program management office to provide an integrated solution for the P&E Initial Operational Capability.

Conclusion

Forensics identifies those principal threats that attempt to remain indistinguishable from the local populace, operate covertly, and use asymmetric capabilities to disrupt or constrain JF operations. Forensics also provides a capability to identify those advanced and destructive technologies now easily accessible to rogue states (e.g., North Korea, Iran), non-state actors (e.g., al Qai'da, Hizbollah), and independent or "lone wolf" actors (e.g., local warlords, computer hackers, religious extremists). To counter these threats, the JF needs timely information on prominent threat actors, networks, and unconventional means of waging war. Forensics can deprive this threat of his/her anonymity and generate information that otherwise could not be obtained. Additionally, this capability can be utilized in the early phases of joint operations to establish legitimacy or avoid escalation of hostilities.

Endnotes

1. JP 1-02, DoD Dictionary of Military and Associated Terms, 8 November 2010 (As amended through 15 September 2013), 254.

Foreign Media Monitoring: The Intelligence Analyst Tool for Exploiting Open Source Intelligence

by Tracy Blocker and Patrick O'Malley

Introduction

For the intelligence analyst supporting the commander's common operating picture (COP), the amount and variety of open source information can be staggering. This information, in the form of television, radio, Internet, print, and collected media, can lack structure and relevant meaning. Add in a foreign language and the intelligence analyst's job can seem overwhelming. How can the analyst gain the situational understanding from this kind of foreign language information? Employ more analysts? Employ more linguists? Could technology provide some solutions?

There is a technological tool that has been available for several years. Based on research and development (R & D) from the Defense Advanced Research Projects Agency (DARPA) in automated speech recognition (ASR), machine translation (MT), and information retrieval technologies, Department of Defense (DoD) organizations have employed foreign media monitoring (FMM) to support data exploitation for open source content.

FMM is an automated collection, processing, and production tool for real-time tracking and translation of broadcast and website media, as well as collected media. DoD's Special Operations/Low-Intensity Conflict (SOLIC) Combating Terrorism Technical Support Office (CTTSO) Technical Support Workgroup (TSWG) has successfully transitioned FMM capabilities to Combatant Commands, Army Commands and other DoD organizations over the past nine years to support exploitation of open source foreign language media.

Foreign Media Monitoring Description

DARPA and TSWG, beginning in 2003, produced a broadcast monitoring system (BMS), as a component of FMM, which provided real-time monitoring and translation of broadcast television in Modern Standard Arabic. The National Institute of Standards and Technology tested the BMS in 2005 and determined that it could provide good triage of vast foreign language media and a basic translation capability when a human linguist was not available. Current needs and worldwide missions have resulted in additional languages and capabilities. Korean is planned for development in 2014.

Since deployments of FMM capability, CTTSO/TSWG has worked with DARPA to improve the ca-

pability based on annual users' workgroups and steady feedback from intelligence analysts. Today's FMM capability can exploit foreign language video (television to include live and recorded video from storage devices) and foreign language text (electronic media to include websites, email, blogs and media storage devices like DVDs/CDs, hard drives, and thumb drives). Additionally, the FMM capability provides data storage integrated with analyst tools to correlate information and develop intelligence products for strategic or tactical use. For the intelligence analyst, the following FMM capabilities are key to his/her ability to paint the commander's COP:

- **Broadcast monitoring.** FMM can provide near real-time 24/7 media processing (speech to text and translation) on multiple channels and has the capability to schedule or change channels. Analysts can establish automatic searches and alerts based on key words and phrases, either in English or the foreign language. FMM can also process other digitized media to be processed and archived in the same database. FMM enables correction of transcription and translation improving efficiency and accuracy when coupled with a human linguist. Additionally, FMM provides other data distillation and intelligence production tools for the analyst.
- **Web monitoring.** FMM can monitor selected websites as well as potential websites of interest based on key words/phrases and provide accurate text-to-text and speech-to-text translation (for embedded videos).
- **Social media monitoring.** As a recently introduced capability, FMM can provide emerging topics and theme tracking, identity and topic correlation, geo-location, sentiment analysis, network graph analysis, language and dialect identification, and archive indexed search through a browser-based user interface.

FMM Success

As commanders and intelligence personnel struggle with understanding the vast amount and variety of foreign language data available from multiple sources, FMM is being recognized as a necessary tool to exploit Open Source Intelligence (OSINT). There have been many Joint Urgent Operational Need Statements and Operational Need Statements since 2003 for the capability ranging from Combatant Commands to Army units such as I Corps and U.S. Army South. FMM systems are currently used at these as well as other DoD organizations and agencies.

In 2004, USCENTCOM J2 OSINT Cell was among the first to adopt FMM technology. Since then, CENTCOM has received an upgraded capability and networked with USSOCOM to increase coverage of monitored channels and websites. The OSINT Cell relies on FMM to support the major activities of the OSINT Cell: 24/7 indications and warning, translations and cultural insight, production and analysis, collection requirements management, knowledge management and dissemination, collaboration and outreach, analyst and foreign language training, and strategic messaging support. During a TSWG Users Workgroup, the OSINT Cell Leadership stated that USCENTCOM OSINT Cell could not meet information reporting requirements without the aid of FMM. FMM is that tightly integrated into the analysts' workflows.

FMM Future

Considerable R&D resources have been expended between DARPA and TSWG to develop and mature the many integrated components that make FMM the viable end to end and turn-key system that it is today. One of the most expensive aspects of the capability has been linguistic data development to support automatic speech recognition and machine translation for the various supported languages. TSWG has expended procurement resources to transition the R&D efforts to operational users with validated requirements. Additionally, TSWG continues to add new languages and improvements to FMM to process, cluster and filter OSINT data that matters most to Commanders.

The Defense Intelligence Agency has provided some recent resources to support the Defense Intelligence Analysis Center and upgrades at Combatant Commands. The Combatant Commands too have also directly funded updates/upgrades, including normal operations and maintenance. Despite the considerable investments and operational success, FMM is not identified with an official DoD acquisition program. Without alignment to an

acquisition program and with overseas contingency operations funding diminishing, the future for FMM is uncertain.

Conclusion

Though the future of FMM is unclear at this time, current users agree that it fills a capability gap to automatically collect, organize, and translate open source content near real time, making sense of the overwhelming amount of foreign language data available to intelligence analysts today. Additionally, FMM saves time and focuses the efforts of analyst, translators, and product editors in the production of intelligence products supporting the commander's COP.

Tracy Blocker, Scientific Research Corporation Contractor, is the MFLTS Product Office Representative at TRADOC Capability Manager-Biometrics and Forensics, Fort Huachuca, Arizona. He is a retired Army Intelligence Officer who last served as the Branch Chief, Language Requirements, Requirements Determination Directorate, Capabilities Development and Integration, U.S. Army Intelligence Center of Excellence at Fort Huachuca. He can be reached at everrett.t.blocker@us.army.mil or (520) 515-1793.

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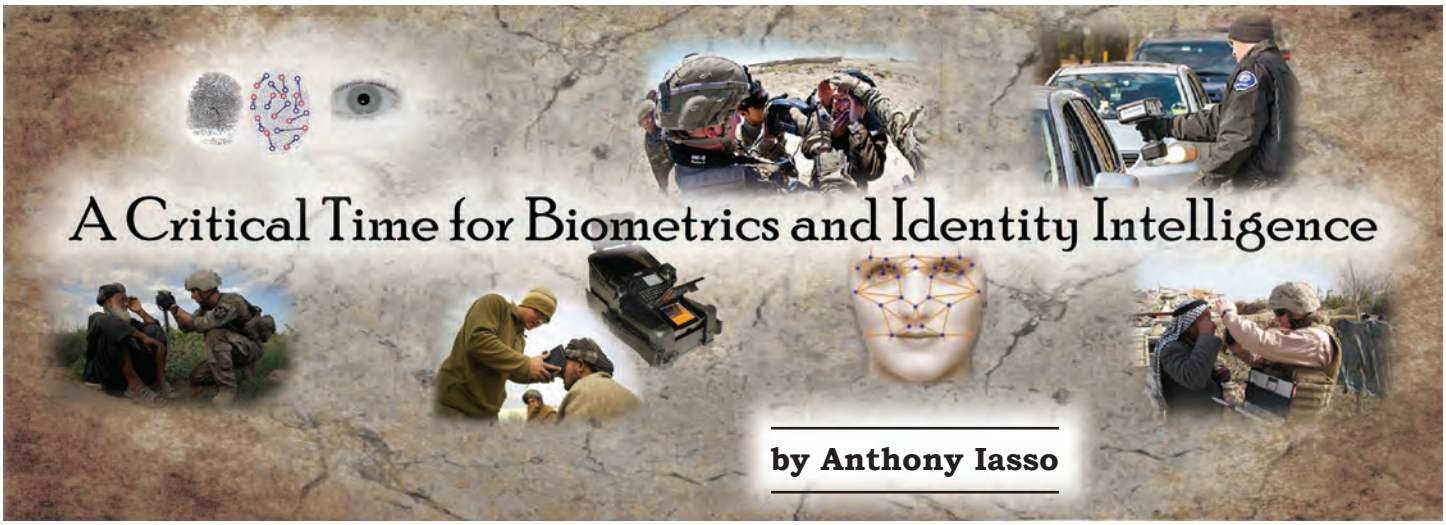

A Critical Time for Biometrics and Identity Intelligence

by Anthony Iasso

Introduction

Biometrics is a term derived from the Greek words bio (life) and metric (to measure). Biometrics is the physiological and/or behavioral characteristics of a human being. Most people are familiar with biometrics such as fingerprints, face recognition, voice recognition, DNA matches, and iris scans. Many of today's television programs and blockbuster movies use biometrics as part of a high tech plot. Whether it's NCIS, CSI, or the new iPhone, biometrics technology can be found in many aspects of daily life. The ability to capture, match, and analyze biometrics has become a critical capability in our nation's military.

In conventional warfare the battleground was generally well defined. The war was fought against another nation or group of nations, and enemy forces could be indentified with reasonable accuracy. Currently though, the Army is engaged globally in contingency operations against indistinguishable enemies who seek to mitigate our military superiority by operating (and hiding) amongst the populace. The biometric capability establishes an individual's identity with certitude and links the individual to past aliases or activities.

Over the last twelve years, biometrics and Identity Intelligence has provided a transforming capability for both operational commands and the Intelligence Community. LTG Huber of Combined Joint Interagency Task Force-435 stated that, "70 percent of all KST caught on the battlefield were identified through biometrics and forensics." Biometrics is a force multiplier that begins at the tactical level, but directly shapes at the strategic level where analysis and interagency/international sharing takes place.

At the tactical level, biometrics shapes the asymmetric battlefield. Soldiers operate the biometric sensors for the purpose of meeting specific mission objectives. Biometrics is used in an attempt to influence the enemy's activities, achieving tactical or operational objectives, and providing security and stability to an area of operations. The intelligence community uses collected biometric data to support analysis for targeting and mapping the human terrain. Thus, biometrics is a sensor that has a direct impact on both operations and intelligence. The successful operational employment of biometrics directly correlates to the intelligence data provided by intelligence organizations.

A Brief History of Army MI Biometrics

One of the reasons biometrics has been so successful in Iraq and Afghanistan is that the technology largely met the needs to support the full spectrum of military operations at all echelons, from tactical to strategic. Implementation of a biometric system for Army Military Intelligence (MI) use was a key objective of the Human Intelligence and Counter Intelligence Science and Technology Advanced Concept Technology Demonstration (HICIST ACTD). The goal was to use biometrics to accurately and efficiently find the records of people in a largely intelligence-driven application. It was not simply to get a threat assessed "red light" or "green light." The goal was to ensure that information collected on an individual initially, and updated over time, was correctly tied to the established identity of that person.

The ACTD, which began in 1998, was set to end in September 2001. In early 2001, work began on the Biometrics Automated Toolset (BAT) at Fort Huachuca. The BAT system was the first multimodal

biometric system which provided the capability to collect, match, and store biometric and contextual data on an individual. BAT collects fingerprint, face, and iris images. By mid-2001, biometrics had demonstrated its importance in detention operations at Operation Southern Knight, Fort Gordon, and by early 2002, Joint Special Operations Command brought the first BAT systems into Afghanistan to enroll persons of interest.

By mid-2002, BAT was fielded to Kosovo for base access screening, preventing "base hoppers" and other known threats from gaining access military facilities. In the winter of 2002-2003, at the direction of the Joint Chiefs of Staff and Defense Intelligence Agency, the counter proliferation capability was added to BAT in advance of operations in Iraq. In March 2003, the Army provided BAT biometric capability to the Marine Corps Forces Central Command and the Naval Forces Central Command. The U.S. Marine Corps (USMC) took BAT into southern Iraq during the ground phase of the war. In the summer of 2003, training was conducted with USMC forces in Iraq. By late 2003, the systems were in use at the Abu Ghraib detention facility. In early 2004 BAT was modified to replace the Interrogation Operations Database, thus tying biometrics to interrogation operations at the Joint Interrogation Facility.

Over the next several years, the capabilities continued to proliferate and improve. Army Intelligence and other government agencies made investments in the Handheld Interagency Identity Detection Equipment (HIIDE), which produced the first completely self-contained multi-modal handheld biometric collection device. Today BAT and HIIDE continue to support Identity Intelligence on the battlefield. Throughout this period, key senior leadership at the Office of the Secretary of Defense and Army G2 provided essential support and resources to get biometric capabilities to the field. Analytical capabilities at the National Ground Intelligence Center grew to support the needs of strategic level biometric enabled intelligence analysis. The Army established the Automated Biometric Identification System as the authoritative repository for biometrics at the DoD level. Today, the same biometric capabilities established in 2001 are in use for census operations, watch listing, entry control, personnel screening, and many other mission sets that were unanticipated when the biometric program first began.

Future Risks to Capabilities

Biometric and Identity Intelligence (I2) is entering a critical time. There are challenges with mixing operational biometric data and intelligence information in a single architecture. With the transition of BAT to program management under the Program Executive Officer–Enterprise Information Systems as an information technology system, the three stakeholders–G3, G2, and G6–have worked to provide a suitable future for the capabilities. However, it is imperative that as DoD addresses the concern of where biometric and intelligence are fused, current capabilities are not sacrificed and that solutions are not overly simplistic or complex.

Calls to move to a simpler "law enforcement" style architecture, with an enrollment or booking capability and a direct tie to national biometric databases, may serve the purposes of missions where encounters are brief and there is no need to control ground over long periods of time. However, many of the Army and Marine Corps missions involve establishing and maintaining identity dominance in an area of operations over an extended period of time.

Biometrics will continue to evolve and support new mission sets for the commander on the ground. Squads, platoons, and companies will require the ability to manage identity and biometric data for the populations they are interacting with. Our commanders are in positions where they have to provide rule of law, basic services and security for a population where personnel identification infrastructure does not exist. As Biometric Enabled Intelligence moves to Identity Intelligence analysts will continue to need ready access to large amounts of identity information at the lowest tactical levels.

Anthony Iasso is a graduate of the U.S. Military Academy at West Point and a former Army MI Captain. He is currently the President of InCadence Strategic Solutions, and has served as the lead engineer and technical lead of the DoD Biometrics Automated Toolset (BAT), Detainee Information Management System (DIMS), Multilingual Automated Registration System (MARS), and Tactical Rapid Exploitation Portal (T-REX).

The Military Intelligence Corps 2013 Hall of Fame

Command Sergeant Major Franklin A. Saunders (U.S. Army, Retired)

Command Sergeant Major Franklin A. Saunders entered the U.S. Army on 14 November 1983 and spent the first ten years of his Army career in Field Artillery and Special Forces. In 1993, he reclassified as a 96U (Tactical Unmanned Aerial Vehicle Operator). His first intelligence assignments were as an Intelligence Analyst with the 7th Special Forces Group; Platoon Sergeant for Company D, 304th MI Battalion, and as First Sergeant of the Army's first tactical unmanned aerial vehicle (UAV) company at Fort Hood, Texas. During his 27-year career, CSM Saunders served in a variety of leadership and staff positions to include: Squad Leader, Platoon Sergeant, Battalion Operations Sergeant, First Sergeant, Brigade Operations Sergeant Major, Battalion Command Sergeant Major, Brigade Command Sergeant Major, The Army War College and Carlisle Barracks Command Sergeant Major, and the U.S. Army Intelligence Center and Fort Huachuca and MI Corps Command Sergeant Major. He retired in 2010 from the position of Department of the Army G2 Command Sergeant Major.

As both a trainer and a leader, CSM Saunders had significant impacts on the MI Corps. As a trainer, he turned tired programs of instruction into relevant hands-on training that prepared MI Soldiers to arrive a unit ready to work. He was instrumental in developing Signals Intelligence training that employed modern signals and merging traditional Imagery training with full motion video. He was one of the first leaders to get the Army's UAV program out of the starting gate: developing operators; tactics, techniques, and procedures; and the operational concepts for their employment. He advocated for increased Human Intelligence training; the Distributed Common Ground Station-Army across our formations; persistent surveillance platforms, and the Every Soldier is a Sensor program, all of which were later validated by deployed commanders. His constant focus on deployed warfighters enabled the MI Corps to provide trained and ready Soldiers along with the best intelligence, surveillance, and reconnaissance capabilities.

As a leader, CSM Saunders repeatedly demonstrated steadfast leadership, selfless devotion to duty, and focus on the Soldier. As the Command

Sergeant Major for the Army Intelligence Center, he updated organizational and Military Occupation Specialty structures to include the initiation of company intelligence support teams and multifunctional teams. When he became the Senior Enlisted Advisor to the Deputy Chief of Staff, G2, he championed every aspect of the Army G2's mission and vision to transform Military Intelligence and to rebalance the Army MI force.

CSM Saunders bettered the Profession of Arms. In the words of CSM Todd Holiday, U.S. Army, Retired, who nominated CSM Saunders to the Hall of Fame, "He is a mentor against which all other mentors should be measured. His success as a leader shaped each organization to which he was assigned, as well as Military Intelligence Soldiers for generations to come."

CSM Saunders' awards include the Distinguished Service Medal; Legion of Merit with two Oak Leaf Clusters; Meritorious Service Medal with four Oak Leaf Clusters, and the Army Commendation Medal with four Oak Leaf Clusters. Badges awarded include the Parachute Badge, Air Assault Badge, Kuwaiti Parachute Badge, and the German Marksmanship Badge. He is a member of both the Sergeant Audie Murphy and Sergeant Morales clubs and recipient of the Field Artillery Order of Saint Barbara Award and the MI Corps' Knowlton Award.

Brevet Brigadier General George H. Sharpe

In February 1863, Major General Joseph Hooker, commander of the Union's Army of the Potomac, established the Bureau of Military Information (BMI) under the direction of Colonel George Sharpe. Sharpe, who would become a Brevet Brigadier General by the end of the war, was perhaps the most effective intelligence officer of the American Civil War.

Upon assuming leadership of the BMI, Sharpe built an all-source intelligence service that collected information from a wide array of sources and then provided timely analysis of it to the commander. Unlike other ad hoc information gathering groups of the era, Sharpe's organization was a permanent part of the Army of the Potomac commander's staff. Sharpe's bureau consisted of seventy to eighty men, mostly scouts, who provided the basis of Sharpe's knowledge of the location and movements of the enemy. He also knew the importance of specialization in an intelligence agency. He hired Mr. John Babcock, a civilian, as his chief interrogator. Babcock kept the BMI records, sketched maps, and compiled the Order of Battle charts. Captain John McEntee organized the scouting operations, assisted with interrogations, and established, when necessary, "branch offices" for the BMI.

Sharpe obtained valuable information from a number of methods and sources, including systematic interrogations of enemy prisoners and deserters; reports from cavalry reconnaissance; Signal Corps observation posts' captured correspondence; communication interceptions, and newspapers. In short, Sharpe developed an all-source collection effort, one of the first in American Military Intelligence.

When Sharpe reported to his army commander, he did not present raw data, but a careful and thoughtful analysis of the enemy and terrain situation. The mass of information was collated, analyzed, and presented in daily written reports to the commanders of the Army of the Potomac, and later, General

U.S. Grant, commander-in-chief of all Union forces. One historian noted, the commanders received "not an assemblage of undigested bits of news seemingly of equal weight but true intelligence, the finished product of systematic information analysis."

Sharpe's BMI had several notable intelligence successes, although they did not all translate into battlefield successes. In the Chancellorsville campaign, his section provided an extraordinarily accurate estimate of the location and strength of the Confederate army, an advantage that was lost when Union tactical reconnaissance failed to detect the Confederate flanking movement. Sharpe's intelligence proved to be a major factor in the Union Army's timely pursuit of the enemy during the Gettysburg campaign and its remaining on the battlefield until victory was won. Finally, in 1864 and 1865, Sharpe supplied critical intelligence to Union leadership on the enemy's movements, strengths, and intentions culminating in the Union victory at Petersburg, Virginia.

From his appointment as the BMI chief to the end of the war, Brevet Brigadier General Sharpe demonstrated effective leadership of an intelligence service that provided the Army's senior commanders with accurate and timely information about the enemy. Through his efforts, Sharpe can be credited for establishing and directing the first modem intelligence service in the history of Army Intelligence.

Colonel William "Jerry" Tait (U.S. Army, Retired, Deceased)

Colonel Tait was a 1980 Distinguished Military Graduate of the University of Alabama, where he received a Bachelor of Arts degree in Communication and was commissioned a Second Lieutenant in Military Intelligence (MI) through the Reserve Officers' Training Corps.

Colonel Tait's 30-year career was filled with challenging assignments during which he made a significant mark on the MI Corps. In one of his earliest assignments with the 7th MI Company, 7th Infantry Division, Fort Ord, California he was instrumental in creating the 107th MI Battalion, one of the Army's first Combat Electronic Warfare Intelligence (CEWI) battalions. In 1987, then Captain Tait served as Action Officer for the activation of the MI Corps. Besides planning, coordinating and synchronizing all events associated with the MI Corps' activation worldwide, he was responsible for developing the MI Corps' entry into the Army regimental system.

Colonel Tait was next assigned to the 66th MI Brigade in Munich, Germany, where he spent four years as a Battalion S3, Brigade Executive Officer, and then commander of the 5th MI Company, leading the overt intelligence operations that predicted and then exploited the fall of the Berlin Wall. Following graduation from Command and General Staff College in 1993, Colonel Tait was assigned to Fort Hood, Texas beginning a close association with III Corps and Fort Hood that lasted his remaining 17 years in uniform. He served in various positions

in III Corps, including the Corps G2 for five years from 2003-2008. During this time, he deployed to Iraq with III Corps Headquarters twice, both times serving as the Director of Intelligence (CJ2) of Multi-National Corps-Iraq.

He led the Intelligence Battlefield Functional Area at the operational level in Iraq during the 2007-2008 "Surge" in forces, which he had helped plan

the previous year. The Surge included an unprecedented infusion of intelligence capabilities and systems. Many of these had been developed or conceived during the FORCE XXI digitization and modernization initiatives led by Colonel Tait when he was assigned to the 4th Infantry Division, then the Army's "Experimental Force," from 1997 to 2001.

Colonel Tait also played a key role in developing and advocating for the Counter-IED Operations/ Intelligence Integration Center concept, the Joint Intelligence Operations Capability-Iraq that is now part of the Distributed Common Ground Station-Army, Company Intelligence Support Teams, Weapons Intelligence Teams, Cryptologic Support Teams, and Task Force ODIN, among other innovative capabilities, all of which have forever changed intelligence operations.

After 30 years as an MI officer, retiring as Executive Officer of III Corps in 2010, Jerry Tait continued to serve as a member of the Army Science Board which advises and makes recommendations to the Army leadership on scientific and technological matters. Colonel Richard Allenbaugh, U.S. Army, Retired, who nominated Colonel Tait to the Hall of Fame, stated, "His achievements as an MI officer distinguished him as being among the very best intelligence professionals to ever serve in uniform."

Colonel Tait's awards and decorations include the Defense Superior Service Medal; Legion of Merit with one Oak Leaf Cluster; Bronze Star Medal with one Oak Leaf Cluster; Meritorious Service Medal with six Oak Leaf Clusters; Army Commendation Medal with one Oak Leaf Cluster; Army Achievement Medal with four Oak Leaf Clusters, and the Parachutist Badge. Colonel Tait passed away on 14 September 2013 in Harker Heights, Texas.

Mr. Robert J. Winchester (DISES-5)

After graduating from the University of Paris, La Sorbonne, and Kings College, Wilkes-Barre, Pennsylvania, Robert Winchester was drafted into the U.S. Army and served as an Intelligence Analyst with the 199th Light Infantry Brigade and the 3rd Brigade, 1st Air Cavalry Division (Air Mobile) in Vietnam. His intelligence skills and leadership earned him rapid promotion to staff sergeant before his honorable discharge in 1971. Returning to his educational pursuits, Mr. Winchester earned Master's Degrees in European Studies from Illinois State University and the College of Europe, Bruges, Belgium, as well as a Law Degree from Temple University.

In 1977, he began a seven-year tenure with the Central Intelligence Agency (CIA) where he served in positions of increasing responsibility culminating as the Assistant General Counsel to the Operations Law Division and Chief of Liaison to the U.S. House of Representatives. His accomplishments with the CIA were numerous. Of particular interest to Army MI, he played a pivotal role in the enactment of public law prohibiting exposure of covert agents wherever they are stationed.

Beginning in 1984 until his retirement in 2010, Mr. Winchester was the appointed Special Assistant for Legislative Affairs to the Secretary of the Army, providing support to sensitive investigations and Special Access Programs. He served as the Legislative Counsel to the Army Leadership, the Army G2, and the commanding generals of both the

U.S. Army Intelligence Center of Excellence and the U.S. Army Intelligence and Security Command.

For 26 years, Mr. Winchester served as the personal liaison between the Department of the Army and Congress, resulting in successful and long-lasting support for MI Soldiers around the world. As the voice of Army MI in Congress, Mr. Winchester avidly supported congressional oversight of the U.S. Intelligence Community and promoted proactive interaction to keep oversight committees fully and currently informed of Army MI capabilities and requirements. He often took members of Congress to view first-hand the value of intelligence missions to National security and the stellar quality of MI Soldiers and officers in the field. Mr. Winchester's avid advocacy of Army Human Intelligence led directly to the establishment of a strong base of vital intelligence capabilities, for which he was honored with the Intelligence Community's National Intelligence Medal of Achievement in 1993.

In summarizing Mr. Winchester's contributions to the MI Corps, nominator Lieutenant General Richard Zahner, US Army (Retired), stated, "Mr. Winchester's unique combination of intellect, experience, and leadership produced results and impact equaled by very few members of our Army MI community. His fingerprints are found on virtually every system, project, program, and innovation within Army MI over the period from 1984-2010. More importantly, he was the foundation of Army MI's outreach to the Congress and caused pure magic to happen time after time in terms of gaining Congressional support, addressing possible contention quickly, and telling the Army MI story with clarity, context, energy, and humor."

Mr. Winchester's awards include the SES Special Achievement Award, Presidential Rank Award-Meritorious Executive; National Intelligence Distinguished Service Medal; Army Exceptional Civilian Service Medal; National Intelligence Medal of Achievement; the Secretary of the Army Decoration for Exceptional Service; Bronze Star Medal; Army Commendation Medal, and the Knowlton Award.

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Leadership Lessons from the Past – For Today and Tomorrow

by Colonel Stephen P. Perkins, USA (Ret.), Colonel Ben C. Clapsaddle, USA (Ret.), and Mr. William J. Willoughby

...I still remember the refrain of one of the most popular barracks ballads of that day which proclaimed most proudly that old soldiers never die; they just fade away.

–General Douglas MacArthur,
Address to Congress, 19 April 1951[1]

Introduction

In the Summer of 2011 while discussing the move of the U.S. Army Forces Command (FORSCOM) from its first home in Atlanta, Georgia to Fort Bragg, we discussed the past FORSCOM Senior Intelligence Officers, referred to as G2s. Brigadier General Oliver Dillard's name was pulled from the past G2's "Wall of Fame." None of us knew this officer or of his service in the Army or contributions to the Nation. The pictures were just another ornament for us. Over the course of the year, we researched "famous" FORSCOM Soldiers and leaders, and discovered General Dillard.

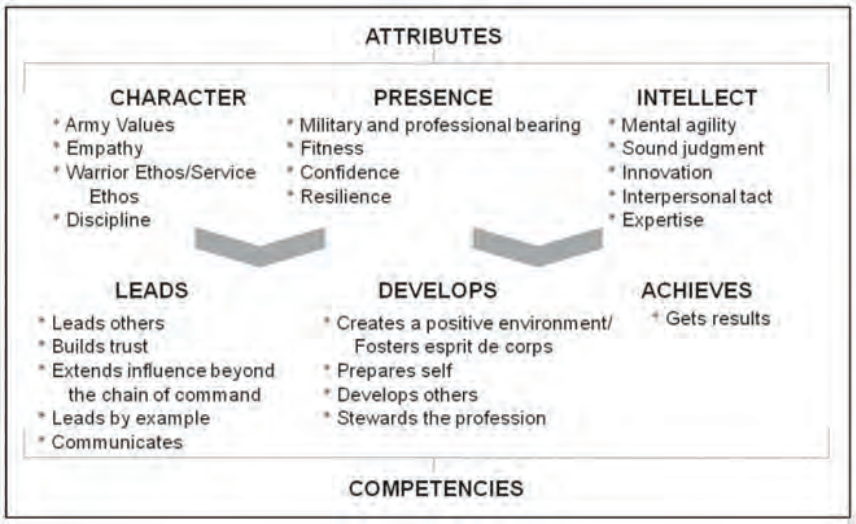
We read chapters of *Black Soldier/White Army*, which portrays Captain Dillard and the 24th Infantry Regiment in Korea, and conducted interviews with him. As we prepared for a commemorative ceremony to dedicate our four conference rooms after Army campaigns, we dedicated our own efforts to ensure that *this old Soldier would not just fade away.* As a result, his exploits are commemorated in an article published in the Military Intelligence Professional Bulletin *"The Forgotten Sable Officer"** and he was inducted into the U.S. Army's Military Intelligence (MI) Corps Hall of Fame in September 2012, the 50th anniversary of the MI Corps.

This article is really more of a conversation between old and new friends with *Little War Stories and Other Stuff* woven around five axioms that General Dillard learned and which we believe should be passed along to our "next generation" of leaders.[2] First, be forewarned that these are based on his opinions and his recollections. Since we don't have his green dufflebag and old moldy footlocker with documents from the past with names, dates and places, there might be a couple of "not quite right" passages.

The Axioms are in "Ollie-speak." Sure there are probably new techno-speak terms; however, Oliver Dillard is essentially a man from a simpler time, who was raised in Margaret, Alabama during the 1930s and 1940s. If they were described in today's vernacular, we would say: *Competency, Attitude, Resiliency, Faith,* and *Determination*. We might even package it up for the military in an acronym ... "CAR-FD." As mentioned earlier, he was, however, from simpler times.[3]

Our look at leadership situations from General Dillard's past leverages today's Army doctrine, specifically the Army Leadership Requirements Model, which establishes what leaders need to **be, know, and do** and is a core set of requirements that informs leaders about expectations.[4]

We will provide one of General Dillard's axioms, look at war stories told by him, and provide two to three examples of how his actions related to today's leadership requirements model.[5]



Army Leadership Requirements Model, ADP 6-22.

Axiom 1: Be good at what you do. This meant a lot to General Dillard. While it was a lesson taught to him by his mother and father, in the Army it was reinforced in his first assignment as an Enlisted Soldier. He was 18 years old and full of pride, and yet maybe just a little bit of apprehension. This Army thing, while an extension of his ROTC days at Tuskegee Institute, was also very different. After all, do the wrong thing and you could go to jail, end up dead, or worse, cause your fellow Soldier harm.

War Story 1

In the fall of 1945, after completing six months of basic training at Fort McClellan, Alabama about two or three hundred other trainees and I prepared for movement overseas for occupation duty in Japan. However, when the atomic bombs forced Japan out of the war, we all believed we would be discharged from the Army because WW II was over. "'No," the Army told us, "You all are going to Germany so that the soldiers who fought the war can come home." We shipped to Germany in December 1945. My first job was as an Administrative Specialist in the 351st Field Artillery Battalion headquarters in southern part of Germany known as Bavaria. I put my heart and soul into that job, and was quickly identified for more responsibility–and very quickly promoted. Since I was new to the Army, I had to learn new things and do it quickly. I worked long hours and studied at night to catch up on my minimal typing skills and knowledge of Army personnel regulations and procedures.

One night the temporary commander, Major Linton S. Boatwright–a White officer who had been the youngest major in WW II at the time and a highly decorated veteran–came by and saw me working late. Major Boatwright told me to keep working hard, and I would go places. He visited quite a few times and the two of us would occasionally talk about my future in the Army, and with the frequent visits he was, in effect, taking an active an interest in me, something I would not forget. A West Point officer, he pushed to get me a direct commission or a warrant officer rating. However, due to Army downsizing all of his efforts were to no avail. My background in rural Alabama as the son of a school teacher formed the foundation for me to be as good at things as I could be. Major Boatwright reinforced that lesson. I saw first-hand that the Army rewards competency.[6]

Leadership Lessons. General Dillard showed the required *resilience* to work through trying times.[7] As a young Soldier, it is easy to find things that are not to your liking or circumstances that are seemingly life-altering. Having to continue with mandatory service after WW II ended and cutting the higher-level education short could have made a lesser person change his course. General Dillard *prepared himself* for the job at hand and for possible promotion if the opportunity arose.[8] We often sink into comfortable surroundings and endure the experience. He looked for opportunities to improve required skills and to enhance the opportunities that Major Boatwright gave to him.

Axiom 2: There is no substitute for a good attitude. This was another one of those axioms that came from his parents and was reinforced by the Army. How many times was he to be tested by the Army? There are too many to count. It actually started before he was drafted into the Army.

War Story 2

After volunteering for Officer Candidate School (OCS) in 1947, I really learned the need to maintain a good attitude. I was one of the few Soldiers in my class to graduate from the Benning "School for Boys" as OCS is affectionately known in Army circles. I continued to learn this lesson even after I shocked the Infantry Officer's Basic Course (OBC) cadre when I emerged as the Course Honor Graduate–the number one graduate regardless of race. I was thrilled to graduate with high honors, and the Dillard family came down from Fairfield to celebrate with me.

Traditionally, the Infantry School publicly recognizes its Honor Graduates and does so with a great deal of fanfare. In my case, the School cadre did not mention my designation as honor graduate. I'm still not sure of the reason–a slight on the outstanding performance by a Black officer in the South; or an effort to defuse a potentially racially changed moment–we will never really know. What I do know is that I would need to maintain a good attitude, even in trying times, if I wanted to achieve the goals that I had set out to attain in the Army.[9]

Provided by MG (R) Dillard

2LT Oliver W. Dillard, newly commissioned officer, Ft. Benning, GA, 1947.

Leadership Lessons. General Dillard used the education gained at Tuskegee Institute and the skills gained as an enlisted man and OCS graduate to *get results* in OBC.[10] He displayed *military and professional bearing* at the OBC graduation ceremony.[11] Was there a slight by the organization or staff? Was this a time to draw lines in the sand and demand that this slight be righted? Those decisions are made at the moment. There is little doubt that General Dillard, even as a 20-year old lieutenant, saw the slight. He chose to show internal discipline and vowed to correct things like this when he was in a future leadership role.

Axiom 3: Once you start something, don't look back. This reminds us of one of the great baseball pitchers, Sachel Page, and his *Rules for Staying Young,* "… don't look back–something might be gaining on you."

War Story 3

One of my best friends in the Army was Lieutenant Colonel Marshall Bass. We had both experienced a lot during the transition from a segregated Army to an integrated Army. We were two of only three Black CGSC students in the 57/58 Class at Fort Leavenworth. We had both fought in Korea; he with the 2d Infantry Division, and I with the 25th Infantry Division. In the late 1960s, Marshall and I had reached the 20-year mark of our careers. I could tell that he wanted to continue in the Army but probably wanted to do more than the Army had to offer. He had successfully commanded an infantry battalion in the Korean DMZ and returned to be the Chief of Enlisted Promotions Branch at the Pentagon. Already selected to attend the Army War College in 1968-1969, he decided to give up on the opportunity for senior command and possibly general officer to pursue opportunities in the civilian sector.

In his book, *The Path of My Pilgrimage*, Marshall wrote that he was "giving up the security blanket (he) had known for all of (his) adult life." There were so few Army GOs back then that there were no guarantees that we would become generals. I was feeling that maybe time had passed us by. I had a very uncharacteristic career path up to that point, and the cuts at higher ranks were getting tougher. Marshall went on to a very successful career with J.R. Reynolds Tobacco Company in Winston-Salem, and I stayed the course, didn't look back, and became a GO. Retrospectively, I think we both made pretty good decisions. My family and I will always value the time we spent with Marshall and his family. You can never have enough good friends. We were part of a small "fraternity," and needed to be really supportive of each other.[12]

Provided by Mr. William Willoughby

MAJ Oliver W. Dillard, Student CGSC 57/58, Ft. Leavenworth, KS, 1958, *The Bell* Yearbook

Leadership Lessons. General Dillard showed *empathy* as Marshall Bass made the decision to stay in the Army or seek his other opportunities in the civilian sector.[13] Since the two had served together throughout the years, General Dillard knew all too well how Bass was torn. General Dillard displayed *confidence* in his skills, his ability to navigate within a complex personnel system, and his reputation as a leader within the Army.[14] As some would say, it was at this time that General Dillard "doubled down" on himself and the Army.

Axiom 4: The going will get tough, hang in there. One thing people can count on in the Army is that they will be tested. Coming out of Fort Dix in 1950 headed for occupation duty in Japan with the 24th Infantry Regiment seemed pretty good to then First Lieutenant Dillard. Half way into the voyage from San Francisco to Japan, he recalled hearing the loudspeaker bark, "The North Koreans have invaded the South. We are at war." Almost immediately after arrival in Japan, the "Deuce-four" headed to Pusan, South Korea. During five campaigns of the Korean War, he was emboldened by the mantra, "The going will get tough, hang in there." He owed it to his Country, his Family, and most importantly, to himself.

War Story 4

The Army selected me as its first Black officer to attend the National War College, an indicator of what I thought would be future high-level assignments. After graduation, I stayed in the D.C. area in the U.S. Army Combat Developments Command's Institute of Special Studies at Fort Belvoir. It was there that I received news that I had not been selected for colonel. After enduring a lecture by a White officer that Blacks did not deserve to be officers, let alone colonels, I watched as senior White officers questioned the process that did not adequately reward what they believed to be exemplary performance.

Based on senior officer involvement, a special board convened, questioned the existing process, and selected me for colonel, which at the time was considered a terminal grade for Black officers. As quickly as the Army had admitted its mistake, now Major General Collins–my old Regimental Commander in the 4th Infantry Division in Germany–supported my assignment to command a battalion of the 5th Combat Support Training Brigade at Fort Dix for six months, and later the Brigade, for a year.[15]

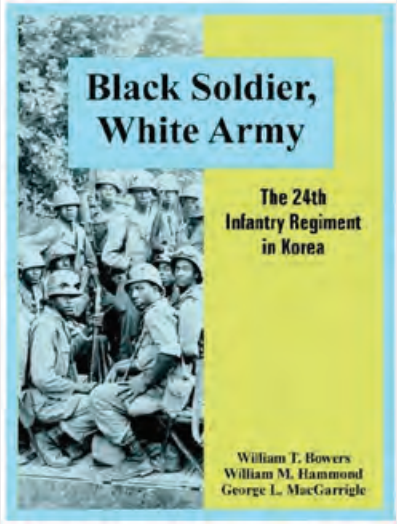
Leadership Lessons. General Dillard displayed *sound judgment* when he heard about his non-selection.[16] Specifically, he did not over-react to the immediate bad news, and he did not react to the bigotry that he encountered from one of his fellow field grade officers. General Dillard had *extended influence beyond the chain of command.*[17] He had earned a sterling reputation among his peers and his superior officers. His selection and later performance as a battalion and brigade commander at Fort Dix proved he was deserving and the extra effort on the Army's part to get it right had paid off.

*** Please see the Apr-Jun 2012 issue of MIPB to read Colonel Perkins article *"The Forgotten Sable Officer."***

Axiom 5: God is there with you; gain strength from Him. This reminds us of more than Biblical verses, and reflects the impact of the Gospel on General Dillard's life and philosophies. General Dillard and his family always looked to scripture for guidance, and tried to be good Christians.

War Story 5

In August 1950 after my Company Commander, Captain Bradley Biggs, had been evacuated due to an injury, I took over Company L just before a major attack. This was one of many times in Korea that I knew God was looking out for me. History doubted the contribution of the Regiment's Black Soldiers, and Roy Appleman's official Army history *South to Naktong, North to the Yalu* told a "not too glamorous" story of the 24th Infantry Regiment's actions in 1950-1951. While I dispute Appleman's version of the truth, he did accurately characterize the environment as not only hostile to Black units participating in direct combat, but also one in which units–both White and Black–were ill prepared to fight in Korea. The occupation duty in Japan did not focus on combat operations, and post-WW II equipment readiness was insufficient to meet the demands placed on them in Korea. I spent a major portion of my career and a considerable amount of my retired years working to straighten out the perception of people about the actions in Korea in 1950, correcting the history written by Appleman. I had faith that the Army and history would tell the story accurately; not my way, but the way it really was. The Army rewarded my efforts with the publication of its book *Black Soldier/White Army*. By retracing our steps in Korea, I was also able to influence John Broder's LA Times article *COLUMN ONE: War and Black GIs' Memories* which continued to explore the truths of that tumultuous time.[18]



Cover, *Black Soldier/White Army: The 24th Infantry Regiment in Korea*

Leadership Lessons. General Dillard's performance in the Korea War exemplified his adherence to *Army Values.*[19] In addition to joining a unit that was woefully unprepared for combat operations in 1950, he had to fight the ongoing racial battles of an Army transitioning from segregation to integration. After receiving wounds as an infantry company commander, he returned to help his unit fight out of the Pusan Perimeter and take the offensive. His valor was highlighted in the Silver Star that he was awarded for actions on 14 and 15 September 1950.[20] During his career and following retirement, he was a *steward (of) the profession.*[21] Specifically, he led the fight for the Army to recognize the contributions of the 24th Infantry Regiment during the Korean War. It is a testimony to his *interpersonal tact* that he was able to win over an often skeptical audience.[22]

Conclusion

In his 1951 address to Congress, General MacArthur coined the phrase, "Old soldiers never die; they just fade away." General Dillard's story did not end on his retirement in 1980. He was a part of the Army's transition from segregation to integration, and to an all-volunteer Army. He was the exception for not only Blacks, but for all officers entering into the Army in 1947. Historically, less than one percent of all officers entering the Army attain flag rank. General Dillard received opportunities to show that Blacks could and would defend America as well as any other race. Things were not always "equal" for him and his fellow Black Soldiers; however, he used three coping mechanisms early in his career that served him well: *Competency, Attitude,* and *Determination.* These three coping mechanisms allowed him to develop *Resiliency* that had *Faith* as its fundamental foundation.

Endnotes

1. Douglas MacArthur, *Farewell to Congress*, delivered April 1951, American Rhetoric.com. At http://www.americanrhetoric.com/speeches/PDFFiles/Douglas%20MacArthur%20-%20 Farewell%20to%20Congress%20Address.pdf (accessed July 28, 2013).

2. Oliver W. Dillard, MG, USA Retired, *Little Old War Stories and Other Stuff*, unpublished personal memoir notes. There are nine vignettes that spanned the course of 40 years, three wars, and most of the continents.

3. Dillard, draft lecture presentation, *"My Leadership Lessons,"* Booz Allen Hamilton Workforce Leadership Council's Celebration of Diversity, Airborne and Special Operations Museum, Fayetteville, North Carolina, 16 February 2012, cited with permission of MG(R) Dillard. While the words in this speech were not used on 16 February, the five lessons were mentioned in the actual speech, and discussed as the foundation for his leadership lessons.

4. ADP 6-22, Army Leadership, 1 August 2012, iii and 5. The *Leadership Requirements Model* conveys the expectations that the Army wants leaders to meet. A common model of leadership shows how different types of leaders work together and is useful for aligning

leader development activities and personnel management practices and systems.

5. The five "war stories" used throughout this paper were either extracted from MG(R) Dillard's unpublished *Little Old War Stories and Other Stuff* or told during interviews of MG(R) Dillard by COL(R) Perkins.

6. Dillard, 2-6, and MG(R) Oliver W. Dillard, telephone interview by Perkins, 23 August 2011.

7. ADRP 6-22, Army Leadership, 1 August 2012.

8. ADRP 6-22, 7-6. *Prepares Self:* To prepare for increasingly more demanding operational environments, Army leaders must invest more time on self-study and self-development than before now. In no other profession is the cost of being unprepared as unforgiving, often resulting in mission failure and needless casualties.

9.MG(R) Oliver W. Dillard, telephone interview by Perkins, 25 August 2011.

10. ADRP 6-22, 8-1. *Get Results:* Effectiveness directly relates to the core leader competency of getting results. From the definition of leadership, achieving focuses on accomplishing the mission. Mission accomplishment co-exists with an extended perspective towards maintaining and building the organization's capabilities. Getting results focuses on structuring what to do to produce consistent results.

11. ADRP 6-22, 4-1. *Military and Professional Bearing:* Army leaders are expected to look and act as professionals. Skillful use of professional bearing–fitness, courtesy, and proper military appearance–can help overcome difficult situations.

12. MG(R) Oliver W. Dillard, telephonic interview by Perkins, 9 May 2012.

13. ADRP 6-22, 3-3. *Empathy:* Army leaders show empathy when they genuinely relate to another person's situation, motives, and feelings. Empathy does not necessarily mean sympathy for another, but identification that leads to a deeper understanding.

14. ADRP 6-22, 4-2, 4-10. *Confidence:* The faith leaders place in their abilities to act properly in any situation, even under stress or with little information, is contagious and permeates the entire organization. Confident leaders help Soldiers control doubt while reducing team anxiety.

15. MG(R) Oliver W. Dillard, telephone interview by Perkins, 28 August 2011.

16. ADRP 6-22, 5-1. *Sound Judgment:* Consistent good judgment enables leaders to form sound opinions and make reliable estimates and sensible decisions. Leaders acquire experience through trial and error and by observing others.

17. ADRP 6-22, 6-8. *Extends Influence Beyond the Chain of Command:* While Army leaders traditionally exert influence within their unit and its established chain of command, multi-skilled leaders must be capable of extending influence to others beyond the chain of command.

18. Dillard, 8-10, and MG(R) Oliver W. Dillard, telephone interview by Perkins, 28 August 2011.

19. ADRP 6-22, 3-1. *Army Values:* The Army recognizes seven values that all Army members must develop. When read in sequence, the first letters of the Army Values form the acronym "LDRSHIP:" Loyalty, Duty, Respect, Selfless Service, Honor, Integrity, and Personal Courage.

20. ADRP 6-22, 7-15. *Stewards the Profession:* The competencies dealing with positive environment, self-improvement, and developing others are the competencies related to stewardship. Stewardship is the group of strategies, policies, principles, and beliefs that pertain to the purposeful management and sustainment of the resources, expertise, and time-honored traditions and customs that make up the profession.

21. ADRP 6-22, 5-2. *Interpersonal Tact:* Effectively interacting with others depends on knowing what others perceive. It relies on accepting the character, reactions, and motives of oneself and others. Interpersonal tact combines these skills, along with recognizing diversity and displaying self-control, balance, and stability in situations.

22. General Order 320, 11 November 1950, 25th Infantry Division, AWARD OF THE SILVER STAR. As commander, Company L, 24th Infantry Regiment, he and a group of 40 Soldiers "remained in position to stop an overwhelming attack by a hostile force … he inspired the group to inflict heavy casualties on the fanatic force and to withstand repeated banzai attacks."

For further reading logon to IKN then go to the Bibliography at https://ikn.army.mil/apps/dms/files/81982

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COL Ben C. Clapsaddle is the Readiness Division Chief, Office of the Deputy Chief of Staff, G2, FORSCOM, Fort Bragg, North Carolina. He served 28 years as an Armor officer in the U.S. Army. Colonel Clapsaddle served in Operations DESERT STORM and ENDURING FREEDOM. He is a graduate of The Citadel, and holds graduate degrees in administration and strategic studies, and is a 2001 graduate of the U.S. Army War College.

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Mission Command Center of Excellence
US Army Combined Arms Center
Fort Leavenworth, Kansas
27 September 2013

Doctrine Update 4-13

The United States Combined Arms Center publishes the *Doctrine Update* periodically to highlight recent and upcoming changes to doctrine and provide information related to doctrine use.

This *Doctrine Update* provides information on the overall Doctrine 2015 strategy. To maximize the understanding of the Doctrine 2015 strategy and the timelines of significant publications, disseminate this update to the lowest level

The Commanding General, U.S. Army Combined Arms Center, is the Army Doctrine Proponent. The preparing staff agency for Doctrine Update is the Combined Arms Doctrine Directorate (CADD), Mission Command Center of Excellence, U.S. Army Combined Arms Center. Comments and recommendations may be emailed to: usarmy.leavenworth.mccoe.mbx.cadd-org-mailbox@mail.mil; or mailed to Commander, U.S. Army Combined Arms Center and Fort Leavenworth, ATTN: ATZL-MCK-D (Doctrine Update, 4-13), 300 McPherson Avenue, Fort Leavenworth, KS 66027-2337. POCs for this update are Mr. Clinton J. Ancker III at clinton.j.ancker2.civ@mail.mil and LTC Augustus Dawson at augustus.r.dawson.mil@mail.mil.

Army Publishing Directorate Notifications

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Development Status of Field Manuals

Listed below are the Doctrine 2015 FMs and their development status as of 1 September 2013:

FM 1-0	*Human Resources Support*	With CAC CG for signature
FM 1-04	*Legal Support to the Operational Army*	Published
FM 1-05	*Religious Support*	Published
FM 1-06	*Financial Management Operations*	Final draft staffing
FM 2-0	*Intelligence Operations*	Signature draft development
FM 2-22.3*	*Human Intelligence Collector Operations*	Exempt from Doctrine 2015
FM 3-01	*Air and Missile Defense Operations*	Signature draft development
FM 3-04	*Aviation Operations*	Signature draft development
FM 3-05	*Army Special Operations*	Signature draft development
FM 3-07	*Stability Operations*	Signature draft development
FM 3-09	*Field Artillery Operations*	Signature draft development
FM 3-11*	*Multi-Service Doctrine for Chemical, Biological, Radiological, and Nuclear Operations*	Exempt from Doctrine 2015
FM 3-12	*Army Cyberspace Operations*	Initial draft development
FM 3-13	*Inform and Influence Activities*	Published
FM 3-14	*Army Space Operations*	Signature draft development
FM 3-16	*he Army in Multinational Operations*	With CAC CG for signature
FM 3-18	*Special Forces Operations*	Initial draft staffing

FM 3-22	*Army Support to Security Cooperation*	Published
FM 3-24	*Insurgencies and Countering Insurgencies*	Final draft development
FM 3-27	*Army Global Ballistic Missile Defense Operations*	Signature draft development
FM 3-34	*Engineer Operations*	With CAC CG for signature
FM 3-38	*Cyber Electromagnetic Activities*	Signature draft development
FM 3-39	*Military Police Operations*	Published
FM 3-52	*Airspace Control*	Published
FM 3-53	*Military Information Support Operations*	Published
FM 3-55	*Information Collection*	Published
FM 3-57	*Civil Affairs*	At APD for publishing
FM 3-61	*Public Affairs Operations*	Signature draft development
FM 3-63	*Detainee Operations*	Signature draft development
FM 3-81	*Maneuver Enhancement Brigade*	Signature draft development
FM 3-90-1	*Offense and Defense Volume 1*	Change 1 published
FM 3-90-2	*Recon, Security and Tactical Enabling Tasks Volume 2*	Published
FM 3-94	*Division, Corps, and Theater Army Operations*	Signature draft development
FM 3-95	*Infantry Brigade Operations*	Final draft development
FM 3-96	*Armored Brigade Combat Team Operations*	Final draft development
FM 3-97	*Stryker Brigade Combat Team Operations*	Final draft development
FM 3-98	*Reconnaissance and Security Organizations*	Final draft development
FM 3-99	*Airborne and Air Assault Operations*	Signature draft development
FM 4-01	*Transportation*	Signature draft development
FM 4-02	*Army Health System*	Published
FM 4-30	*Ordnance Operations*	Signature draft development
FM 4-40	*Quartermaster Operations*	With CAC CG for signature
FM 4-95	*Logistics Operations*	Signature draft development
FM 5-02	*Operational Environment*	Initial draft development
FM 6-0	*Commander and Staff Organization and Operations*	Signature draft development
FM 6-02	*Signal Operations*	Signature draft development
FM 6-05	*Conventional Forces and Special Forces Integration*	Final draft development
FM 6-27	*The Law of Land Warfare*	Initial draft development
FM 6-99	*U.S. Army Report and Message Format*	Published
FM 7-15	*Army Universal Task List*	Revision staffing
FM 7-22	*Army Physical Readiness Training*	Published

* FM 2-22.3 and FM 3-11 are exempt from Doctrine 2015 timelines due to policy decisions.

Other Recently Published Publications

Recently published Army Techniques Publications (ATPs) (listed by date of publication) include:

ATP 3-37.34	*Survivability Operations*	28 June 2013
ATP 4-94	*Theater Sustainment Command*	28 June 2013
ATP 4-11	*Army Motor Transport Operations*	5 July2013
ATP 3-01.4	*Multi-Service Tactics Techniques and Procedures for Joint Suppression of Enemy Air Defense (J-SEAD)*	19 July 2013
ATP 3-01.84	*Terminal High Altitude Area Defense (THAAD) Techniques*	26 August 2013

ATP 3-04.1	*Unconventional Warfare*	6 September 2013
ATP 3-39.12	*Law Enforcement Investigations*	19 August 2013
ATP 4-12	*Army Container Operations*	29 July 2013
ATP 3-09.30	*Techniques for Observed Fire*	2 August 2013
ATP 3-57.10	*Civil Affairs Support to Populace and Resources Control*	6 August 2013
ATP 3-57.50	*Civil Affairs Information Management*	6 September 2013
ATP 4-93	*Sustainment Brigade*	9 August 2013
ATP 6-02.90	*UHF SATCOM: Multi-Service Tactics, Techniques, and Procedures for Ultrahigh Frequency Military Satellite Communications*	9 August 2013

All published Army doctrinal publications are available online at https://armypubs.us.army.mil/.

Recently published doctrinal joint publications (JPs) (listed by date of publication) include:

JP 1-02	*Department of Defense Dictionary of Military and Associated Terms*	16 July 2013

All published joint doctrinal publications are available online: http://www.dtic.mil/doctrine/doctrine/doctrine.htm.

Publication Staffing Status

These publications that are currently undergoing external staffing (listed by type and suspense date):

FM 6-27	*The Law of Land Warfare (Initial Draft [ID])*	28 October 2013
FM 3-18	*Special Forces (Final Draft [FD])*	13 October 2013
FM 3-94	*Division, Corps, and Theater Army Operations (FD)*	23 September 2013
FM 3-24	*Insurgencies and Countering Insrugencies (FD*)	23 November 2013
ADRP 1-02	*Operational Terms and Graphics (FD)*	1 November 2013
ATP 2-19.3	*Corps and Below Intelligence Techniques (FD)*	17 October 2013
ATP 2-19.4	*Brigade and Below Intelligence Techniques (FD)*	17 October 2013
ATP 2-22.31	*HUMINT (S//NF)(FD)*	22 November 2013
ATP 2-22.7	*Geospatial Intelligence (FD)*	27 November 2013
ATP 2-91.7	*Intelligence Support to DSCA (FD)*	04 November 2013
ATP 3-34.5	*Environment Operations (FD)*	29 September 2013
ATP 3-39.20	*Police Intelligence (PD)*	10 October 2013
ATP 4-02.2	*Medical Evacuation (FD)*	28 September 2013
ATP 4-13	*Army Expeditionary Intermodal Operations (FD)*	12 November 2013
ATP 4-45	*Quartermaster Force Provider Company (ID)*	21 October 2013
ATP 4-45.12	*Unit Field Sanitation Teams (FD)*	21 October 2013

Important Doctrinal Changes

FM 3-12 *Army Cyberspace Operations,* will provide Army level doctrine on planning, employment, and conduct cyberspace operations. This publication will become part of the Doctrine 2015 FM library when it is completed.

FM 3-50 *Personnel Recovery Operations*, will shift to become an ATP due to publications FM 3-12 and FM 6-05.

FM 6-05 *Conventional Forces and Special Forces Integration*, will provide information on planning and executing operations where conventional forces and special operations forces occupy the same operational environment. This publication will become part of the Doctrine 2015 FM library when it is completed.

FM 6-99 *Report and Message Formats*, will be rescinded upon the authentication of FM 6-0, *Commander and Staff Organization and Operations*. The content of FM 6-99 will be incorporated into FM 6-0 as an appendix.

Revision of ADRP 1-02, Operational Terms and Military Symbols

ADRP 1-02, *Operational Terms and Military Symbols*, is under revision. This revision consolidates, updates, and revises the information contained in the current editions of ADRP 1-02 and FM 1-02. The publication of this edition of ADRP 1-02 will supersede the current ADRP 1-02 and FM 1-02. This revision will also include changes as the result of new and revised ADRPs, FMs, and ATPs from the ongoing Doctrine 2015 process. It will include all changes to symbology because of changes to MS-2525, *Common Warfighting Symbols,* and APP-6, *NATO Joint Military Symbols*.

ADRP 1-02 will include all Army or joint terms that appear in Army doctrinal publications. It will include all land military and air control measure symbols. This revision will expand the symbol tables to include examples of how symbols will look in operational graphics.

Terminology Update

Table 1 lists significant new terms since *Doctrine Update 3-13.* A complete list of new, revised, and rescinded terms can be found at https://www.milsuite.mil/book/docs/DOC-25269.

Table 1: New terms

advanced trauma management	collection point(s) (patient or casualty)
combat lifesaver	combat and operational stress control
continuity of care	criminal intelligence
Cultural Intelligence Element	definitive care
definitive treatment	direct haul
emergency medical treatment	en route care
essential care	first aid (self aid/buddy aid)
forward resuscitative surgery	hub
initial response force	intrazonal operations
key communicator	key leader engagement
lines of patient	medical evacuation
motor transportation	nontransportable patient
patient estimates	patient movement
police intelligence	preventive medicine
psychological action	psychological objective
relay	resuscitative care
shuttle	spoke
tail gate medical support	support U.S. military support

Control of Draft Doctrine

By Army Regulation, all draft doctrine is to be treated as restricted distribution information. It may not be shared with anyone outside of the Army, unless specific release is given by the originating agency (i.e. the organization that wrote the draft). Someone recently posted a draft manual on a commercial website in violation of this regulation. Anyone who receives a draft manual for review must be made aware of the need to safeguard the draft publication.

Use of the terms Mission Command and Command and Control

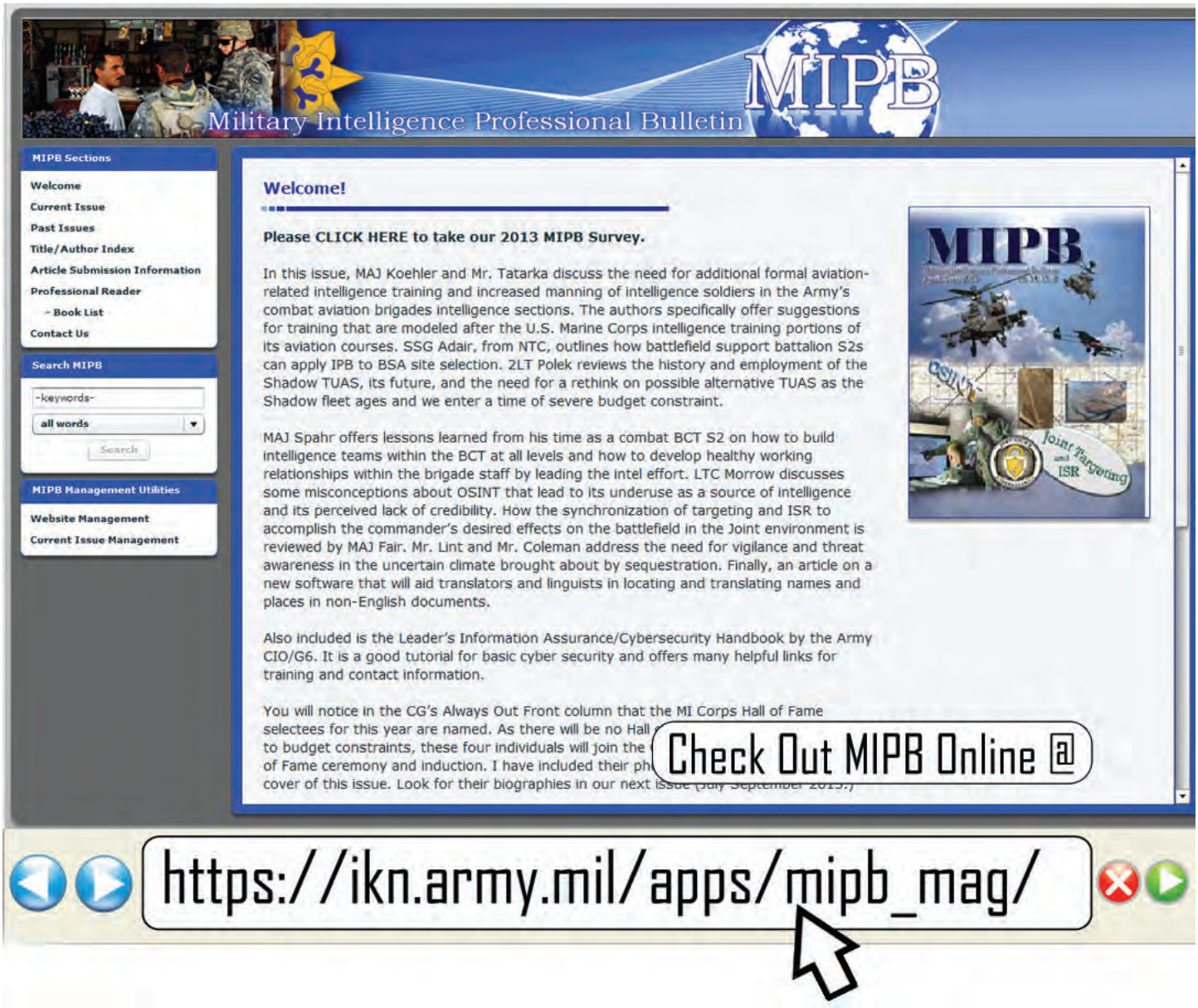
The Army changed the name of the command and control warfighting function to the mission command warfighting function. However, the joint community, the other Services, and our NATO allies still define

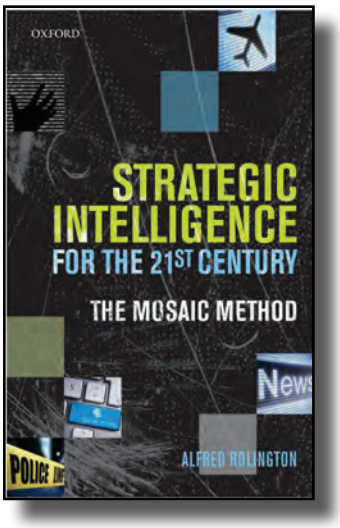
our conception of mission command as command and control. NATO and the joint community also use the term mission command for the philosophy of command, similar to the Army use of the term mission command for the philosophy. Clearly, the multiple usages of these terms cause confusion about their correct implementation. Please adhere to the following bullet comments for guidance:

- When referring to the **philosophy**, defined in this case as the exercise of authority and direction by the commander to empower agile and adaptive leaders in the conduct of unified land operations, the correct term is **mission command**.
- When referring to the **Army warfighting function** (formerly command and control), the correct term is **the mission command warfighting function**.
- When referring to the function as exercised by the joint community, other Services, or our NATO allies, the term is **command and control**.

Designation Change

The designation of the 20th Support Command (CBRNE) has changed to the 20th CBRNE Command. This more accurately reflects their true role and should stop misdirected requests for logistics support addressed to their organization.





Strategic Intelligence for the 21st Century by Alfred Rolington

CPI Group (UK), Ltd., (Croydon: Oxford University Press 2013), 171 pages, ISBN: 978-0-19-06542-1.

Strategic intelligence is basically information which may help a decision maker prepare policy now and in the future. Its value is that it helps in the development of policy that has positive effects. Strategic intelligence may be obtained in various ways, but in this book the author is advocating the mosaic method.

The mosaic method looks at a current problem and analyzes it from historical, political, economic, and other perspectives which results in a more comprehensive analysis. Using this method has the advantage of providing different insights about a problem or challenge facing a policymaker. What the mosaic method boils down to is a form of analysis which involves using different ways of looking at a particular situation with the intention of coming up with a more complete picture of its reality. It necessitates interpretations from different types of experts to bring about a more realistic picture of a situation. It is suggested that the use of the mosaic model to obtain intelligence will be quite valuable to the police, military, intelligence organizations, and even to some sectors of private industry.

The use of the mosaic method is recommended because it provides better information or intelligence needed to meet the new challenges of the 21st century. These new challenges could be terrorism, cyber-threats, and nuclear proliferation. All of them and some others require a new response from intelligence agencies that previously relied on different methods to obtain information.

This book has three main parts. Part one deals with the changing definitions of information and intelligence. Part two concerns post-modern intelligence activity and has an interesting chapter about new information sources. Part three concerns "Intelligence Review" and demonstrates how business enterprises and policing are related to intelligence activities.

Although all three parts of the book provide interesting commentaries about aspects of intelligence, Chapter Three is most appropriate for those interested in military intelligence (MI). MI is defined as providing information and analysis to help commanders make more effective decisions in times of conflict. Historically, warfare was seen as the birthplace of intelligence. The first recorded and published intelligence methods and processes that are still available to us are Chinese. (53) The author writes that throughout centuries three different levels of MI have developed. One type is strategic intelligence which is important for what might happen in the future and it is concerned with the long view of a situation. A second type is operational intelligence which is concerned with a shorter period of time. The third type is tactical which refers to information most currently needed for a situation such as when a battle is taking place.

The author also makes reference to a number of classic books which have influenced military commanders and policymakers. An example is "*The Art of War*" attributed to Sun Tzu who is thought to have been a great successful senior commander. The author's comments about the book note: "This is the most successful book ever published about military strategy and tactics and is still read and referred to in many military academies, intellectual circles, and business schools today." (55)

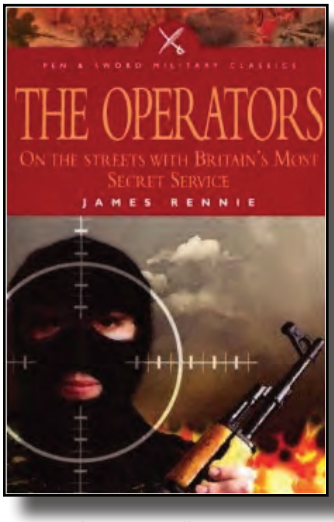
Besides indicating the value of using the mosaic method as a tool in obtaining intelligence, the author makes several other good points. For example, he notes that "today's intelligence analysis can also become overwhelmed by the sheer quantities of available information.... There is an overload of

information and data to make collection sometimes seem more important than analysis."(5) This seems to be recognition that there is a difference between quality intelligence and quantity intelligence which is important to note because too much intelligence or information has the disadvantage of slowing down the securing of the really important information needed by policymakers.

Another commendable suggestion by the author is that there should be more cooperation among different entities, each of which has need for the best type of intelligence. Considering the fact that many of the challenges facing governments today are on a global scale, the author's advocacy of continued interlinked relationships among entities makes practical sense.

There are many good works concerning intelligence activity and this book is one of them. However, it has the extra advantage of making suggestions about intelligence activity in the twenty-first century. In addition, its scope of commentary includes business entities as intelligence concerns which is not found in many other books. Yet, perhaps one of the biggest advantages of this book is a variety of suggestions about how to improve intelligence capabilities and what changes should be made to bring this about.

Reviewed by William E. Kelly, PhD,
Auburn University



The Operators: On the Streets with Britian's Most Secret Service by James Rennie

(South Yorkshire, England: Pen & Sword Military Classics, 1997), 206 pages, ISBN-13: 978-1844150991.

This book is a gripping historical account of one of Great Britain's most secretive clandestine org anizations, 14 Company. 14 Company, also known as "The Det," was a British Intelligence organization with a mandate to find and capture the Irish Republican Army's (IRA) most violent terrorists in the mid-90s. They conducted surveillance operations on the streets Northern Ireland in some of the most violent IRA neighborhoods; these operators used every aspect of their extensive training to "fit" into these violent terrorist sanctuaries. The selection of the Det's personnel was the most critical component of their mission successes. James Rennie underscores the most essential of the Special Operations truths: Humans are more important than hardware.

The majority of this insider's account focuses on the extensive selection and training program 14 Company used to weed out all but the best applicants. This unit was unique in that they drew from all sectors of the Ministry of Defense, and recruited females into their ranks based on the unique mission. The author is a former Infantry officer who made it through the grueling process to become an operator. From the outset the selection was very focused on the task at hand. It was not intended to create a "jack of all trades," but instead a very specialized clandestine intelligence operative. Although the training was physically and mentally grueling, it was tailored to the specific task of operating in covert or clandestine roles on the streets of some of Northern Ireland's toughest IRA neighborhoods.

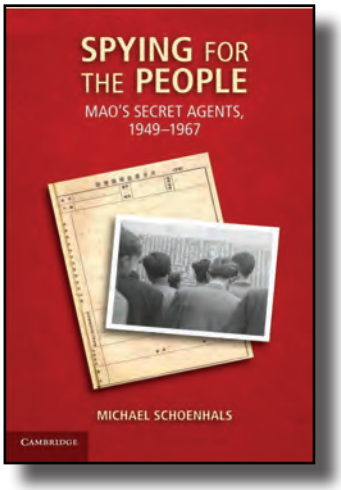
Over half of the book describes the selection and training necessary to execute these highly specialized operations. The author highlights the great pains taken to select and train the appropriate personnel. After the selection course candidates spent the next six months completing the intensive training course. The training focused on physical fitness,

technical and non-technical surveillance, high speed driving, advanced shooting, cutting edge photography, and non-standard communications. The purpose of this specialized training was clear later in the book when he described the dangerous situations these operatives are thrust into immediately upon deploying to Northern Ireland.

The author offers numerous blow-by-blow accounts of dangerous close access intelligence and special operations directed against the IRA's most wanted leaders. 14 Company conducted manhunting operations for decades prior to 9/11, and they adroitly executed these missions daily. They were so successful the British Special Air Service (SAS) began detailing a small number of their operators to 14 Company for two year tours. This was to build the SAS capacity for covert operations and improve the interoperability between the two units, since the two Special Forces units habitually worked together in Northern Ireland. The Det is now believed to be the Special Reconnaissance Regiment that still operates with the SAS, but more recently operating in Iraq and Afghanistan.

James Rennie describes numerous successes by 14 Company in Northern Ireland, but he is careful not to overstate their achievements. He also examines candid examples of setbacks and failures suffered by the British Special Forces during this intense period. Although he provides an insightful first-hand account of this complex covert war against the IRA, the book presents a rather myopic view as it only covers two years of 14 Company operations in a conflict that lasted from the late 1960s to 1998. That being said, this is a good book to contemplate and scrutinize covert and clandestine intelligence support to special operations. With the drawdowns of the combat zones, it may also provide some insight into the future of Military Intelligence operations as we reconfigure our force to bring our Nation's enemies to justice.

Reviewed by Major Steve Smith, a U.S. Army MI Officer and student in the Defense Analysis Department at the Naval Postgraduate School, Monterey, California.



Spying for the People: Mao's Secret Agents, 1949-1967 by Michael Schoenhals

(New York: Cambridge University Press, 2013), 266 pages, ISBN: 978-1-07-60344-8.

Public security was a top priority for the founders of the People's Republic of China (PRC) soon after they came into power in the world's most populated country. This is understandable considering the many challenges they had from domestic and foreign elements including the U.S. and the Soviet Union. This book focuses on how the new communist government reacted primarily to the domestic challenge among its own citizens during its early years of existence from 1949 to 1961. It is basically an interesting commentary about how the Chinese government spied on its own people during this time and what methods were used to make such spying effective in maintaining the security of the government.

The targets of the massive Chinese spying efforts were mainly its own citizens who resided in the urban areas and who might tend to be "counter revolutionary elements." There is little commentary about Chinese spy efforts abroad though mention is made of early help from the Soviets in developing some spy techniques used by the Chinese. However, as relations between the Soviet Union and China soured–the influence of the KGB on Chinese domestic spying subsided.

When one peruses this book it is easy to realize that the act of spying by a government can be looked at from various points of view. Citizens are

probably in agreement with spying as a necessary method to protect a country from foreign elements. Certainly spying is not a new phenomenon in history. However, when spying by a government on its own citizens takes place, there understandably will be less support for such governmental activity and may even lead to a collapse of the government. Perhaps this is why the act of spying is often secret, not only when it occurs against foreign countries, but also when it takes place by one's own government focused on a country's citizens. Communist China has grown enormously in power and influence since its inception, and perhaps it believed it was necessary to expand its internal spy activity to bring about its present world status.

Another view with some possible accuracy could be that China would still be a world power without expanding so much of its resources on domestic spying. To put it another way, was the possibility of domestic opposition so great and dangerous that such a large extent of spying on its own citizens was actually necessary to safeguard the existence of the new Chinese government? This is a question that historians and others may be debating for some time.

The information in this book is well documented by a number of foreign sources of which a large amount are Chinese and pertains to Chinese policy regarding spying. Although all seven chapters of the book are interesting, *Chapter Four-Finding the Right Person for the Job: Operational Profiling*, gives us some idea as to what the PRC was looking for in domestic spies in terms of characteristics. Characteristics such as resourcefulness, observation skills, nerve, empathy, and discretion were the ones that spy recruiters found helpful among domestic agents. Interestingly, what the PRC found useful in maintaining internal security is what other countries also have used, namely, its own citizens recruited for various reasons to spy on other citizens.

A difference, however, is that western democracies are not expected to spy on their citizens as much as China did during its early years of power. Perhaps this is also true because western democracies seem to be less frightened by internal dissent and more likely to allow it to occur and become public. Yet, the present day revelations in the U.S. about the National Security Agency and the implementation of the Patriot Act may make some American citizens fear that our own government has gone too far in monitoring our citizens.

Interestingly, the author of this book has only one major conclusion after studying the early spying activity of the PRC and it is that the spying was ". . . widespread but not necessarily efficient." This conclusion should be recognized because it suggests that governments which do engage in spying for whatever reason should emphasize securing quality intelligence as opposed to quantity intelligence which has the negative characteristic of needing additional resources to determine what is important and what is not important.

This is an interesting book for various professionals. Academic scholars should find it useful in providing valuable information about a way of life in the latter part of the 20th century in China. There is valuable historical and political knowledge about a large country which other countries must deal with in the future. This knowledge may help us to better understand the current situation in one of the world's largest countries and a country which is increasing in power, influence, and recognition. Intelligence analysts may also benefit from a comparative perspective. Specifically, they can gain some knowledge about how a new government uses its security forces to maintain internal control over citizens and also become aware of some negative results of such activity.

Reviewed by William E. Kelly, PhD,
Auburn University

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Articles about current operations and exercises; TTPs; and equipment and training are always welcome as are lessons learned; historical perspectives; problems and solutions; and short "quick tips" on better employment or equipment and personnel. Our goals are to spark discussion and add to the professional knowledge of the MI Corps and the IC at large. Propose changes, describe a new theory, or dispute an existing one. Explain how your unit has broken new ground, give helpful advice on a specific topic, or discuss how new technology will change the way we operate.

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- Be concise and maintain the active voice as much as possible.
- We cannot guarantee we will publish all submitted articles and it may take up to a year to publish some articles.
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