

MIPB

Military Intelligence Professional Bulletin



Knowledge

Management

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FROM THE EDITOR



This issue's theme is Knowledge Management (KM) with a focus on the U.S. Army Intelligence Center's (USAIC) Intelligence Center Online Network (ICON).

Colonel James Galvin, Director of the Battle Command Knowledge System (BCKS), establishes the KM environment in this issue by summarizing the origins of KM and discussing the ways the Army is integrating KM practices into the Operating and Generating forces in order to effect knowledge transfer. Mr. Scott Chunn, Director of USAIC's KM Office, introduces ICON, the Intelligence Knowledge Network for Military Intelligence (MI) professionals, a sort of 'one stop shop' connecting people and information within the Intelligence Community. He emphasizes that KM is about people and processes, not just technology.

Several writers from the USAIC KM Office explain the ICON moving parts. I encourage the reader, like I did, to go to <https://icon.army.mil> and use these articles to explore ICON Portal to find out just how powerful a tool this is for Intelligence professionals. In the training arena for example Captain Tom Pike, Course Manager for the MI Basic Officer Leader's Course, explains how ICON (along with other knowledge tools) is taught to lieutenants to enable them to leverage knowledge networks from the very first day of training.

John Ives offers a discussion of the 'people' side of KM, suggesting the development of a human resources program that proactively provides a personnel knowledge database and assignment policy to conserve tacit knowledge for future operations. Two articles detail work being done by the U.S. Army Reserves. Chief Warrant Officer Two Brian Harris explains how reserve units are using Intellipedia as a collaborative tool for intelligence production. Major Chris Barra discusses how a Reserve unit supports the BCKS initiative. Finally Rich Holden talks of the success of INTELST, a way for Intelligence professionals to share information and collaborate through email.

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ALWAYS OUT FRONT

by Major General John M. Custer III
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“The basic economic resource is no longer capital, nor natural resources, nor labor. It is and will be knowledge.”

—Peter Drucker

This issue of MIPB is devoted to Knowledge Management (KM). Why? Because I believe it is one of the most important things we are doing today and as Military Intelligence (MI) professionals it is a critical part of our profession. We often hear the terms “data,” “information,” and “knowledge” being used and usually they are used in a hierarchy that goes from data to information to knowledge. Data are facts, numbers, or individual entities without context or purpose. Information is data that has been organized into a meaningful structure (to aid decision making). And finally, knowledge is information with personal context applied. Therefore, knowledge is information provided in context to produce an actionable understanding. The key word is actionable. We have worked actionable intelligence for years and it is not any different in the context of KM. Collection has never been our problem—the challenge has always been with processing, analysis, and sharing. The same is true with KM and the vast and ever increasing amount of information that is available today. If it is not actionable, it piles up in papers that are never read, databases and spreadsheets that no one uses, and archives and repositories that no one ever visits. The most important criteria for knowledge within an organization today is action or the ability to take action—this is what makes knowledge so valuable.

KM is a process for optimizing the effective application of that knowledge to achieve organizational objectives. Many argue that you can’t really manage knowledge because that is what is in people’s heads, but what an organization can do is manage the environment that optimizes that knowledge. Our goal is to make the U.S. Army Intelligence Center (USAIC) a knowledge centric organization. An organization becomes knowledge centric when it can connect people to each other and deliver the right information, and only the right information, at the right time to enhance learning, innovation, effectiveness, and productivity. It provides the ability to make better and more informed decisions and take action.

The Army is rapidly changing, both in structure and the way it does business. The work has become more knowledge based and the Soldiers have become knowledge workers. The young Soldiers (dubbed the *Millennials*) coming in the Army today are extremely smart, optimistic, confident, multi-tasking, achievement oriented, and have a strong sense of civic duty and respect for diversity. They are more comfortable with technology and multi-tasking than their Traditionalist, Baby Boomer, or Generation X counterparts. They are the Army’s *digital natives*. We must provide the information and tools for all Soldiers to accomplish their jobs and ensure we provide them with education and training—both for their current jobs and their future development. Information flows in all directions in a learning organization. The most successful leaders find a balance and a way to let every generation be heard. They recognize that no one has all the answers. This appreciation of diversity allows each group to contribute and be a part of the growth of an organization.

The Intelligence Center Online Network (ICON) is a KM tool that enables Intelligence Soldiers all over the world to communicate, collaborate and investigate. It provides a standardized suite of mission-specific web services and tools to enable the exchange and sharing of knowledge across the USAIC and MI community. ICON hosts discussion forums, and serves as a single point of entry to get to USAIC, Intelligence Community (IC) websites, and other Army websites. It also hosts a variety of public and private web applications that support directorates across the Intelligence Center and the IC worldwide with both NIPRNET and SIPRNET
(Continued on page 4)



CSM FORUM

by Command Sergeant Major Gerardus Wykoff
Command Sergeant Major
U.S. Army Intelligence Center and Fort Huachuca

As of the writing of this article we, as an Army and Nation, have been combat in operations for five years in Iraq, and almost seven years in Afghanistan. These major operations as well as many minor ones have strained non-commissioned officer (NCO) Leader development across the entire Army. Yesterday, today, and tomorrow, NCOs will continue answer the call of our nation, over and above what is normally expected of their age and paygrade.

Today promotions occur at an extremely fast pace when compared to ten years ago. When most of the senior Command Sergeants Major (CSMs) and Sergeants Major (SGMs) were selected for promotion to the rank of Sergeant First Class (SFC) they had, on average, between twelve and fifteen years time in service. Today, the average is down to seven to ten years. This faster promotion pace is needed to satisfy the needs of our Army. Several of our NCOs have experienced at least two deployments. Two deployments amounts to almost thirty-six months of time focused on the mission. This time includes train-up, block leave, deployment, redeployment, and reintegration. This cycle repeats itself almost immediately. Now factor in permanent change of station moves and the faster promotions, the timeline to develop NCOs in an academy setting is greatly compressed. Because of this and other factors, several branches have experienced a large backlog. Currently Military Intelligence (MI) is not one of them.

The end result of all of this turbulence is NCOs performing jobs one or two paygrades above their rank. As an example, while deployed my Operations Sergeant (an SFC) filled the position of a brigade-level S3 SGM. He later filled the position as a battalion CSM during the almost six month under-lap between actual CSMs.

The Army recognizes the turmoil and needs, and has therefore, decided to change the way we do business. The U.S. Army Training and Doctrine Command (TRADOC) briefed the Vice Chief of Staff of the Army (VCSA) on 26 July 2006 on a concept to adapt NCOES instruction in the institutional Army to better support units affected by the Army Force Generation (ARFORGEN) model. The VCSA approved the concept to export Basic NCO Course (BNCOC) instruction via mobile training teams to brigade combat team home stations during the ARFORGEN reset period. This concept was for high density military occupational specialties (MOSs) across the Army. Currently MI does not fall into this category. Additionally, we currently do not have a backlog. This was the first change.

The second TRADOC change deals with a “train ahead” approach where certain skill sets and competencies are taught earlier in an NCO’s lifecycle. An example of this is training SFCs to perform the duties of a First Sergeant or Master Sergeant, while setting the stage for his or her development as a CSM/SGM. Starting at the bottom:

- ◆ Warrior Leaders Course (WLC) will not change much from the way it is today.
- ◆ Advanced Leaders Course (ALC)–Name change for BNCOC. ALC will focus heavily on MOS technical skills at the squad and the platoon levels. ALC will prepare NCOs to serve primarily at the squad level, but also at the platoon level. This is a big change as we now prepare our BNCOC NCOs for the squad level with little focus on the platoon level.
- ◆ Senior Leaders Course (SLC)–Name change for the Advanced NCO Course (ANCO). SLC will focus on MOS technical skills at the platoon and company level. It will also prepare NCOs to assume duties of a First Sergeant by incorporating critical tasks from the current First Sergeant Course.
- ◆ Senior Staff NCO Course (SSNOC) ** Not confirmed as of this writing** The Combined Arms Center (CAC) is exploring the development of this new course. Its purpose will be to prepare NCOs to serve Army and Joint staffs above the Brigade level.

ALWAYS OUT FRONT

access. ICON enables students to use this tool while in residence status as well as providing Soldiers a “reachback” capability to subject matter experts (SMEs) within USAIC for follow-on KM and life long learning once they graduate. ICON is the knowledge network for MI Professionals.

MI Net is a network of forums for MI professionals to share knowledge and information with the capability for threaded discussions, file repositories, and complete access to a wealth of available knowledge. This Network consists of a series of connected online Structured Professional Forums that create an informal network for professional interactions across the IC and the Army. These forums consist of communities of peers and SMEs, who are linked through online collaboration systems and dedicated to advancing their profession through knowledge sharing and shared learning. MI Net is the professional forum for MI Professionals. This issue will provide a better understanding of KM and highlight ICON and MI Net and their applications for all intelligence professionals. 

Always Out Front!

CSM FORUM

- ◆ Battle Staff NCO Course (BSNCOC) will continue to provide skills necessary for the NCO to serve as a staff NCO in a brigade.
- ◆ Sergeants Major Course (SMC) will not change from its main purpose and intent as we know it today.

The third change deals with self development. NCOs at every level will be required to complete some form or level of self development prior to progressing to the next level. While there are a few parts to the change, the main part deals with the various levels of what will be called Structured Self-Development or SSD. SSD mainly consists of core requirements such as Joint Learning Areas; Army/NCO history, and other mandated tasks not normally found in NCOES. SSD, when mated up with the resident course, will support the life long learning strategy. As it stands now, most of the tasks taught in SSD are directed by TRADOC, CAC, and the U.S. Army Sergeant Majors Academy. The proponents will have less than 80 hours for each level. The levels of SSD are:

- ◆ SSD1 (Prior to WLC). This starts at a Soldier’s first unit, and it is up to the unit to get the Soldier enrolled. Just as with WLC, this level of SSD is completely controlled by TRADOC, there are no proponent tasks at this level.
- ◆ SSD2 (Between WLC and ALC). Again, most of the tasks are common tasks throughout the Army and this coupled with the downward migration of skills and competencies might result in the elimination of what we now call BNCOC phase 1 or Stand Alone Common Core. The proponents will have up to 80 hours of time at this level.
- ◆ SSD3 (Between ALC and SLC). Same as SSD2, just at a higher level. Again each proponent will get up to 80 hours.
- ◆ SSD4 (Between SLC and SMC). This level, coupled with SLC will give the NCO the skills sets and competencies currently taught in the First Sergeants Course, while including the proponent skills from what we now call ANCOC.

There isn’t a lot that NCOs can do in order to get ahead and prepare themselves for the change other than stay aware. One of my suggestions is to work on some form of distributed learning. Examples are enrollment in an Army Correspondence Course Program, online Smart Force classes, or an online college class. The NCOs will be taught and developed on tasks as they attend the residence phase of NCOES just as they are today. The largest change that might be unique to NCOs is actually sitting at a computer on their own time, without being told as well as keeping up with the course timeline. This is where working on other forms of distributed learning will help develop the discipline needed to make it through the various levels of SSD. 

NCOs Lead from the Front!

Army Knowledge Management: People and Processes Enabled by Technology

by Colonel James J. Galvin, Jr.



Introduction

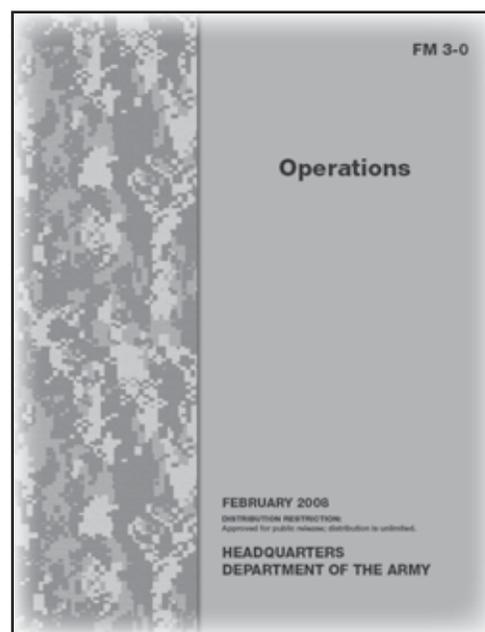
Over two thousand years ago Sun Tzu said, “Know the enemy and know yourself; in a hundred battles you will never be in peril.” Our Army continues to adhere to this sound advice today. However, the complexity of the current operating environment and the massive amount of data and information available make it difficult to adequately attend to the great Chinese general’s advice. It takes talented leaders and disciplined followers to create the conditions that result in knowing both the enemy and yourself.

To address the challenge of “knowing,” the U.S. Army is integrating knowledge management (KM) practices into both the Operating and Generating forces. The integration is now beginning to coalesce around people and processes, but began as an information technology driven effort. Many believed we could improve our knowledge transfer capabilities by issuing more computers and building new websites. However, it became obvious that knowledge transfer primarily occurs through iterative experiences and dialogue. People interacting with each other are the key to effective performance. Computers and websites enable broad scale virtual interaction. However, hardware and software by themselves are insufficient for KM.

Knowledge Transfer

The February 2008 version of **Field Manual 3-0 Operations** is the first doctrinal publication to address KM. Knowledge is information processed by a human to provide meaning and value, which leads to understanding. Chapter Seven describes information superiority and addresses KM and information management. KM is, “the art of creating, applying, organizing, and transferring knowledge to facilitate situational understanding and decision making.” This is in contrast to the definition of information management: “the science of using procedures and information systems to collect, process, display, store, protect, and disseminate knowledge products, data, and information.” Together, these two complementary activities provide knowledge products and services to decision makers.

Knowledge products and services fall into two general categories. The first category consists of “codification.” Information in repositories such as documents or videos, called explicit knowledge is in the first category. Handbooks, storyboards, and video interviews are



examples of codification products. Content management, virtual team room management and knowledge center design are codification services.

The second category consists of “personalization” or people sharing what they know, their tacit knowledge, through face-to-face or technology enabled dialogue. Web conferences, communities of practice and digital games are examples of personalization products. Expertise location, forum facilitation and collaboration are examples of personalization services. It took almost a decade for the Army to generate doctrine based descriptions of KM and to begin widespread implementation of these practices.

Besides the time needed to mature and grow, the key ingredient to knowledge creation and transfer is leadership. The development of KM practices began and continues to be a result of both bottom-up and top-down leadership. Innovative company level leaders began NCOTeam.org in the early 1990s and CompanyCommand.com in 2000. These leaders created the sites on their own time and with their own money in order to interact with their peers around the Army. Both those websites were first steps in the Army’s journey of sharing its knowledge and creating new insights through online gathering places called “communities of practice.”

Professional Forums

The two communities are now part of a larger knowledge transfer capability called the Battle Command Knowledge System (BCKS). The Army refers to these and many other online communities as “Professional Forums.” There are forums for other leaders: Warrant Officer Net, Platoon Leader, S3-XO, and Command Net. Additionally, there are forums for functional experts: MI Net, LOG Net, S-1 Net, COIN Net, Advisor Net and many others. All of the forums are available through common access card or Army Knowledge Online (AKO) login at: <https://forums.bcks.army.mil/>. Thousands of leaders gather at these sites to share what they know, solve problems, and grow professionally.

The leaders who brought these capabilities to the force recognized the importance of leading and managing the online communities. The senior Army leadership saw the value of the junior leaders’ initiative and provided top-down support by designating resources for the BCKS network of community facilitators. The BCKS team provides world-class forum facilitation and has the expertise to train others how to be facilitators. The facilitator serves as coach, mentor, gatekeeper, librarian, traffic cop and advertiser for the forums. It’s a crucial role that provides rhythm and energy to the communities.

Prior to deploying to Operation Iraqi Freedom in 2003, the First Cavalry Division Commander, then Major General Chiarelli inquired about the Company Command online community. He directed his staff to create “CAV Net,” a community available to all Soldiers in the division. They used CAV Net to share insights from patrols—enemy activity as well as tactics, techniques and procedures used by either friendly or enemy forces. According to the division leadership, CAV Net gave patrols the “tactical competitive advantage.”

In addition to online communities, Army leaders use other KM techniques. While he was in Iraq, MG Chiarelli also introduced the practice of virtual teaming. He used the Command Post of the Future (CPOF) system to conduct daily command and staff meetings with his 13 subordinate brigade commanders and the division staff. The CPOF enabled all to view a common operating picture from their respective locations, work with shared content and connect with experts throughout the CPOF network. The practice saved time, accelerated knowledge transfer, and reduced travel along hazardous routes.

The leaders of the Stryker Community expanded KM practices in the Army to the Enterprise level. Their efforts represent a best practice called the Stryker Warfighters’ Forum. Initially under the leadership of I Corps Commanders, Lieutenant General Dubik and now LTG Jacoby, the Stryker Warfighters’ Forum is a powerful holistic approach to KM. The forum consists of a repository of content, including video, after action reports, lessons learned, articles and studies. The Stryker Free fire zone is an online community within the forum, part of the BCKS, where Soldiers participate in asynchronous discussions. Stryker leaders collaborate quarterly through a synchronous online Adobe Connect web conference linking commanders,

command sergeants major, and staff officers and noncommissioned officers from all seven Stryker brigades from Hawaii to Iraq. The Stryker Warfighters' Forum is a model that is spreading to other parts of the Army.

The commander of Forces Command (FORSCOM), General Campbell, directed the III Corps and XVIII Airborne Corps to develop similar capabilities for the heavy brigade combat teams and the infantry brigade combat teams. These Warfighters' Forums are undergoing development through a deliberate process of building content and community. The Warfighters' Forums are communities of purpose. They blend both hierarchy and networking by requiring the chain of command to orchestrate forum activities and to expect leaders throughout the communities to participate. The Commander of the U.S. Army Training and Doctrine Command (TRADOC), General Wallace, directed the TRADOC Schools and Centers to create Warfighters' Forums for the functional and separate brigades as well as the Experimentation Brigade for the Future Combat Systems. These forums hold great promise as knowledge creation and transfer capabilities. However, careful implementation is essential. Fortunately, there is synergy building around the effort as FORSCOM and TRADOC turn to the Army Operational KM Proponent for assistance.

To further establish the importance and relevance of KM, the Department of the Army G3/5/7 designated the Combined Arms Center (CAC) at Fort Leavenworth, Kansas as the proponent for Army Operational Knowledge Management (AOKM). As a collective organization where the Army does much of its thinking and learning, CAC is a wise choice to lead the development of KM. Personalization and codification are two principle activities at CAC, which is responsible for much of the Army's training, education, leader development, doctrine development, lessons learned, and battle command. Army leaders physically and virtually pass through the gates and servers of CAC to share what they know and find what they need.

Those who leverage the power of KM practices have demonstrated its benefits to Soldiers, mission accomplishment, and organizational learning. The Military Intelligence (MI) community routinely takes data and information, transforms it into knowledge and then transfers it to leaders to help them understand and act. A stated objective of the Commander of the U.S. Army Intelligence Center, Major General Custer, is to, "build an intelligence force that dominates in the 'fight for knowledge'—in all environments to achieve decisive victory." MI professionals throughout the Army are organizing people and processes around enabling technology to make this vision a reality.

Conclusion

The future of KM is very promising. Soldiers throughout the Army are growing up as "digital natives" who are very comfortable collaborating online. They move seamlessly between the physical and virtual worlds. Leaders are learning how to follow the guidance of the chain of command while leveraging the ability to network with others across organizational boundaries. CAC is laying out a vision and roadmap for the implementation of knowledge networks to connect capabilities development, the warfighting functions and operating forces. Numerous enablers are also under development to ensure individuals, teams, organizations, and communities effectively manage knowledge. Activities to elicit, distill, and transfer knowledge through interviews, games, and stories are also underway. The opportunities for individuals to contribute and create the future are limitless. The initiative and innovation of the MI community will undoubtedly play a major role in expanding and enhancing the practice of knowledge management. 

Colonel James J. Galvin Jr. is the director of the Battle Command Knowledge System at the Combined Arms Center, Fort Leavenworth, Kansas. He previously served with the U.S. Southern Command, the Army Staff, the 18th Airborne Corps and V Corps. A West Point graduate, Colonel Galvin has an MA in Operations Research and Systems Analysis from the Naval Postgraduate School and a PhD in Industrial and Systems Engineering from Virginia Polytechnic Institute.



ICON Portal
 Knowledge System for the
 Military Intelligence Community

— What is It and How Do We Do It?

By Scott Chunn

Ask a room full of Knowledge Management (KM) practitioners and you will most likely get as many answers as there are people in the room. While there are many definitions, there is no one universal definition of KM. Knowledge is viewed as both an economic resource and a power that can either be shared or hoarded. An organization moves toward becoming a knowledge-centric organization by connecting people to each other when helpful and delivering the right information, and only the right information, at the right time to enhance learning, innovation, effectiveness, and productivity. And as we move to a knowledge-centric workforce our Soldiers, civilians, and contractors work more with their minds and less with their hands. This is particularly true in the Intelligence profession where workers are hired and advanced for their experience and their knowledge. We are practicing KM when we are building systems and improving the processes that create or transfer knowledge within our organizations. We are not practicing KM if those systems are not being used or if the people that need the knowledge do not have access. This issue of MIPB will highlight KM efforts at the U.S. Army Intelligence Center (USAIC), how we are incorporating it into our curriculum, and some of the tools

that are being developed and currently exist to enable people, processes, and the sharing of knowledge.

KM is about people and processes and while it is certainly enabled by technology, it is not a technology-based concept. Information Technology (IT) provides the KM tools to make it easier to bring people and processes together and to share knowledge. This can include commercial off-the-shelf packages, tailored and specifically built collaboration tools, web portals, learning applications, or database and data mining tools. But just because you have these applications and tools it doesn't necessarily mean you have a KM Program. The Intelligence Center Online Network (ICON) is the Intelligence Knowledge Network for Military Intelligence professionals. It is important to the USAIC KM Program and critical to connecting people throughout the Intelligence Community.

One of the most used applications is the "Shout Box." This tool allows users to ask and answer questions and share information. Anyone can post a shout and anyone can answer a shout. If a shout goes unanswered for more than a couple of days, the KM Office will track down a response and post it to the Shout Box. This is done because experience has shown that if a person posts a shout that goes unanswered, chances are the shout box will become irrelevant to that user and he won't return to post another shout. Just recently a Soldier posted a shout looking for information on a course being developed. This Soldier was placed in contact with the training developers developing the course and a response was posted to the shout box. Another Soldier at Fort Benning, Georgia was monitoring ICON and the shout box, saw the shout and the re-

response, and contacted the training developers for additional information. That is the kind of power we strive for with KM and using tools to enable the sharing of knowledge.

As Colonel Jim Galvin points out in his article *Army Knowledge Management: People and Processes Enabled by Technology* there are two types of knowledge—*tacit* and *explicit*. These exist on a knowledge spectrum with unconscious knowledge and experience on one end of the spectrum and the codified and structured knowledge on the other end. Most knowledge resides between the two ends of this spectrum. Explicit knowledge is easily shared and expressed, while tacit knowledge is much more difficult. How often have we had personnel transfer or take a job somewhere else and leave with the institutional memory or knowledge about a particular project or organization? While continuity books are great, they still don't compare to the personal experience and context an employee or Soldier brings to an organization. That is why you see organizations focusing on networks, communities of practice, organization yellow pages, best practices, and using technologies like threaded discussions and videoconferencing. A best practice is something that has been shown to be effective in an organization that could be effective in another. We spend a lot of time reinventing the wheel or failing at endeavors for which someone else has already developed a method that has worked. Subsequently, there is a huge push to incorporate Lessons Learned into our tactics, techniques, and procedures and our instruction at the Centers of Excellence. People will come and go, but repeated mistakes and reinventing the wheel will drastically affect productivity. The key here is connecting people and linking the sources of this tacit knowledge. Computers and communications systems are great for capturing, storing, and distributing structured information that rapidly changes. But if you want to understand knowledge, interpret it within a context, or synthesize unstructured knowledge, people are still the best choice.

Introducing a change into an organization is difficult. It is like tossing sand into an engine—it produces friction and the more friction you have, the more resistance. In many cases implementing KM is a cultural change. An organization's culture is the values, the beliefs, and assumptions that are held by the people in that organization. The culture will influence the decisions people make and how they behave in

different circumstances. It is tacit knowledge and like an iceberg, most of an organization's culture is below the waterline. If you only deal with what is above the water—things like strategies, structures, and processes, and fail to take into consideration the cultural things like beliefs, attitudes, values, relationships, and the organizational climate, you will undoubtedly fail. The organization's culture can quickly derail KM efforts. To succeed, you must understand the power of the organizational culture, work within it, and involve the people in identifying the requirements and knowledge needed. The two biggest critical success factors are the support of the leadership and the involvement of the people in the organization.

Developing a KM program usually takes years and must become part of the way an organization does business. People say "we have built the house and now we must fill it with people." "Build it and they will come" isn't always true. IT does not equate to KM. Build it, and if you haven't involved the affected organization and its people, they may yawn in your face. How many times have we tried to fit organizational processes into an IT solution instead of building an IT solution to enhance the organization's business process? At USAIC, we go to great lengths to gather and understand the organization's requirements. We identify the organization's business processes and involve the personnel in the development. We can then build solutions, not necessarily always IT, which enhance and improve the organization's processes and which won't wind up as junkyards for unused and abandoned material. This strategy is working. A little over a year ago, ICON had approximately 5,000 registered users and today that number is close to 20,000. It has matured from a static website to a dynamic portal. It is our goal to make USAIC a knowledge centric organization and ICON a KM portal that will put a variety of information resources into one location to make a unified user interface for the Intelligence Community. 

Scott Chunn currently serves as the Knowledge Management Officer and Lean Six Sigma Deployment Director for the U.S. Army Intelligence Center. He retired after 30 years in Military Intelligence and has been a Department of the Army Civilian since 2002. He holds an MA in Organizational Management.

The Intelligence Center Online Network: Walkthrough of a KM System

by **Sandra Landers**

The Challenge

We live in a digital age. We have more tools available to use to share information than ever before. Increasingly, our methods of preparing for our missions rely on sharing information across boundaries that we previously didn't cross. In order to succeed against an enemy that will use any and all methods available to win, we need to adapt and adopt preemptive measures not just to keep up with the enemy, but to supersede their methods of preparing for and engaging in conflict. Every Soldier on the battlefield holds information that we could use to better prepare for our struggle to prevail in the War on Terror.

There is a strong drive in the Military Intelligence (MI) community to incorporate knowledge management (KM) into our daily working environment, training, and mission activities. If we are to succeed, we need to take advantage of every tool and every opportunity that allows us to share information within the boundaries and mandates of operational security (OPSEC). We cannot continue to hold information close and stand back and watch our peers prepare for and engage in war less prepared because we did not disseminate information that could save lives.

Our young MI professionals have grown up in the digital age. They grew up with daily access to websites, email, instant messaging, chat and blogs. These current and future leaders fully expect to have available tools that allow them to communicate quickly and effortlessly. They do not comprehend an environment where information is needlessly hoarded and protected. Our young Soldiers, whether in positions of leadership or not, are driving the direction of information sharing in our Armed Forces. This shift of process in communication is forever changing the direction of information dissemination in the military. If we do not provide our Soldiers the architecture that they need and expect to meet their in-

formation needs, they will use unsecure methods to post and collect the information that they require.

The Environment

In order to meet our knowledge sharing goals and still ensure that sensitive data that we are providing is not readily accessible by our enemies, we need to keep OPSEC principles foremost in our minds. We must use available tools on networks that are appropriate for the sensitivity of the information that we are disseminating or collecting. There are many forums that MI professionals are using to share information including: open Internet chats, blogs and websites; secure and unsecure email communications; and military communities such as Army Knowledge Online (AKO), Battle Command Knowledge System (BCKS) and Intelligence Center Online Network (ICON). If the tools that are provided for our Soldiers are insufficient, they will migrate to communities that are less secure to get the answers that they need. It is our responsibility to ensure that our Soldiers have all of the tools they need in secure environments to allow them to fully prepare for the missions that they are facing.

The goal of ICON is to supplement and complement the information found in other communities such as AKO/DKO and BCKS. ICON was developed by the U.S. Army Intelligence Center (USAIC) to provide a single point of entry for MI Soldiers to request, share, and locate information relevant to the accomplishment of their specific information-centric missions. While there are many communities that MI Soldiers can use to find and share information, few are solely dedicated to the MI community. One of the major struggles that MI Soldiers have today is the overabundance of information and information sources. Where do you go to find the information that you require? Is the source of the information definitive and authoritative? How many websites and forums do you have to search through to find that one piece of information that you need to solve your problem? Where is the best place for

you to go to reach the appropriate target audience? Will people be able to find the information that you are providing? Information is worthless if people can't locate it. Many communities have information of interest and importance to MI Soldiers. ICON is dedicated solely to providing information to the MI Community.

ICON Focus

ICON was first deployed in the summer of 2003. The challenge for the first couple of years was to develop a secure, reliable environment that allowed MI professionals to get vital information. Once the architecture and basic concepts were well established, our focus changed to providing tools and information to making ICON a community that provides value to our target audience. We provide links to outside communities and websites that contain vital information and tools for MI professionals. We have also developed specific tools and applications in two major categories:

- ◆ Tools that assist MI Soldiers in operational missions across the globe to locate and share information (MI community focused applications).
- ◆ Tools that directly, positively impact the training and preparation of Soldiers in USAIC prior to deployment to operational missions (USAIC focused applications).

Tools for the MI Community

The ICON portal provides applications for the MI community that supplement and complement other systems such as AKO. We strive not to compete with other KM systems, while still providing an environment that facilitates information sharing and collaboration. What we don't provide as tools in ICON, we make available to users quickly and easily via AKO single sign on with other KM systems.

- ◆ **What about AKO?** We are single sign on with AKO and all other systems that have established AKO single sign on. What this means to you as an MI professional is that the tools and information you don't find in ICON are likely one click away in AKO, BCKS, or other official KM portals. We currently do not provide instant messaging or internal email servers. These are services that are provided by the greater AKO architecture and we are not encouraging our MI professionals to abandon the AKO system which provides these helpful tools for your use.

- ◆ **What about BCKS?** We provide discussion forums and threaded messaging through MI Net via BCKS. BCKS is the authoritative provider of KM professional forums. It provides forums and tools for the greater Army audience. MI Net is a forum specifically for MI discussions and is hosted by BCKS but managed by dedicated MI professionals in the USAIC community to ensure its relevance to our specific MI needs. MI Net is directly accessible to ICON users in our left hand menu area under the KM Toolkit/Forums. We also host a limited number of special interest forums for USAIC organizations that don't easily fall under the umbrella of areas of discussion in BCKS.

What's in ICON for the MI Community?

Our primary mission is to ensure that our target community has the tools it needs to communicate effectively and get the information it needs to accomplish missions. We have developed and deployed the following tools in ICON to assist in this goal:

- ◆ **ICON Outer Main Page (pre-login).** This area contains information screened and approved for public dissemination. No content available in this area can contain *For Official Use Only* or other sensitive data. This area is targeted to disseminate information to the general public, family members without AKO logins, and users from



other services and federal agencies that may have difficulty obtaining AKO accounts.

- ◆ **ICON Inner Main Page (post-login).** This area contains information of general interest to USAIC and the MI Community. Data in this area is accessible by ICON users with AKO accounts. The exception to this rule is that AKO users with “email only” accounts cannot log into ICON. Data displayed in ICON inner channels must be carefully considered because family members with AKO accounts, contractors, and people with other AKO account types can freely access this data.
- ◆ **ICON Shout Box.** The ICON shout box is available on the right menu area once you log into ICON and is available to all ICON users with AKO accounts. The shout box allows open discussion between ICON users. The majority of questions and comments posted in the shout box are requests for information from USAIC and the MI community. Often the requests are addressed by other MI professionals. When questions aren’t answered by others in the community, our KM office searches out the answers and responds to the questions. For long term discussion topics, we recommend using MI Net professional forums.
- ◆ **ICON Websites.** This area is dedicated to and managed by USAIC organizations and relevant supporting organizations. You can access this area by selecting the “ICON Websites” tab across the top menu bar of ICON below the graphic banner. Organizations who host data in this area maintain 100 percent control over the information that they provide. Examples of data provided in this area include: organization mission statements; organization and MI course contact information; course pre-arrival instructions and documentation, and course and organizationally focused documents for review and download. You can search for content in this area by using the “Search” box on the top menu bar on the ICON Inner Main Page.
- ◆ **ICON Document Management System (DMS).** The ICON DMS is a structured and controlled document repository for the MI Community. The DMS can be found in the “KM Toolkit” left hand channel on the ICON inner main page and is available to all registered ICON users with AKO accounts. Documents that are loaded into the



DMS are meta-tagged upon upload with appropriate permissions, assigned pronponency, and document status. DMS documents can be restricted to groups of users such as “Trainers” and “MI Users”. Documents are categorized as “Active”, “Inactive”, “Draft”, “Superseded”, “Obsolete” and “Proposed”. You can search the entire DMS or targeted areas in the DMS by selecting the “Search” tab in the DMS application window. If you aren’t sure what you are looking for, browse the DMS by selecting the “Documents” tab in the DMS application. If you have documents that you would like to see loaded in the ICON DMS, you can use the “Suggest Document” menu item or contact the Fort Huachuca KM office at kmo@conus.army.mil.

- ◆ **ICON Virtual Footlocker.** The Virtual Footlocker is a structured and controlled course document repository for MI Community. It can be found in the “KM Toolkit” left hand channel and as a main tab on the top menu bar on the ICON inner main page.



The Virtual Footlocker is available to all ICON users with AKO accounts. It is controlled and maintained by the USAIC Training Materials Support Branch (TMSB) and the MI Library. A primary goal of the Virtual Footlocker application is to make soft copy course document packages available to students currently attending MI courses at USAIC. Virtual Footlocker documents are under continual review by the TMSB and the MI Library to ensure that expiring documents and manuals are continually replaced with current relevant course materials. This continual review process ensures that the MI community can access the most recent documentation available in selected course areas. Users can create custom packages by searching our DMS for documents, uploading personal documents from their computer, and creating web links for quick reference to other web resources. This resource is available as a reach-back capability for MI Soldiers worldwide to access documents related to their military occupational specialty in the MI field. The Virtual Footlocker application is a new resource in ICON. It was deployed for use in mid-December. Soon all users will have a “My Virtual Footlocker” channel available on the inside main page of ICON for easier access to favorite documents.

- ◆ **ICON Workgroups.** ICON Workgroups is our most closely controlled document collaboration tool. This application is available for all ICON users with AKO accounts who request access. It is designed to be a closed environment for small groups to collaborate on working documents. Each folder in the Workgroups application is available only to users who have explicitly been granted access. ICON Workgroups can be compared to Exchange private folders except that they are freely available to us-

ers without requiring access to a closed exchange network inside a firewall. The ICON Workgroups enable collaboration worldwide with nothing more than Internet access and an AKO account.

- ◆ **Army Intelligence Comprehensive Analysis Tool (AICAT).** The AICAT system provides the Army Intelligence community a repository to store, maintain, query and report on intelligence, surveillance, and reconnaissance requirements and related doctrine, organization, training, materiel, leadership, personnel, facilities (DOTMLPF) information. It is a research web application that allows user to review current and projected MI force structures and create comprehensive training task lists. AICAT has three types of available search queries: standard, ad hoc, and saved queries. Standard queries allow users quick access to commonly run queries. Ad hoc queries are available to give users the ability it perform very granular, refined queries based on force structure, Army Universal Task List (AUTL), collective tasks, and individual tasks. The saved query function allows users to save either a query or the data returned from a query for later recall. An example of a complex query that can be performed in AICAT is: “AUTL to Collective Tasks to Individual Tasks by TOE Title.” This type of query can be used by trainers to compile a complete training task list in preparation for classroom or field instruction. The AICAT system is also directly linked to the ICON DMS. The AICAT document repository contains a library of documents to assist in the research of force structure and MI doctrinal information. It contains a robust document browsing and search capability and is available to all ICON users.



- ◆ **Fort Huachuca Interactive Locator.** The Fort Huachuca Interactive Locator is a tool to assist personnel visiting Fort Huachuca in locating key buildings and streets. This application was recently deployed to ICON. The system allows you to search for buildings or streets by name. It also provides a browsing tool to explore what buildings and streets are located in a specific target area. You can drill into a specific location and see a closer view of the surrounding streets and view the history of the selected location if available.



- ◆ **Conference and Seminar Websites.** The ICON Portal Team develops and deploys conference and seminar websites for MI related activities. Most conference websites are located inside of ICON after successful login. However, some conferences that are targeted to audiences who may have difficulty obtaining AKO accounts are hosted on the outside of ICON. ICON conference websites provide the following standard components:
 - ◆ **About the Workshop.** Description of the conference and the official welcome letter.
 - ◆ **Online Registration.** Allows users to register for a conference and select electives and supplementary event participation.
 - ◆ **Maps and Directions.** Links to MapQuest with predefined target locations, graphic images with maps of Fort Huachuca, and a link to the Fort Huachuca Interactive Locator.
 - ◆ **Speakers.** Area for conference hosting organization to provide list of host speakers and their biographies.
 - ◆ **Contact Us.** Area to send requests for information directly to key personnel hosting the conference.
 - ◆ **Conference Agenda.** Complete list of conference agenda items organized by date and time and linked to key speakers.



- ◆ **Lodging and Area Information.** List of hotels, restaurants, rental cars, and other points of interest. This area also notes preferences for Fort Huachuca lodging. All hotels that have had rooms blocked off for the conference are listed at the top of the page.
- ◆ **Conference Documents.** This area is used by the hosting organization to load conference briefings and supporting documents and is usually populated within one week of conference completion.
- ◆ **Other Conference Specific Content.** We have also created other custom channels in the conference at the special request of hosting organizations. Examples of special request content include: CSM Doug Russell Award description and instructions for CSM Conference, exhibitor's channel, printable Fort Huachuca gate passes to gain quick entry to conference locations, and post conference online surveys.
- ◆ **USAIC Conference Administration System.** Conference websites are managed by conference action officers. The USAIC Conference Administration System gives conference action officers control over the data displayed in their conference website. The data available for the action officers to maintain includes the description of the conference, agenda items, electives and events, speakers, contact information, documents and briefings, hotel/restaurant/rental car information, and frequently answered questions. Conference action officers can also track detailed conference

registration information for each registered conference attendee and create reports for use as SSO clearance datasheets or for use in conference planning and execution.



Tools for Training the Force (USAIC Focused)

In support of USAIC's mission to train MI Soldiers, the ICON Portal team has developed and deployed a suite of applications targeted to improve USAIC training processes. Many of these applications are restricted access applications and not available to the general ICON user base. However, understanding the tools being used in USAIC to facilitate knowledge transfer among trainers and leadership may give you some insight and ideas of ways to implement KM in your organization.

◆ **Lessons Learned and Lessons Learned Integration.** We have two related web applications that together comprise our Lessons Learned System. The Observations, Insights, and Lessons Learned (OIL) web application is the collection point for incoming insights from the field. The OIL system is used to collect, analyze, review, and approve/reject issues. Other than the input form that allows users from the field to submit new observations, this application is a closed system. It is accessible to the USAIC Lessons Learned team and to USAIC key leadership to review and develop incoming observations using a DOTMLPF framework. Once observations have been vetted and approved, they get assigned to organizations for action. At this point, the observation gets transferred to the Lessons Learned Integration application for public review and action officer maintenance. Once issues complete the local development cycle, they will be made available to the Center for Army Lessons Learned (CALL) for integration into the

CALL website. Statistics from the OIL web application are fed to the Commanders' Dashboard for leadership review in a real time manner.



◆ **Noncommissioned Officer's Academy Student Registration and Management System (NCOA SRMS).** The NCOA SRMS (under Resources) was developed to assist USAIC NCOA cadre with student registration and tracking throughout student attendance at the academy. The system uploads Army Training Requirements and Resources System (ATRRS) data to assist in the planning cycle for upcoming class rotations. The ATRRS data area allows cadre to communicate with students prior to arrival at Fort Huachuca. The system allows the NCOA cadre to assign students to classes and platoons and allows S1 personnel, instructors, leadership, training managers and administrators selective access to the management of student records. It tracks student progress in the following areas:

Student Data

- ◆ Student data records including gaining and losing command data and emergency contact information
- ◆ PT test results
- ◆ Height and weight event results
- ◆ IRON NCO event results
- ◆ German Armed Forces Proficiency Badge event results

and approval of course administrative data (CAD), program of instruction (POI) and integrated training plan (ITP) documents. Training Development and Integration personnel export current products from the Automated Systems Approach to Training (ASAT) system. They take the exported documents and upload them to the TRAS Tracker application. Documents go through two distinct approval processes: preliminary staffing and formal staffing. The preliminary staffing process allows multiple USAIC organizations to review and comment on the documents concurrently. Once all preliminary staffing comments have been gathered and changes have been made to the documents based on those comments, the documents are moved into the formal staffing process. The formal staffing process is a sequential approval process that allows high level USAIC leadership to perform final validation and approval of the document prior sending it to TRADOC for review and approval. TRAS Tracker data is fed directly to the Commander's Dashboard for leadership review in a real time manner.

- ◆ **USAIC Commander's Dashboard.** The USAIC Commander's Dashboard application has three major areas: USAIC SIGACTS, dashboard charts and graphs, and key issue tracking. Organizational SIGACT reports are archived here for review and analysis. We have historical SIGACT reports as far back as three years. The charts and graphs area provides real time statistics for several of our key web applications including: TRAS Tracker, Lessons Learned, USAIC Tasking System and

QAOS. This real time data display offers data to the commander continuously to reduce the number of time consuming data calls to collect, organize, and present similar information. The key issue management area allows commanders to review hundreds of ongoing USAIC issues and their current status in a standardized DOTMLPF focused quad chart format. This system is provided to allow commanders to have up to the minute access to key decisionmaking data.

- ◆ **USAIC Tasking System.** The USAIC Tasking System allows USAIC G3 personnel to create, disseminate, track and close requests for personnel and equipment support. This system also allows



tasked organizations to respond to taskings. The next iteration of this application will allow organizations below the G3 level to initiate taskings to sub organizations, assign G3 taskings to lower levels, and to send requests for support up the chain to higher level organizations. The USAIC Tasking system has an integrated statistics and search dashboard. USAIC Tasking System data is fed directly to the Commanders' Dashboard for leadership review in a real time manner.

- ◆ **USAIC Master Activities Calendar (UMAC).** The USAIC Master Activities Calendar is a web based calendar that allows organizational administrators to create and publish events targeted for public distribution. The UMAC works on an overlay concept. There are currently 21 organizations participating in the UMAC system. Users can choose which organizations they want displayed on their customized main calendar page. Then they can select and unselect organizational calendars and overlay multiple



calendars on one page to see the greater organizational picture. The functionality of the UMAC is based on functionality in Microsoft Outlook including day, week, and month views and event management.



OPSEC and Security in ICON

The ICON Portal is single sign on with AKO. This means users never have to “register” with ICON. You simply enter your AKO username and password or use CAC login authentication to access ICON inner content. This process ensures that users have single click access to data in ICON, AKO/DKO, BCKS and other participating AKO single sign on portals. Information in ICON is made available or hidden based on both AKO account type and specific ICON role information. AKO users who are classified as active duty or DOD civilian are automatically granted “Intel User” access in ICON without being forced to request it. Intel User access grants access to documents and applications flagged with Intel User restrictions. ICON users who need Intel User access to accomplish their missions and do not have it may request it by selecting the Request Access link in the ICON Basics channel in the upper left menu area in ICON. ICON also has other roles for user groups that need access to specific restricted applications in the portal.

Where is ICON Going?

ICON and other information communities are works in progress. No community can expect to continue to provide value to our target audiences if we do not continue to grow and integrate new information, tools and applications. Much of our focus

in the last few years has been on developing and deploying tools of relevance to training MI Soldiers here at USAIC. We will still continue to ensure that applications are provided and maintained so that we have the best trained MI Soldiers in the world. That is our USAIC mandate. We will also strive to improve and add to the tools we provide to the greater MI community. ICON is not just a portal for USAIC. We want to assist MI Soldiers all over the world to stay connected and informed. We will be expanding our focus more on operational forces and to supporting MI Army Reserve and National Guard forces, who continue to have a major role in our ongoing war on terrorism.

What Can You Do to Help ICON and the Greater MI Community?

Without feedback from the MI community, ICON will end up as primarily a USAIC tool. We do not want to be one of those websites where users come and say “there is nothing here for me.” If you find yourself in ICON and are saying those words to yourself, we humbly request your feedback. What information were you hoping to find in ICON that you could not find? What tool(s) would make ICON a system that would benefit you in the accomplishment of your mission? Is the information there, but difficult to find? We are only as good as the feedback that is provided to us. If we do not provide the tools and information that you need as an MI professional, you will go elsewhere to find it. You will probably go to many different sites to get all of the information you require. We challenge you to help us build a system that meets 90 percent or greater of your specific MI community information needs. If you have comments or recommendations for us, please contact our KM office at kmo@conus.army.mil. We eagerly look forward to hearing your important comments and suggestions so that we can help in any way possible to assist our users to complete your missions and win our war. 

Ms. Sandra Landers is a Northrop Grumman contractor supporting the USAIC CIO/G6 and KM offices. She is a Senior Software Engineer and has been the ICON Portal Project Manager since ICON was first deployed to the MI Community in 2003. She is a former enlisted MI Soldier and holds a BS in Information Technology. Since leaving the Army in 1996, Ms. Landers has been working KM and software engineering tasks for USAIC.

MI Net: Digital Intelligence Community



Introduction

The Military Intelligence Network (MI Net) is a site that empowers its community members by allowing them to easily publish, manage, organize, and discuss a wide range of content through one accessible website. MI Net which is part of the Battle Command Knowledge System (BCKS) is operated by, devoted to, and used by all personnel interested in MI issues. Hundreds of people use MI Net every week to share what they know and find what they need and get their questions answered in a timely manner by numerous subject matter experts (SMEs). These SMEs are found around the world and represent a variety of passionate professionals from Soldiers in ranks of Staff Sergeant through Major General to DOD civilians of all pay grades as well as contractors. Their job experiences range from Intelligence Analyst to the Army G2 Command Sergeant Major (CSM), MI Corp CSM and even the Commander of the U.S. Army Intelligence Center and Fort Huachuca (USAIC&FH).

MI Net was created to lessen the experience gap between doctrinal teaching in the Generating Force and emerging tactics, techniques, and procedures within the Operating Force. One of the most difficult problems between the Army's many Centers of Excellence (COEs) and the Operational Force has been eliminating the discrepancy between doctrine and emerging best practices. MI Net along with BCKS has teamed with USAIC's Intelligence Center Online Network (ICON) to form the Intelligence Knowledge Network (IKN) a blended solution of available resources and knowledge. The IKN, like many of its counterpart knowledge networks, has been extremely successful in bridging the knowledge gaps between COEs, Operational Forces and the Army Force Generation cycle.

Digital Social Networking

MI Net has been able to help the MI community to quickly transfer knowledge, share ideas, and lessons

by **Dustin D. Cloos**

learned amongst its professionals regardless of rank or duty position. The peer-to-peer networking and professional and technical mentoring elements of the IKN on MI Net provide opportunities to collaborate with individuals or groups of people, so that everyone in the community benefits. Professional networking is a key element to breaking the age old cycle of reinventing the wheel which seems to perpetually plague the Army. This assistance is afforded in real-time 24/7 and is available between attendance at MI service schools and to Soldiers who are in non-MI units. The daily knowledge transference on MI Net has aided Soldiers in providing change from the ground up as well as helping them avoid costly situations due to lack of intelligence and experience.

Many of us can remember a noncommissioned officer (NCO) or officer in a past unit who was considered the "go to" person. Thinking back to that NCO or officer many of us can remember a way of conducting business called "the good old boy network," a type of social engineering developed to get missions accomplished even when you or your unit lacked the operational knowledge or expertise. In times where there was an absence of manuals or tools to fix a piece of equipment you could always "go to" that NCO or officer who would in turn call on a buddy in another unit who knew a guy that knew a guy who could get you the manual or tool you needed. This same sort of network has been re-established digitally within the communities of practice (COPs) on MI Net and other forums on BCKS. I have personally witnessed Soldiers ask questions on MI Net and receive multiple solutions to problems or information that aided them in finding their answer.

Getting help to Soldiers is what MI Net is all about. Responses often vary from simple textual replies to much needed tools like standard operation procedures, PowerPoint presentations, or Excel spreadsheets. Every tool on MI Net is intended to be shared and adapted for personal and/or professional use.

AKO organizational sites, SharePoint portals, providing reach back support as needed to units' KM needs, and assisting the Army in KM doctrinal development. In addition BCKS has started providing organizational KM assessments and process recommendations to units to include KM training and suggested KM processes with methods and best practices to incorporate them. (This is a limited capability at this time.)

The Warrior Knowledge Base (WKB), another BCKS initiative, is a huge repository of documents completely meta-tagged and searchable by meta category, author, date, keywords, etc. Because of these great initiatives BCKS and many of its subordinate forums have been recognized by the Army and the U.S. government, winning awards such as the Army Knowledge Award (AKA) for Enterprise/Cross Functional Solution; the AKA for Knowledge Transformation Initiative; the E-Gov KM award for Best Initiative or Organization Successfully Using KM Practices, and the E-Gov KM award for Best KM Initiative Delivering High Value to a Broad User Community/Supporting Agency Mission.

Conclusion

If you are interested in becoming a member of MI Net, visit this community by going to <https://minet.bcks.army.mil> or by clicking on the forums link at ICON at <https://icon.army.mil>. MI Net is cleared For Official Use Only documents and discussions. Visit MI Net's parent organization BCKS at <https://bcks.army.mil> or explore the WKB at <https://wkb.bcks.army.mil/Search/>. Please note that in order to gain access into the WKB or BCKS you must have an Army Knowledge Online username and password. Contractors are provided access to BCKS, MI Net, and WKB on a need-to-know basis. For more information about anything mentioned in this article, contact the USAIC KM Advisor, Mr. Dustin D. Cloos at (520) 533-0263, DSN 821-0263 or by email at dustin.cloos@us.army.mil.

Dustin D. Cloos is a Certified Knowledge Management Advisor with 13 years of MI background specifically in the area of Intercept/Electronics Warfare. While in the Army he served in positions such as the Fort Huachuca Post Combatives Instructor, 1SG, Senior Drill Sergeant and many others. Dustin holds certifications for Basic and Advanced Knowledge Facilitation, is a Microsoft Certified Professional (Access), and a certified Unix System Administrator.



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ICON Portal's Document Management System



by Barbara Simonds

What are Document Management Systems?

A document management system (DMS) is a repository that is used to store, organize, and track documents. DMS typically provide storage, metadata, and security, as well as indexing and retrieval capabilities and have multiple benefits such as:

- ◆ reduction of duplicate copies of documents on users' systems.
- ◆ reduction of outdated documents being utilized.
- ◆ increased security.

How Document Management enables Knowledge Management

A DMS is a key enabler in the knowledge management (KM) process. KM focuses on gathering, storing, and sharing information; utilizing a DMS is crucial to ensuring that information is available. In the past, users stored their documents and information on their local machines and protected this information needlessly. This behavior results in numerous copies of the same document being stored on multiple users' hard drives and unavailable to the greater organization.

The ICON Portal, with the KM Office, encourages the Military Intelligence (MI) Community users to share documents and information by utilizing the DMS available on the ICON portal. Two applications are available on the ICON Portal for document management based on the security and control needed: ICON Document Management System and ICON Workgroups.

The ICON DMS

The ICON DMS is a structured, controlled document repository that is used to store and manage documents of varying security levels for the MI Community. It is located in the KM Toolkit on the front page of the ICON portal and consists of two distinct areas: **Documents** and **Search**. The **Documents** area allows users to browse, view, and download documents by looking through the various categories or sandboxes. This area is sometimes referred to as the "folder view" because the sandboxes are further broken down into folders similar to the folder structure users would see on their own hard drives. The **Search** area is a full text search engine that searches all sandboxes based on key word search criteria. Users can locate documents by using either function.



- ◆ **Document Tagging, Security and Categorization.** Documents are loaded into DMS by predetermined sandbox administrators who are required to properly "tag" the document by assigning the proponent, document status, published dates and any security restrictions. If a document administrator assigns security to a document, then it is restricted to a specific group(s) of users (such as Intelligence, Trainers, etc).
- ◆ **Tagging and Security.** Users are able to view the document properties set by the sandbox administrator by hovering or selecting a document. In this example, the administrator restricted this document to Intelligence Users. Users without the Intelligence User role will not be able to view the document. Document properties also show that the document's status, the size and the date the document was published.
- ◆ **Categorization.** In the DMS, documents are categorized into various "sandboxes." These sandboxes are separate, secured areas for the documents to be stored. They include AICAT documents, Virtual

Footlocker–Course Material, SIGACTS, and USAIC Training. Each sandbox has an administrator that has complete control of uploading, updating and removing documents in their sandbox. The security roles span across sandboxes, so users could have access to documents in multiple sandboxes. Currently there are four sandboxes in the Document Management System:

- ◆ **AICAT Documents.** This sandbox is managed by the AICAT administrators and includes documents categorized by DOTMLPF domains. This sandbox contains thousands of documents and a number of documents in this sandbox are restricted to only Intel Users.
- ◆ **Virtual Footlocker Course Material.** This sandbox contains the student issue material for those attending courses at the U.S. Army Intelligence Center (USAIC). The course material currently includes: Initial Entry Training by military occupational specialty, Warrant Officers’ Basic Course, Basic Officers’ Leadership Course, Noncommissioned Officers’ Academy Basic and Advanced Courses.
- ◆ **SIGACTs.** This sandbox is managed by the KM Office and contains the significant activity reports (SIGACTS) for the various directorates across USAIC.
- ◆ **USAIC Training.** This sandbox contains various training documentation to include programs of instruction, course administrative data, lesson plans, etc.

Browsing for Documents in the DMS

ICON users are able to browse through the DMS by selecting the **Documents** menu item on the DMS toolbar. This will take the user to the folder view of the DMS and the various sandboxes. Users can choose to display the contents of the folder in an icon or list view. Users can browse through the various sandboxes and the subfolders to view the documents stored in the ICON DMS. There are multiple options to view or download documents in the DMS:



Queue Files. Users can select multiple files to place in their download queue by dragging/dropping the files to the “Queue Files” button or by selecting the file and clicking the button.



View my Queue. Users can select the “View my Queue” button to view the files placed in their queue. This view will allow the user to download all the files at one time or clear out their queue.



Download File(s). Users can select the “Download File(s)” button to download the file(s) selected in the list/icon view to their desktop. If a user selects multiple files, the system automatically creates a .zip file for download.



View File. Users can select the “View File” button to view a selected file from the list/icon view. This option allows users to view the file without actually downloading the file to their desktop.

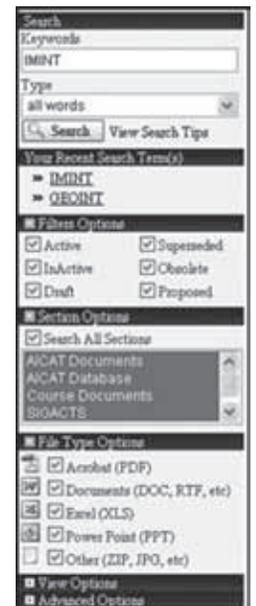


Favorites. Users have the ability to bookmark documents in the DMS as “favorites.” Users can select the document(s) and either drag/drop to or simply click on the “BookMark File(s)” button. The “View My Favorites” button allows the user to view their bookmarked files quickly and easily. Users are also able to bookmark files from the search functionality.

Searching the DMS

The second area of the DMS is the Search Engine. The DMS search engine is a robust full text search engine that allows users to search each sandbox and its subordinate folders at the touch of a button. The search engine provides users with a simple, easy to use search function that includes multiple advanced features allowing users to narrow search results or to create an advanced search.

The search engine tracks the user’s most recent searches and allows for “on the fly” updates to the search results. The user simply changes the options and hits the search



button again. Users are able to bookmark or add documents returned in the search result to their Virtual Footlocker packages.

ICON Workgroups

The ICON Workgroups is our most closely controlled document collaboration tool and is designed to be a tightly controlled collaboration environment for small groups to store, review and share working documents. The documents stored in workgroups are not included in any searches completed in the ICON DMS. However, users are able to request a document from the workgroup be published by filling out a request form and submitting it to the KM Office.



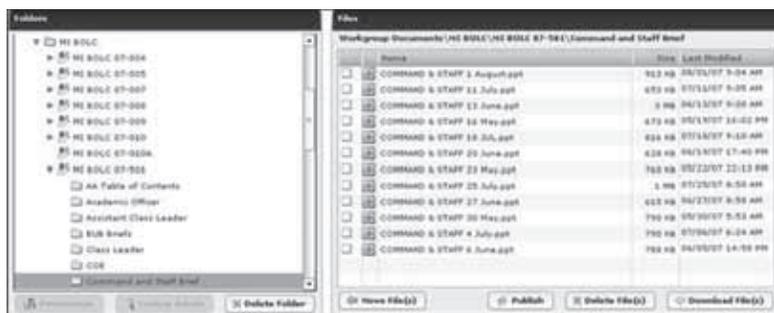
◆ **Folder Security.** Each 2nd level folder in the ICON Workgroups application is available only to users who have explicitly been granted access. Each folder is assigned a “Group Administrator” who has full administrative privileges over the folder and any subfolders, including assigning user access. Group Administrators are able to assign different levels of security in their workgroup: download only and upload/download. Users added to a folder are given download access by default.

- ◆ Download only. Users are only able to view and download documents in the folder(s) for which they have access.
- ◆ Upload/Download. Users are able to upload new documents, remove documents as well as view and download documents.

The following permissions matrix is provided to help users identify the folders they have access to.

Permission Matrix	
Folder Icon	Indicates
	A standard folder.
	A workgroup folder in which you're the admin
	A workgroup folder in which you have download and/or upload access.
	A workgroup folder in which you do not have access.

◆ **Viewing documents in a workgroup folder.** With access to a workgroup folder, the user is able to view and download the shared documents. If users have the additional upload access, they are also able to upload and delete documents from the folder.



The figure illustrates a workgroup folder for the MI BOLC Course 07-501. The Group Administrator for this folder created multiple subfolders to organize the documents and increase ease of use by the students. Users can select one or more documents by selecting the checkbox and the Download File(s). The system will download the file(s) to the users’ desktop as a zip file.

Conclusion

The ICON Portal has two structured and controlled applications for our users to store, organize, view and share documents. Between these two applications, users are storing and have access to over 6,000 documents that are relevant to USAIC and the greater MI Community. If you or your organization needs an ICON Workgroup or has questions about the ICON DMS, please contact the KM Office at kmo@conus.army.mil.

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The Virtual Footlocker

I need help! I received this great threat guide from my instructor when I was in class at Fort Huachuca last year. I had to turn it back in when I finished and I really need it—today!

By Vee Herrington, PhD

. . . Telephone call from an MI Soldier

Introduction

The above quote is very typical of the numerous calls or emails throughout the month received by the Chief Warrant Officer Two Christopher G. Nason Military Intelligence (MI) Library at the U.S. Army Intelligence Center (USAIC), Fort Huachuca, Arizona. The library staff would then try to track down the document—which was often difficult because the Soldier could not remember the title of the document. Even if the hardcopy was located, there was still the problem of getting it to the Soldier quickly.

Purpose of the Virtual Footlocker

This scenario was the catalyst for the creation of the Virtual Footlocker (VF). During training, students receive a basic student issue consisting of a number of books, manuals, regulations, and student handouts. At the end of the course, these materials must be returned (per AR 25-3). This does not allow the students to later reference these materials once they have left training. Even though many of the documents are now also being issued in CD format, the students often lose the CD or it becomes damaged. The VF is a creative solution to this problem since it provides access to these resource materials anytime and reach-back from any location—and, the documents will never be outdated!

What is the Virtual Footlocker?

Documents are never out-of-date!

Storage capacity is never an issue!



Think of the VF as the equivalent of the original military footlocker or trunk, which contained the basic issue of materials and equipment and travelled along with the Soldier. The VF is a web application pro-

viding students and MI professionals the ability to search and store MI training documentation, student issue documents, and their own personal documents and websites. The VF can be accessed from anywhere at anytime, all the Soldier needs is an Army Knowledge Online (AKO) password and an Internet connection. It also provides the opportunity to store and save any document or website link. Storage capacity and issue date are never an issue because the course documents are stored in another database with just a link to the VF.

Background Information

The VF is a web-based application of the U.S. Army Intelligence Center Online Network (ICON), which is USAIC's Knowledge Portal. ICON enables MI professionals worldwide to connect, communicate, collaborate, and investigate. In addition to the VF, ICON hosts a variety of web applications and tools that support the MI community:

- ◆ AICAT (Army Intelligence Comprehensive Analysis Tool)
- ◆ ICON Workgroups
- ◆ Warrior Tasks and Drills
- ◆ Discussion groups and Forums
- ◆ Commander's Dashboard (USAIC commanders only)
- ◆ Lessons Learned
- ◆ Links to unit websites

The Document Management System (DMS) is the powerful, dynamic data management and retrieval "engine" behind the ICON applications. The administrator of the VF loads the documents into the DMS. For each document loaded, the document name, date published, and proponent fields are required. The document is tagged if it is restricted. Access to restricted documents is limited to the ICON role of Intelligence User. All other ICON users see the title of the document and a link to request access to the document.

The VF administrator creates the student issue packages by using active documents from the DMS and applying categories to the package. This allows the users to locate packages by military occupational specialty (MOS), Intelligence Discipline, and Course Type (i.e., enlisted, officer, etc.).

How to Access the Virtual Footlocker

The VF is accessed via ICON (<https://icon.army.mil>), using AKO credentials to login. At the ICON main screen, click on the key icon or use the CAC login option on the upper right hand corner of the page. Click on the VF tab on the top toolbar or in the left frame under KM Tools. Using AKO authentication, the ICON portal determines the current status of an ICON user.

What is a Package?

The VF is organized into packages. The “Student Issue Packages” represent predefined packages of documents. These packages correspond to a particular course and are set up by instructors, thus ensuring the users always get an up-to-date and accurate list of course materials. When a document in a predefined “Student Issue Package” is revised or becomes obsolete, the document is automatically updated in the VF. A package can also be a customized package created by the user and placed in “My Virtual Footlocker–My Custom Packages.” The customized package is given a name by the user and can contain documents from the predefined packages, Internet websites, documents uploaded from ones computer or documents found in the DMS. For example, a user may decide to create a custom package for all his or her army records. The package could be named “Army Records” where forms, leave statements, travel vouchers, websites, etc. could be uploaded and saved into this Custom Package.

The VF uses a Drag and Drop feature. To add packages, documents or URLs to “My Virtual Footlocker” just drag and drop. Files have to be dropped into packages. **Note:** a file cannot be dragged and dropped into “My Virtual Footlocker” unless there is already a package present.

Sections of the Virtual Footlocker

The “Browse Student Packages” section provides MI students and other ICON users the ability to search and save instructor-created Student Issue

Packages (MI Training Documentation) to their footlocker. Users drag and drop entire packages to their “My Student Issue Packages” or individual files to any existing package (Student Issue or Custom). Click on the “Browse Student Packages” tab at the top and the basic issue course packages will be displayed by name. To view the titles of the course materials (field manuals, army regulations, student handouts, etc.) in a package, highlight the package. A report of all packages with the list of course materials can be printed by clicking on “View Printable Report.” To narrow the search, go to the Filter box and search on Title Keyword, Course Type, MOS or Intelligence Discipline.

The “Tabs””: Two Sections of the Virtual Footlocker	
<i>Browse Student Packages</i>	<i>My Virtual Footlocker</i>
You can VIEW pre-defined packages	You can CREATE custom packages
You can view files	You can view packages and files
You can drag and drop packages and files to “My Virtual Footlocker”	Once a package is created or dropped into “My Virtual Footlocker” the package can be changed by: <ul style="list-style-type: none"> ◆ Adding a website (URL) ◆ Deleting a file from the package ◆ Uploading a file from your computer ◆ Adding a file from DMS
<i>You cannot:</i>	<i>You cannot:</i>
Change a pre-defined package	Drag and drop a pre-defined package to a “Custom Package”
Drop a file into “My Virtual Footlocker” without dropping it into a package - either a pre-defined package or a custom package	

The “My Virtual Footlocker” section allows MI students and other ICON users to view the Student Issue packages they have placed in their footlocker and/or create personalized custom packages. Users are also able to add documents from packages, search for documents in the DMS, and upload their own documents and website links to any of their packages.

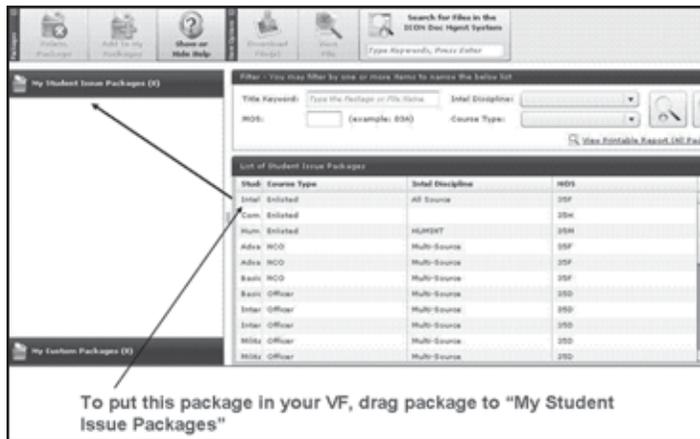
Subscription Service

The VF provides users a subscription service when placing a “Student Issue Package” in their footlocker. If the user chooses to subscribe to package update notifications, they will receive emails when the package has been modified.

Dropping Packages into My Virtual Footlocker

After browsing for course packages, the entire package can be dropped into “My Virtual Footlocker” (Student Issue Packages). A pre-defined package cannot be dropped into “My Custom Packages,” but single documents from a pre-defined package can be

dropped into any package—Student Issue Package or Custom Package.



Viewing and Downloading Files

Highlight the package and all of the items will show up in the right frame. To view a document, highlight the file and click on “View Document” at top. Files cannot be opened by double clicking. Documents can also be saved to the desktop by clicking on Download File.

Creating a Custom Package

Custom Packages can be created in “My Virtual Footlocker.” Documents from predefined packages, documents from the user’s computer, and web links can be dropped into a “Custom Package.” While in “My Virtual Footlocker,” click on “My Custom Packages” at bottom of left frame. After clicking it will rise to the top directly under My Student Issue Packages. Before a file or a URL can be added to a custom package, the package has to be created and named. Click on the “Green Plus” icon at the bottom—“Package Options.” Name the custom package. Remember that an entire predefined “Student Issue Package” cannot be dropped into a custom package.

Uploading a Document from the Desktop

After clicking on “My Virtual Footlocker,” highlight the package and click “Add Documents to Package” button. Find the document on the computer by clicking on “Upload Document” and double click the file. The file name appears in the “List of Documents” box. The user has to click on the Upload button again. The last step is to drag and drop the file into the package.

Adding a File from DMS to a Package

The DMS is a searchable repository of documents. To search for a file in DMS, click on “My Virtual

Footlocker.” Put the keywords in the Search for Files in ICON DMS box on top toolbar. When the file is located, click on the information icon and add the document to a VF package. If returning to “My Virtual Footlocker” and the file is not in the package, hit refresh.

Adding a URL to a Package

Click on “My Virtual Footlocker” tab. A URL cannot be added to a package from the Browse Student Packages tab. Click on “Add Links to a Package.” Add the URL and name to “Create a Link.” Highlight the package you want to add the URL to. From the “List of My Links” window, drag and drop the URL to the package.

Conclusion

The Virtual Footlocker is a good example of the meshing of two Army initiatives—Lean Six Sigma and KM. Both of these initiatives focus on change, efficiency, sharing, and improvement. Through the use of network-centric technology, the Virtual Footlocker allows the MI Professional to embrace the Army’s strategy of transforming itself into a knowledge-based force. For directions on how to use the Virtual Footlocker, go to http://www.universityofmilitaryintelligence.us/mi_library/documents/KMBrochure2_000.pub and download the brochure. 

Points of Contact for further information are:

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Vee Herrington currently serves as the Chief of the US Army Military Intelligence Library. Before coming to USAIC, Dr. Herrington was a Business Intelligence Analyst and Corporate Librarian for Lucent Technologies. She holds a PhD from Arizona State University and Master’s Degrees from the University of Cincinnati and the University of Tennessee, Knoxville.



The Internet has become a valuable communication tool for getting important information out to those who need it. As U.S. Army Intelligence Center (USAIC) units began developing an online presence, relevant information was instantly made available to incoming students and permanent party. However, it was soon recognized there were issues maintaining these websites and servers and keeping content current. Prior to the deployment of the Intelligence Center Online Network (ICON) Portal in July 2003, USAIC tenants had their own websites on various servers in disparate locations. There was no common technology or content standards. Sometimes servers were not even in a vault or server room, they simply existed somewhere within the unit. The websites were usually built by available Soldiers who had knowledge of html or another web language and could put together a site. When the web author changed duty station, the responsibility would fall on another Soldier who may or may not have the same knowledge as the original web author. It was shown that the information contained on the units' sites was valued by those seeking it, but only if that information was current and easily retrieved.

The solution was to bring all USAIC and related websites under the ICON umbrella to provide a consistent way to maintain all the sites at a common location. This consolidation would go a long way to solving a large piece of the Knowledge Management puzzle for USAIC. Website consolidation under the ICON Portal made information more readily available concerning courses, facilities, training, and other data. This improved data availability allows Soldiers to arrive informed and better prepared for their training.

ICON websites are dedicated to and managed by USAIC organizations and relevant supporting organizations. The websites can be accessed by selecting the "ICON Websites" tab across the top menu bar of ICON Portal below the banner. The various units are categorized on the ICON websites page by Command Group, Training, and other USAIC and Military Intelligence (MI) programs. Organizations who host data in this area maintain 100 percent control over their information. Examples of data provided in this area include:

organization mission statements, organization and MI course contact information, course pre-arrival instructions and documentation, course and organizationally focused documents for review and download. Each site also has a file cabinet feature to store content for download. You can search for content in this area by using the "Search" box on the top menu bar on the ICON Inner Main Page.

The ICON Websites content management solution provides unit

web authors the capability to update and manage the content of their site in real time. Several authoring tools were considered when developing a content management solution for ICON. What was needed was an easy-to-use tool that would require minimal training. This would allow unit web authors to quickly become productive, and when one web author left and another took over, hand-off and ramp-up would be smooth and consistent.

On the server side, the ICON portal team created a secure, web-based architecture to house unit sites. On the author (client) side, the tool chosen for the ICON website content management was Adobe Contribute. This tool provides a WYSIWYG (what you see is what you get) interface that allows web authors to easily create and update their sites.

Effective Content Management

by Kenneth J. Todd

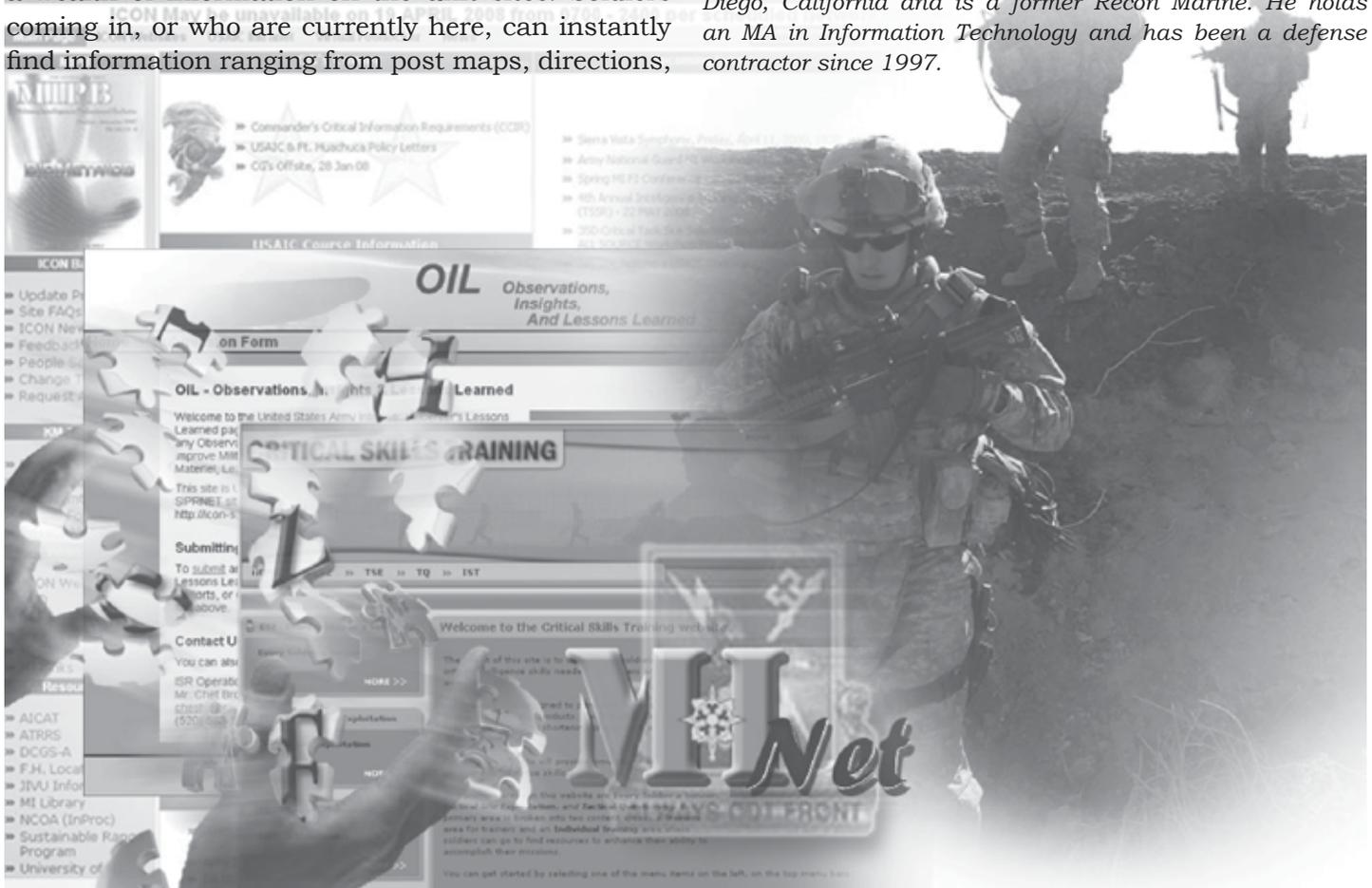
With this tool, web authors simply navigate to their sites as they would in a web browser. Once there, the “Edit” button is clicked. Now the site is in edit mode, where text can be changed or added and pictures or other multimedia can be dragged from the desktop to the web page. When the unit web authors’ are satisfied with the site, they simply click the “Publish” button and their changes are available for viewing by the user. This process avoids information bottlenecks and creates an environment where information can be updated quickly as changes occur in a command. This tool eliminates the need for organizations to locate and dedicate a Soldier/civilian with “web development” experience. It also reduces the amount of time that web authors need to spend in maintaining their website so they can spend more time focusing on their core mission.

The Noncommissioned Officer Academy (NCOA) and the 111th MI Brigade are two examples of entities that have been very successful in getting information out to those who need it through the ICON websites content management solution. Students and permanent party who are coming to either of these can find a wealth of information on the unit sites. Soldiers coming in, or who are currently here, can instantly find information ranging from post maps, directions,

packing lists, base and command policies, chains of command, and just about anything else the unit wants to make available. Under the 111th MI Brigade, not only is there information and files pertinent to the 111th, but each battalion (304th, 305th, 309th, 344th) has its own website containing pertinent information and files. The NCOA has taken one step further, by not only providing information through its website, but they also in-processing and student tracking through ICON. This saves valuable time for the command by having BNCOC and ANCOA students in-processed prior to showing up for their course.

The way ahead for ICON Websites is clear—provide the information to those who need it to allow for better prepared, more informed Soldiers. The USAIC CIO/G6 and the ICON portal team are here to assist in this mission by continually looking to leverage technology to advance the capabilities and increase the ease of use in this solution. 

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Training Intelligence Networks

by Captain Tom Pike

"We don't know what we don't know" General Peter Pace

The Problems of Information and Knowledge

On the first day of the Military Intelligence Basic Officer Leader's Course (MIBOLC), the students discuss the natural bias to believe that more information means better analysis and better decisions. This belief has proven repeatedly to be false. In fact, the only result of more information is more confidence in one's analysis but not more accuracy.¹ However, small pieces of information have proven repeatedly to be crucial to the outcomes of battles and key to commanders' decisions. What would have happened at the Civil War Battle of Antietam if a Union private had not found the Confederate battle plans wrapped around three cigars? What would have happened at Normandy if the famous agent Garbo had not convinced Hitler that Normandy was a feint and Hitler had reinforced Normandy with the quarter of a million German soldiers that were waiting at Calais? More information does not mean better analysis, but the right information could mean the difference between victory and defeat. This situation is made infinitely more difficult when analysts realize that to find the right information they must determine what the information means.

The greatest challenge that information presents is determining what the information means. Once an analyst determines the significance of the information, and how it relates to other information, the analyst crosses the invisible boundary from information to knowledge.² The same piece of message traffic could be given to an analyst from World War II, Vietnam, and Operation Iraqi Freedom, and each one based on their understanding of tactics, technology, cultural understanding, and education would interpret its significance differently. In fact, analysts within the same MIBOLC class will interpret the same piece of information differently, based on myriad of different factors. Instructors at MIBOLC use a simple vignette to illustrate how perspective and knowledge can influence understanding and action. The vignette is as follows:

Information and knowledge are the realm of intelligence analysis. Information and knowledge have three overlapping and sometimes paradoxical characteristics that dramatically affect analysis. First, more information does not improve analysis, it only makes the analyst more confident even if the analyst is wrong. Second, one small piece of information can prove critical to victory or defeat. Third, the subtle nuances of information and how it is filtered as it is transitioned from a piece of information to a piece of knowledge through the mind of the analyst is infinitely complex. Analysts have developed numerous methods to minimize this daunting situation. Tactically, analysts rely on Intelligence Preparation of the Battlefield (IPB) as a method to organize the complexity of the battlefield and determine what options the enemy has available. However, the added complexity of counterinsurgency, the rapidly globalizing and technological world means that analysts must also be prepared to analyze situations that expand their understanding of what factors can contribute to IPB. The major problem analysts face is they do not know what they do not know, and

undoubtedly, the great threats to America or their unit will be the threat that no one anticipated. No matter how sophisticated the method or technique someone uses to conduct analysis, much of what is learned comes through trial and error.³ The flattening of information and knowledge through the Internet and other tools of communication provides analysts with an incredible tool to minimize their ignorance by leveraging the knowledge of the MI Corps.

The MIBOLC Strategy

Knowledge networks provide intelligence analysts amazing tools to rapidly adapt to any threat they face. However, it is only an amazing tool if the analysts use it. The challenge of MIBOLC is to train the new intelligence officers to leverage every tool at their disposal to be the best analyst possible. They must steal experiences and ideas shamelessly. They must realize it is the MI Corps fighting the enemy and no one is as smart as all of us, and every Soldier from private to general can have the eureka moment that provides them with the keen insights required to destroy the enemy. To embed this knowledge-sharing trait within their analytical culture, MIBOLC is attempting a two-prong strategy. The first part of the strategy is the most difficult: training lieutenants to leverage knowledge networks. The other part of the strategy is training lieutenants to use the knowledge tools available. The four tools MIBOLC trains are: Distributed Common Ground System–Army (DCGS-A); Nonclassified Internet Protocol Routing (NIPR) and Secret Internet Protocol Routing (SIPR) resources; MI Net, and the Intelligence Center Online Network Document Management System (ICON DMS). This strategy will undoubtedly develop and mature over time, but it is a good place to start.

The first prong of the MIBOLC knowledge network training strategy, training lieutenants to use the knowledge management (KM) tools at their disposal, is the most difficult. The approach MIBOLC is attempting is to sell the value of each of the KM tools as an essential part of analysis. To do this each KM training event must have value added to the students and help them examine or think about a problem more rapidly than they would without the KM tools. However, this statement is more easily said than done. MIBOLC is a sanitized environment where all the answers to successfully complete the mission are held within its walls. The challenge MIBOLC faces is why should students be concerned with complex, unsolved problems of the real world when it is challenging enough to complete the tests and briefs as part of the program of instruction? Why should students log onto ICON when one can simply walk over to the cadre area and talk to the expert who will be grading the assignment and knows exactly what they are looking for? The goal of MIBOLC is to mix the critical tasks that are known and must be trained with the intangible realities of the operations that are currently being conducted. If the U.S. Army Training and Doctrine Command schools knew exactly what to teach then the problem would already be solved. MIBOLC, when training students to leverage KM networks, works to couple basic and proven tools with unsolved problems that are more rapidly addressed with the KM tools. Incorporating KM tools to address reality in combination with training critical tasks is the cornerstone of the MIBOLC KM strategy.

The second part of the strategy is to train the lieutenants on the KM tools available to them, specifically MI Net and ICON DMS. Not unlike online Learning Team discussion forums employed by major universities, MI Net allows MI officers to interact in a threaded discussion forum and discuss issues relevant to MI officers. The underlying principle MIBOLC works to instill is the power of the intelligence team. Each Teach, Assess, and Counsel (TAC) identifies a relevant problem in the current operations that is customized to the knowledge and interests of the class. The TAC then leads an MI net discussion on that topic, eliciting ideas from the lieutenants on ways to overcome this problem. This discussion has the added benefit of instilling within the students that they are the future leaders of the MI Corps and they must find solutions to the problems they face. In addition to the mandatory discussion MIBOLC is also encouraging students to use MI Net to find topics they can discuss in their morning TAC Briefs, as well as using it to find knowledge for their insurgency case studies and other POI assignments. MI Net provides students with the ability to expand beyond the MIBOLC to find knowledge concerning MI issues. More importantly

it works to train MI officers to find solutions as a team and leverage the entire Corps to solve the problems they will face in combat.

The second tool is the ICON Document Management System (DMS). The major problem with the Internet and all the knowledge available within it is that there is too much. The difficulty is not finding items, but finding what one is looking for. MIBOLC has an advantage in this case because it synchronizes the lieutenants' understanding of intelligence issues. As students go through the course they are required to conduct their own research on issues from terrorist threat profiles to counterinsurgency issues to battle analysis. A major trend that the cadre has noticed is that students spend the majority of their time trying to find the information to analyze versus analyzing the information. Therefore, MIBOLC is standing up, within the MIBOLC workgroups, the MIBOLC knowledge center. This folder and its subcomponents will provide students the ability to rapidly find the material they need to focus on and analyze the material, not just find it. In addition, as students move forward to the force, if the folders are truly providing information that is critical, students will return to the workgroups to reference these items and use their knowledge when deployed. The workgroups have the added bonus of giving permissions to access information to cadre, allowing them to see the number of people who access each folder. This will inform the cadre of which folders and areas are the most needed or most used, allowing the cadre to refine their knowledge and improve their instruction. The ICON DMS provides a consolidated location of knowledge that the students will use over the 13 week course, and in doing so become proficient at locating the content they need. This familiarity will provide the students with an easy to use reference as they transition to the force and invariably are required to find or reference training they received through MIBOLC.

Conclusion

Training second lieutenants to use KM tools available to them is essential for improving their analysis. These officers will face new analytical problems as they transition to the force and into combat theaters. The problems will be solved more rapidly and with greater accuracy if they leverage the knowledge and experience of the rest of the MI Corps. KM tools provide these officers with that ability. The goal of MIBOLC is to train officers to leverage these tools to conduct more rapid accurate analysis. In order to accomplish this objective MIBOLC is pursuing a two prong strategy. The first part of this strategy is to train officers to understand the value of using the tools to improve their knowledge and understanding and in doing so improve the analysis and support of their decision makers. The second part of this strategy is training officers in using the predominant tools that can assist them in leveraging the knowledge within the Corps. The goal of MIBOLC is to train its students to create and use intelligence networks to be more effective analysts. 

Endnotes

1. Richards J. Heuer, Jr., *Psychology of Intelligence Analysis*, Center for the Study of Intelligence, 53-55; Malcolm Gladwell, *Blink*, (New York: Back Bay Books, 2005), 139-140. The authors in both books cite psychological experiments in which more information only improved confidence and not accuracy.
2. Battle Command Knowledge System, *BCKS Knowledge Manager Course What is Knowledge? Module One*, December 1, 2005.
3. Nissam Taleb, *Black Swan* (New York: Random House, 2007). Mr. Taleb, a financial analyst specializing quantitative trading, exposes how poor experts are at prediction. He cites many experiments as well as many failures of financial companies that use the best and brightest mathematical tools and analytical methods of risk management and prediction and still end up completely bankrupt due to their failure to predict.

Captain Tom Pike is the Course Manager for MIBOLC. He has served as a Rifle Company Platoon Leader, Rifle Company Executive officer, Bradley Platoon Leader, Scout Platoon Leader, Intelligence Officer, AIT Company Commander and MIBOLC Instructor.

The Army Intelligence Comprehensive Analysis Tool



by Wesley M. Good and Rafael Camberos

The Army Intelligence Comprehensive Analysis Tool (AICAT), an Intelligence Center Online (ICON) application, was first introduced in the July-September 2006 issue of the MIPB. A review of basic functions may be useful for those not familiar with AICAT from the initial article. AICAT provides the capability to analyze and assess the Army Intelligence information including processes and organizations in a more timely and efficient manner. The AICAT provides the Army Intelligence Community a repository to store, maintain, query, and report on intelligence, surveillance, and integration requirements (ISR) and related doctrine, organization, training, materiel, leadership and education, personnel and facilities (DOTMLPF) information. The system also provides a location to capture statistical, assessment, and modeling and simulation products. It contains searchable data concerning the Army Intelligence Guide to Modularity (AICGM), collective and individual tasks, army universal task lists (AUTLs) and universal joint task lists (UJTLs), equipment, missions and Army Intelligence Drills. AICAT can be found on the ICON portal at <https://icon.army.mil>.

Since the last article, the number of AICAT users has increased to 2,235 and more than 4,000 searchable files are housed in the Document Management System (DMS). AICAT receives constant updates of the most current AICGM, objective force structure and tasks, individual and collective task lists, as well as AUTLs and UJTLs. Among the new additions to DMS are two data repositories in the form of a Course Materials folder, and the U.S. Army Intelligence Center and Fort Huachuca (USAIC&FH) Training folder. The Course Materials folder includes

student reference material and the USAIC&FH Training folder contains student training material. From its inception, AICAT was designed to reduce the amount of research time it takes members of USAIC&FH to access the various task lists, force organization and equipment information, doctrine, concepts and supporting material. The tool has more than succeeded in serving its original purpose.

There are many ways in which AICAT can help members of the Intelligence Community. The ICON "Shout Box" commonly displays questions such as: "Who is the Intelligence Center POC for Biometrics?," "What are the critical tasks for a HUMINT Soldier?," or "How can I get a copy of a brief from the last Intelligence Warfighter Seminar?" In most cases the task lists, files, or information requested can be found in the baseline section of AICAT or in the DMS. Queries conducted in DMS not only search the file name but the content of the file. The combination of the two tools allows users access to more than 4,000 PowerPoint, Word, Excel, Adobe Acrobat, TXT, RTF, ZIP files and the ability to search the Individual tasks, Collective tasks, Soldier tasks, Warrior tasks, AICGM, 6,700+ lines of data from AUTL, and 35,000+ lines of data from UJTL. Users also have access to the Intelligence Center, Significant Activities (SIGACT) library and the addition of the Course Materials folder. All of the repositories can be search at one time with the results returned in seconds.

AICAT users vary greatly, a sampling includes: a Robotics and Unmanned Sensors project management team members; an Active Guard Reserve training NCO for the G2 in a Sustainment Command; National Guard Battalion S2s, and a Space and Missile Defense doctrine writer. Training developers

from various proponent offices of all branches of the service have found the tool very helpful. Users are amazed at the tool's processing capacity and capability, and the speed at which AICAT and DMS enable a one-of-a-kind knowledge management capability.

Many users discover unique applications for AICAT tools to suit their specific requirements. Further, AICAT's development team is often able to develop interfaces to address new functionality or interface requirements. Some use AICAT as a research vehicle for addressing Quick Reaction Capabilities assessments, while others employ it in a mission requirements or training development support role. As an illustration of the tool's versatility, consider the following scenario:

You are tasked to conduct a quick turn around assessment on the impact of replacing a military occupational specialty (MOS) 35F30 (SSG) Intelligence Sergeant from a section with an MOS35L30 (SSG) Counterintelligence Agent (CI). One method for determining the impact using the doctrinally approved tasklist, is to compare the individual tasks of the two MOSs. From the comparison you can find what skills the 35L30 CI SSG would need to be trained on above and beyond their core MOS skills.

To conduct such a comparison in AICAT, go to the "Baseline Data" module, click on the "Ad Hoc Queries" then the "Task" tab and select "Individual Tasks." Ensure you select "Steps" which will include the task performance measures. In the "Individual Task ID" box, type "35F-3". Clicking the "Display Grid" provides you with a quick snapshot of the data. Selecting the 'PDF Report' option generates a Soldiers Training Publication type report that contains all of the tasks an MOS 35F30 performs. Use the same process to get the 35L30 individual tasks by typing "35L-66" in the "individual Task ID" box. Searching for 35L-6 gives you the 20 level tasks; searching for 35L-66 gives you the 30 level tasks. If you want the data in MS Excel format, choose "Create TXT File" which will launch your internet browser. By selecting "File," "Save As" and choosing text file you will be able to save the file to your com-

puter. Then, right mouse click on the file and open it with MS Excel.

This method of query also benefits those who are deploying without the entire suite of authorized personnel for a section. If your section is missing a SSG 35F or a 35D O2 All Source Intelligence Officer, you can use AICAT in a similar fashion to generate a comprehensive task list including both individual and collective tasks. This can help focus individual training to compensate for the personnel shortfall.

As a part of the Systems Approach to Training task development process, individual tasks are linked as supporting tasks to collective tasks. The collective tasks are linked as supporting tasks to the AUTL. AICAT provides you with the capability of taking your training calendar to another level where, with a single query, you have the ability to pull AUTL tasks and the supporting collective tasks and individual tasks. NCOs developing training schedules and OICs developing unit and section level mission essential task lists (METLs) are finding AICAT saves them time by providing a baseline of linked, vetted and approved Army doctrine. Still others have taken the additional step of creating training matrixes that give them the ability of tracking individual Soldiers and collective training conducted in support of mission rehearsal exercises and mission readiness exercises for deployments.

AICAT has proven a useful tool on many fronts. Originally developed as an internal tool to support the research requirements of the Integrated, Intelligence, Surveillance and Reconnaissance (I2SR) Force Development Test and Experimentation (FDT/E), its utility on a larger scale was apparent from the beginning. Once functional, the widespread utility of the tool to support many Intelligence Center, and later Army-wide requirements, was readily apparent. The tool continues to benefit a wide range of users and further improvements will only increase its utility. Look for updates on added capabilities as they become available. You can also influence the utility of AICAT by providing us with your thoughts concerning current and future capabilities by contacting the authors. 





Knowledge Management Leaders' Lessons Learned

by Major Chris Barra



Introduction

The military has always had programs to collect, analyze, and incorporate lessons learned from its operations and training into its doctrine and operating procedures. However, there is a price in terms of time—the process may take weeks or longer to effectively execute. The speed of the modern battlefield has created a requirement for a more rapid and less structured sharing of certain information that may be highly time sensitive and unique to a specific unit or area of operations. To meet this need, the Army Professional Forums were born.

Army Professional Forums were first implemented by passionate volunteers who wanted to share knowledge with peers in an effort to improve their profession. Perhaps the most well known is *CompanyCommand.com*, which was started by two young officers in an effort to become better company commanders in the 25th Infantry Division. Their forum and *PlatoonLeader.net* were formally adopted by the U. S. Army in 2002. Later, in 2004, the Battle Command Knowledge System (BCKS) Professional Forums was created to take ownership of these efforts and tasked with providing structure to the nascent knowledge sharing operations.

Soon *NCO.net* was also supported and adopted by BCKS, and by September 2004 there were nearly 20,000 members. The Professional Forums has expanded to more than 40 forums, more than 75,000 members (and growing by nearly 2,000 members per month), and now supports both the National Guard and the U.S. Army Reserve (USAR). They provide professional support to Soldiers, 365 days a year 24/7 and around the globe and include privates and general officers. Sharing knowledge and experience is independent of rank!

Army Reserves Supporting BCKS

BCKS is recognized as the Army's proponent agency for Knowledge Management (KM) and is headquartered at the U.S. Army Combined Arms Center at Fort Leavenworth, Kansas. The USAR portion is headquartered at Fort McCoy, Wisconsin. The BCKS, along with the civilian contractors, are responsible for developing a dynamic knowledge sharing environment that can transfer knowledge from those who know to those who need to know.

The Reserve component (RC) is now part of the larger KM initiative, the Knowledge Management Leaders Lessons Learned (KM&L3). KM&L3/BCKS Program initiatives include Army Knowledge Online (AKO) expansion and marketing, virtual forums, lessons learned analysis, site development mechanisms for individual and organizational collaboration, links and references to training and doctrine resources, and information exchange enhancement.

These initiatives are expansive, but the RC is uniquely equipped to address them given the diverse backgrounds of its members. The RC continues to direct its efforts in accordance with Army Knowledge Enterprise detailed in the Army Knowledge Management Implementation Plan and focuses on the AR Net which addresses topics unique to the Reserve experience.

KM&L3/BCKS has three primary businesses. The first is to provide the online professional forums for individual Soldiers, Department of Defense civilians, and military contractors. The BCKS management office at Fort Leavenworth provides forum facilitators, who, augmented by drilling Reserve Soldiers, support the discussions, connect forum members with subject matter experts, and capture new and relevant

knowledge for the Army. The Leader Lessons Learned Cell (L2) is staffed completely by Army Reservists and supports the key objective—increasing the timeliness and effectiveness of shared knowledge. Cell members work together on teams, collaborating in various on-line environments.

Next, KM&L3/BCKS works with corps and division KM officers to assist them with their duties. The Integration Cell is responsible for integrating KM&L3 with schoolhouses, units, and other KM entities. It also will market KM&L3, provide trainers, and provide technical support to KM&L3 at Fort Leavenworth and in the field.

Finally, KM&L3/BCKS supports the Warrior Knowledge Base (WKB) of Army manuals, regulations, lessons learned, after action reports (AARs) and a variety of documents, photos, and video clips. The KM Support Cell, also composed of Army Reservists, has the primary responsibility of content management. Their mission is to maintain a “one stop shop” of information of interest to our Reservists. Content can come from anywhere, including military forums, websites, magazines, trip reports, AARs, interviews, etc. Content Managers then load this information to the WKB and manage its life cycle.

Typically Army Reservists serving in these capacities are assigned in one of the three aforementioned roles. However, each Soldier is utilized, based on his skills and availability, across the spectrum. Soldiers manage forums from their homes throughout the month, logging their hours to accumulate equivalent battle assembly participation. Their duties often require additional effort due to the importance of a timely response to forum entries or WKB data migration. Soldiers use their own time along with fragmented annual training (AT)/ADA to address this work load. Integration efforts use long tours at school houses across the Reserve as well as AT for shorter mobile training team efforts. The efforts of these Soldiers provide limitless possibilities to Battle Command and Supporters.

The KLM&L3 is not alone in the support of KM. The AKO Support Cell of the KM and Leaders Lesson Learned Division of the 2-70th Division (USAR) also helps by providing training and support to Army Reserve organizations in the areas of implementation, administration, and maintenance of unit or organizational collaboration sites

in AKO. These solutions typically include an organizational main page and related content pages for subordinate units and staff, Knowledge Centers for accessing unit specific documents, and User Groups with specified access levels for members of the unit.

The Cell focuses on effective and efficient use of the capabilities available in AKO which are characterized by:

- ◆ Channels that can be targeted to specific groups of users.
- ◆ Content for current news and effective communication.
- ◆ Design of user-friendly pages to simplify the information and knowledge.

Success Stories

Real-world examples best illustrate how unfettered access can generate military power. Lieutenant Colonel Kenneth Cerney teaches at the U.S. Army Reserve’s Battalion and Brigade Pre-Command Course. To facilitate knowledge exchange and to enhance the professional education of his students, he started a discussion in *Command Net* by posting a request to current commanders to share their unit’s training guidance with his students. Within a week, he received replies with attachments of training guidance from commanders in the field.

LTC Cerney directed his students to join *Command Net* and download the experienced commanders’ training guidance from the discussion. The students then used the guidance to generate classroom discussion and feedback for the commanders in the field—which of course they posted back onto *Command Net*. One field commander even emailed his revised guidance to LTC Cerney for posting back on *Command Net* and commented on the value of getting feedback from the students and how interesting it was to see their thoughts.

Lieutenant Colonel Marcus De Oliveira, an observer-controller at the Joint Readiness Training Center started a reconnaissance squadron discussion forum which produced similarly positive results. Over the course of six months, LTC De Oliveira initiated and facilitated a discussion thread that provided feedback from rotations and various field commanders posted replies. Due to the observations collected, the discussion thread affected a change in their tactics, techniques, and procedures (TTPs).

Apart from changes to training guidance and TTPs, such feedback can also contribute to providing changes to doctrine in a timelier manner. As an example, after discussions within the Air Force and Army training communities, Colonel Mark Mueller, of the Joint and Combined Arms Training Directorate, wanted to investigate other air-to-ground training issues. He posted a request for feedback from battalion and brigade commanders and received numerous insightful replies from experienced commanders.

Conclusion

KM&L3 wants to continue to add to such successes as the BCKS continues to expand and refine forum coverage addressing the many RC areas of interest. WKB personnel are aligning with many com-

mands and agencies to populate an already vast database of Army knowledge. Integration is working the school houses at Forts McCoy, Bragg, and Lewis to integrate and spread KM principles. The new partnership with AKO promises to be a very exciting initiative for KM&L3 and RC's ability to more effectively share knowledge and address important issues in the field and at home. ✪

Major Chris Barra is a 1989 graduate of the United States Military Academy and is an Airborne, Ranger, and Air Assault qualified Field Artillery officer. He holds an MBA from the Anderson School of Management at UCLA. He has been assigned to the 70th Training Division and its predecessor, the 84th USARRTC since March 2005. He can be reached at christopher.barra@us.army.mil.

Intelligence Philatelic Vignettes

P.O. Box 506 Lisbon:

Undercover Correspondence During WW II

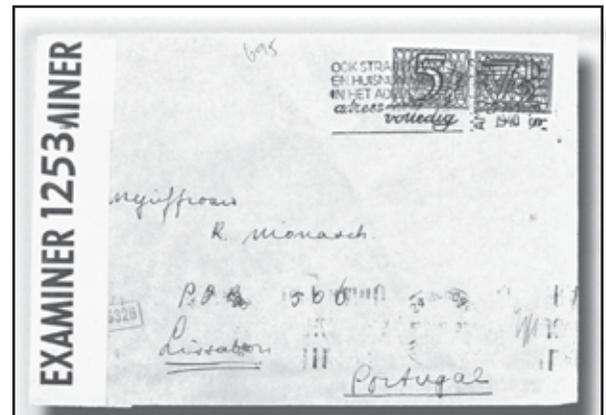
By Mark Sommer

Postmarked on November 27, 1941 (a mere ten days before the U.S. entered the war) this letter/cover was addressed to a "secret" mailbox that was administered by the British firm of Thomas Cook and Sons. This mailbox was used for mail that originated in Nazi occupied countries to be received by addressees in other countries such as Great Britain, Palestine, etc. (Portugal was officially neutral.)

The Thomas Cook Company forwarded the contents which carried this address to their London office. From there it was mailed to its final destination. Front and back clearly show both British and Nazi censor markings. Service was strictly for personal mail, not commercial or military.

An excellent publication entitled *Undercover Addresses of World War II* is now in its 3rd updated version and is written/published by Charles Entwistle. ✪

Mark Sommer holds a BA in Political Science from Yeshiva University and an MA in International Relations from Fairleigh Dickinson University. He teaches at Stevens' Institute of Technology in the Humanities Department. His philatelic memberships include The American Philatelic Society (www.stamps.org); Military Postal History Society (www.militaryPHS.org); Forces Postal History Society (UK), and The Psywar society (www.psywarsoc.org).



The INTELST Forum: Collaboration via Email

by Lieutenant Colonel Rich Holden, U.S. Army, Retired

“USAIC&FH first heard of the operational need for an intelligence capability at the maneuver company through the INTELST. We then took that information and performed a limited DOTMLPF assessment where we studied the requirement, and explored the similar work of the Marine Corps. After sending this assessment out for world-wide staffing, an ever increasing number of individuals and units came on line validating the requirement and the assessment. In an unprecedented short amount of time, we now have a fully-supported Force Design Update in front of HQDA to make this a permanent capability in our force.”

*–Senior Army INTELST member
at Fort Huachuca*



The INTELST (List server acronym for “Intel List”) was created in April 2000 to provide an information-sharing forum to discuss current and future intelligence doctrine, and to share and request ideas, and tactics, techniques and procedures (TTPs) between intelligence professionals at all levels regardless of their location. From a humble beginning with about 30 charter U.S. Army members, the INTELST has grown to over 3,300 members all over the world. The INTELST membership is composed of intelligence professionals from across the length and breadth of the military and civilian intelligence worlds.

“. . . I wrote up a paper on Counter IED-Social Network Viral Targeting, the INTELST gave me a ton of POCs with IED experience. At the time, April-May 2007, the IED social networks were not very well understood. INTELST was able to provide contacts to interview that ranged from Stryker troops, Demo guys, MI, FBI, CIA, Shaw’s ASW team, etc. The paper was very well received in Counter IED circles for the network concept of roles over individuals, and RAND is basing a formal study off of it that will be published late this year. So in the grand scheme of things, this is a direct area where Warfighters would have been assisted by INTELST in the #1 killer of the war by helping us redirect some Targeting Missions.”

–Civilian SOF INTELST member

INTELST Forum members come from all the U.S. military services (active duty, National Guard, and the Reserves) and the Department of Defense (to include DIA, NGA, and NSA). Members are also found in the Departments of Justice, Homeland Security, and State; the Federal Bureau of Investigation, the Federal Aviation Administration, the U.S. Bureau of Alcohol, Tobacco, and Firearms and other federal, state, and local governmental agencies. U.S. and foreign universities with intelligence and security programs, as well as members from a variety of countries (Australia, Canada, Denmark, England, Estonia, Korea, Lithuania,

Netherlands, New Zealand, Norway, and Sweden) also participate. Army Intelligence's senior leadership in the Department of the Army (DA) G2, at Fort Huachuca, and at the U.S. Army Intelligence and Security Command are routinely kept informed of relevant INTELST discussions as new topics develop.

"INTELST has isomorphic value to OSINT. You can get around artificial barriers, ignore conventional wisdom, and get direct contact between parties that need to interact. If you channelized it through the system, it would end up right back in the same mix. That was the lesson I took away from nailing my own analytical work to the door after it got ignored in the cathedral."

–Civilian INTELST member

Discussions on the INTELST have covered a wide range of topics to include: company-level intelligence cells in the U.S. Marine Corps as well as in the U.S. Army; actionable intelligence; asymmetric warfare; after action reports and lessons learned from Operations Iraqi Freedom and Enduring Freedom; Army and Joint Transformation and its impacts on intelligence requirements and structure; current and future MI force structures and requirements; the training of intelligence analysts; effects based operations; Geospatial Intelligence; HUMINT and current intelligence force structures, UASs, professional Recommended Reading Lists, FM 2-0 Intelligence series of field manuals issues, battlefield visualization, intelligence and the MDMP, Information Operations, Open Source Intelligence, Intelligence Preparation of the Battlefield, Operations Security, intelligence sharing with LEOs, targeting, and intelligence architectures and systems in general. Additionally, the INTELST now has a new website with word searchable archives organized by discussion subjects (You must be an INTELST member in order to access the website at <https://listserv.army.pentagon.mil/>).

"The one anecdote I can think of is where I was able to link up with an intel officer at Fort Benning working combat developments who had some questions about the current North Korean threat with the intel folks at the 2d Infantry Division at Camp Red Cloud Korea who could provide him some direct subject matter expertise and products."

From my optic, INTELST provides a venue for rapid horizontal communications across the intelligence enterprise which currently cannot be replicated across our email addresses which remain mired in non-compatible domains and which don't feature a searchable job function field (now there's an idea for upgrading AKO!)."

–Senior Army INTELST member in Korea

The INTELST, as well as numerous other military topic-related lists, are run on a list server that is maintained in the Pentagon by the U.S. Army Information Management Center. The list is not a DA officially endorsed forum, so discussions can be, and sometimes are, controversial, yet kept within the spirit of "thinking outside the box." A good set of regularly enforced rules of engagement for the list also helps keep discussions on intelligence related topics.

"[The] INTELST has always been a source of information and points of contact for me as a doctrine writer and [former] editor of the MI Corps Associations' The Vanguard. For doctrine, the INTELST linked me to subject matter experts and references files that assisted directly to the development of Objective Force manuals and, more recently, FMI 2-22.9, Open Source Intelligence. Also, the connections established through the INTELST resulted in several articles for The Vanguard and, as reprints, the Military Intelligence Professional Bulletin. Finally, monitoring the dialogue on the INTELST allows participants to track emerging issues and participant in dialogues of concern to Army intelligence professional."

–NSA INTELST member in Hawaii

Member's of the INTELST also contribute to the growth and enrichment of the INTELST's knowledge database on the Army Knowledge Online (AKO) site at <https://www.us.army.mil/> called the Intel Reference Files (IRF) Knowledge Collaboration Center (KCC) which was created in October 2002. The IRF KCC was the first KCC on AKO to have over one million downloads, and remains one of the top ten KCCs on AKO for downloads (over 2.3 million), as well as providing over 21,000 documents, briefings, and files to all

military professionals. On the IRF KCC, you can find a wide variety of unclassified files all organized by topic and relevance such as after action reviews, country and area of operations information, SOPs, handbooks/smartbooks, briefings, OPDs/NCOPDs, TTPs, current and historical readings—all centered on our intelligence profession.

“Not only has this been an excellent resource for intelligence related references, but also provides great insight into issues and controversies enjoying lively debate and discussion within a diverse and professionalized intelligence community. My understanding of intelligence disciplines and processes—and the value that brings to my organization—is greatly amplified by the information sharing that INTELST fosters and promotes.

As just one example of its practical value to us, we launched our first ever J2 Intelligence Workshop last year in June. This annual workshop seeks to break down barriers for information sharing between Army National Guard and Air National Guard Intelligence in New York, as well as among Intelligence, law enforcement, and other civil authorities with whom we liaison in Fusion Centers and during defense support for civil authorities in emergencies.

Some months prior to the Workshop, I saw an announcement about a conference hosted by the International Association for Intelligence Educators (IAFIE). I attended the IAFIE Conference immediately following our own J2 Workshop, which led to further contacts and information sharing within an even larger international intelligence community.

We are now planning our second annual J2 Intelligence Workshop for New York State, and thanks to the contacts and resources available via INTELST and IAFIE, I feel confident we can not only gain access to current issues and highly relevant topics, but also key contacts for possible participation and publicity for our Workshop.

The theme of our Workshop this year is Information Sharing, and we will highlight “success stories” of breaking down barriers to information exchange and cooperative intelligence efforts. I view INTELST as a prime example of just such a success.”

–Senior NCO INTELST member in a JFHQ

Finally, the INTELST can come to you in one of three versions: individual emails, a once-a-day digest with all the messages included, or a once-a-day index hyperlinked to the archives on the website. There can be anywhere from 3 to 5 emails up to as many as 30 to 50 emails per day, so a lot of busy folks either get the digest or index versions, or do not receive mail and check the archived messages on the website. If you are interested in joining the INTELST, please send an email to richard.holden@us.army.mil.

“The one recent area of help came when I posted the information about the new Middle East Cultural Integration course (posted 6 December) that 1st IO Command conducts. Our training branch received inquiries to the course from folks around the country and Canada. Their assessment is that the posting helped in getting the word out. The 14-18 January course was filled; the prior session, held before my posting, had to be cancelled due to lack of students (only 1 signed up). The next two classes are 14-18 April and 28-31 July, I will likely re-post the information to remind folks of the course.”

–1st IO Command INTELST member

Other comments:

“Your forum has been an excellent networking tool in helping me with my thesis and I have even used discussion messages in classes. I started out looking at a LE intelligence subject and the people I contacted through your forum were very helpful. My final thesis topic on company intelligence cells is full of data and quotes from members of the forum.

I enjoy reading the forum discussions. As a new intelligence officer it has also given me some insight into current topics and issues in the field.”

–Senior INTELST member at NDIC

“The INTELST is an invaluable networking tool and is, without question, a great means by which the community can communicate and share ideas.”

–INTELST member, Army National Guard Bureau

“The INTELST has provided a wealth of valuable tools which have greatly benefited my BN/BDE in the VTARNG.

As with many NG units, we are without the right equipment, limited access to SIPRNET, MOS Qualified MI personnel due to a recent transition to an IBCT with all the associated challenges, yet an OPTEMPO as high paced as any other military unit in these days.

The INTELST led me to a GOLD MINE of tools that helped hundreds of deploying and re-deploying Soldiers/missions such as: Instructions on how to access AKO’s Intelligence Reference Files and other related folders; Information on INTELINK-U; Feedback/advice on several training and operational projects.

The mentorship provided by retired members reminds me of a civilian program called SCORE (Senior Core of Retired Executives) where retired professionals make their time available to mentor young aspirants in a variety of professional disciplines.

I sincerely appreciate this tool and feel it really exemplifies teamwork and the informal/relaxed setting was key to me asking some questions that I would not have wanted to ask in a more formal setting. On behalf of my unit and CDR, I again thank you all for your patient assistance.”

–Senior NCO INTELST member

“I use INTELST to help me track the international occurrences of religious violence. It is a global phenomenon, tracks with all of the world’s religions (great and small) and has generally predictable patterns of violence (psychological as related to discrimination; structural as related to preferential law, and physical as related to death-producing conflict). It has been an enormous contribution in validating the nascent theory of the relationship between religion and violence. (Theory is so much more fun with facts!). And, the spin-off benefit, is that it keeps ‘us’ from focusing only on Islam—knowing that violence can not be explained by a ‘single’ factor analysis— and thereby contributes to discussions of national policy and practice. Thanks for the good work.”

–Professor, USMC Command and Staff College

“I administer an Interagency and Stability Operations portal for the JFCOM J5, and I cannot count the number of times I’ve found very useful materials for that portal via the INTELST. Also, from 2003-2005 while working in support of the JFCOM Joint Urban Operations Office, I frequently used information from INTELST to support joint exercises like Joint Urban Warrior and Urban Resolve.”

–Senior INTELST member at JFCOM

“As a FAO in Brazil in 2003 I was trying to write a thesis on the implementation of UAVs. I put out a net call on INTELST and received over 25 individual responses on sources that were available on the web, unit experiences, etc. Almost 80 percent of the information in my thesis came from input from the INTELST.

In 2006 in Saudi Arabia, the wealth of resources offered in the INTEL list files proved invaluable in making me an “on the spot ranger” with the one star general I worked for. He would come to meetings with various topics of interest, both regional and professional, that he picked up on from his higher. He was constantly amazed that at follow up meetings it was his most junior staff officer (me) who came back with answers, products, and links to whatever he was interested in. For me, it was as simple as hopping on the products page and searching for a few minutes. It is like having the results of a search engine on topics specific to your profession constantly at your fingertips.”

–Senior INTELST member in Afghanistan

Rich L. Holden, Jr. retired as a lieutenant colonel, U.S. Army, in 2004 following service in a wide variety of assignments and units. He holds a BS in Computer Science from Clarkson University, Potsdam, New York; an MS in Systems Management from the University of Southern California, and an MS in Strategic Intelligence from the National Defense Intelligence College. He is also a graduate of the MI Officer Basic Course; the Counterintelligence/HUMINT Officer Course; the Air Assault Course; the MI Officer Advanced Course; the Post-Graduate Intelligence Program, and the Combined Arms Service and Staff School, and the Command and General Staff College. In April 2000, Mr. Holden created the INTELST Information-Sharing Forum to discuss current and future intelligence doctrine, and to share and request ideas, and TTPs among intelligence professionals at all levels. He also created, in October 2002, Intel Reference Files Knowledge Collaboration Center (KCC) on the AKO website. This KCC was the first KCC on AKO to have over one million downloads, and remains one of the top ten KCC’s on AKO for downloads (over 2 million), as well as providing over 20,000 documents, briefings, and files to all military professionals.



Capturing Knowledge

by Major John M. Ives

Disclaimer The views expressed in this article are those of the author and do not reflect the official policy or position of the Departments of the Army and Defense, or the U.S. Government.

“We rely too much on others to bring information to us, and too often don’t understand what is reported back because we do not understand the context of what we are told.”¹

—Comment by unnamed analyst to the Iraq Study Group, 2006

Introduction

Since October 2002, over 40 brigade-sized U.S. Army units have deployed to Afghanistan and Iraq, with most deploying two or more times. The experience of hundreds of intelligence analysts from those units should make each rotation more beneficial than the first. On the contrary, the brigades did not occupy the same locations as before and analysts rotated to other assignments or opted to leave the service. The *Army Times* reported that by late 2006, less than half the deployed Soldiers in Iraq had greater than four years experience.² Less than half the Soldiers that entered the War on Terror are still fighting it. For the analysts who left the Army, or those no longer deployed, their knowledge is misplaced and largely unused. The new analysts have little means of knowing who is the most knowledgeable in any subject and would have few options for contacting them if they found out. Current knowledge management (KM) lives on PowerPoint, dumped in databases, or otherwise lost to the world of zeros and ones. This system fails to capture the experience of individuals and falls shy of maintaining the tacit or anecdotal knowledge that survives in context in the analyst's mind. The individual is ineffectively replaced by technology.

The Intelligence Community (IC) must improve its KM with a proactive and efficiently reactive human resources program that provides a personnel knowledge database and a responsive personnel assignment policy. An intelligence knowledge database, similar to a digital yellow pages or *My Space* database, would introduce intelligence analysts to a more expansive network of tacit and anecdotal knowledge that expands data mining beyond raw facts and into the realm of contacting experts. This article first defines the facets and purpose of KM as well as the consequences of current IC knowledge collection and personnel management system. It concludes with a more in-depth explanation of the creation and efficiency of an IC knowledge database.

Defining the Issues

The leading and most influential writer on this subject, Karl Wiig, defined the different forms of knowledge as factual (that found in books and data), conceptual (found in perspectives and concepts), expectational (knowledge to make judgments and hypothesis), and methodological (knowledge from reasoning and strategies).³ This article covers the conceptual and expectational knowledge. Inside

these forms of knowledge lay what Wiig classifies as the several manifestations of knowledge—most describing procedures, lessons learned, and facts that are related to or captured in manuals and databases. Two other manifestations prove more difficult to capture for future use. The first, tacit knowledge, manifests itself through skills, habits or learning by doing—experience or organizational intelligence. The second, anecdotal knowledge, is a memory of a particular case or event that may not surface without context.⁴ Another researcher defined knowledge as:

Information possessed in the mind of an individual: it is personalized or subjective information related to facts, procedures, concepts, interpretations, ideas, observations and judgments (which may or may not be unique, useful, accurate, or structurable).⁵

It is exactly the word structurable that makes capturing anecdotal and tacit knowledge so difficult and traps current KM in a data gathering role.

The Current KM Picture

The IC works tirelessly at managing knowledge. For its part, and with Operation Iraqi Freedom (OIF) as a backdrop, the IC created postings, web pages, training centers, manuals, and knowledge centers by several names at all classification levels for processing and disseminating data. Army Knowledge Online, for example, has open forums and lessons learned sites featuring hundreds of pages of raw data and analyzed information available to any Soldier. Yet, it is the anecdotal and tacit knowledge stored in the minds of analysts that escapes most often unharnessed by the IC.

High turnover rates are a problem. Analysts redeploy from tours overseas or transition to organizations that do not focus on their area of expertise, resulting in lost tacit and anecdotal knowledge. A prevalent example of a KM issue is analysts leaving an organization “with heaps of ‘know-how.’”⁶ Hundreds of analysts with experience in Iraq either changed duty station or ended their time in service (ETS). The Office of the Chief of Military Intelligence plans for a 33 percent ETS rate annually for Army intelligence analysts. In 2005, 43 percent of all analysts (MOS 35F, formerly 96B) departed military service.⁷ When nearly half of the tacit and anecdotal knowledge for the War on Terror, Afghanistan, and Iraq departs in one year, the loss is staggering. Worse still, analysts that do return to Iraq for a repeat (or even

a “three-peat”) tour, deploy to different locations. The 3d Infantry Division, for example, is currently on its third tour in OIF and its brigades operate in different locations than the previous tours. While the units’ analysts have general knowledge about Iraq or even a particular city, they have to re-learn neighborhoods, personalities, and enemy tactics for each tour. Therefore, some of the anecdotal and tacit knowledge from those experienced analysts remains misallocated despite their longevity in the division and Iraq. Retirees also leave organizations with invaluable information. A 20 year intelligence veteran leaves the service with much more than a farewell gift. How does this situation occur? How does the IC unknowingly misplace the invaluable experience of individuals?

Several studies show that the phenomenon occurs in every organization. One study presented the “deadly sins” of KM including misidentifying knowledge as only data or stored information, substituting technology for true KM and “viewing knowledge as existing predominantly outside the heads of individuals.”⁸ Discussion of knowledge is pointless without the presence of the person possessing such knowledge.⁹ Attempting to separate the knowledge from the person assumes the person has expended all information, data, and experience into an easily accessible format. This is impossible given that both tacit and anecdotal knowledge require certain amounts of context for recall. As David Kilcullen pointed out in his analysis of counterinsurgency in Iraq, “Everyone sees Iraq differently, depending on when they served there, what they did, and where they worked.”¹⁰ The IC is currently more comfortable with collecting data and generating information about the past in hopes of educating those in the present.

The reliance on data as the primary conduit of knowledge creates mountains of raw information with few plausible means of filtering, extrapolating, and internalizing for future knowledgeable decisions or analysis in a relatively timely manner. In essence, the knowledge found in one’s head is lost to the system of data collection rather than being an asset for the current and future fight.

The consequences of mismanaging knowledge are gaps in understanding and judgment. Intelligence personnel provide situational awareness and situational understanding for the customer in hopes

of creating an environment for knowledgeable decisions. For brevity’s sake, situational awareness is that clear picture of relevant information and data, while situational understanding is the outcome of linking that information into context for further judgment. If context comes from experience, then experience (and therefore tacit and anecdotal knowledge) is an invaluable tool. The Iraq Study Group (ISG) findings highlight the inefficiency of intelligence agencies, citing the Defense Intelligence Agency (DIA) as employing only 10 analysts with more than 24 months experience in their area of expertise.¹¹ One very young and yet senior Iraq analyst at the DIA held 4 years experience beginning only in late 2002 before leaving DIA in favor of a rotational assignment at another agency.¹²

The ISG recommended, “Agencies must have a better personnel system to keep analytic expertise focused on the insurgency.”¹³ One author made it a point to place the impetus on leadership, demanding leaders “order” KM at all levels and through every component.¹⁴ An Air Force journal published a study that recommended a “Chief Learning Officer” take charge of all “learning operations” for the unit to ensure “development and deployment of their organizations’ human capital, thus enhancing individual and organizational productivity.”¹⁵ Regardless of the method or name, for the IC to support OIF (as the immediate example) and prepare for the yet unknown future fight, it must find and harness knowledge appropriately. The database technique is still a worthwhile and important step in maintaining knowledge as it captures several manifestations of knowledge. However, the IC must additionally create a personnel system that captures the remaining anecdotal and tacit knowledge for future operations.

Managing the Knowledgeable Personnel

Capturing tacit and anecdotal knowledge appropriately requires a reactive and efficient IC human resources plan. The military is not alone in its quest for capturing knowledge. In some sectors of civilian organizations KM has its own subset in the human resource departments for capturing as efficiently and effectively as possible the many forms of knowledge. The first step requires knowing where to find the knowledge while the second requires a will and means to bring that knowledge to the table. One civilian knowledge manager referred to his trade as a

“means of keeping track not so much of knowledge itself, but of who held the knowledge and how to locate them.”¹⁶ This is the crux of the argument and why the IC must create a knowledge database.

Files on IC personnel currently identify past positions and accolades without identifying their geographic areas of responsibilities or their experiences. Sitting at a desk under one job description does not determine the amount of experience that intelligence professional gained during the tour of duty. The China analyst at Pacific Command, for example, does not have the same experience as the China analyst at the DIA. This proposed knowledge database will expound on experience beyond the typical employment information. This process requires local leadership as well as Office of Director of National Intelligence oversight to ensure agency compliance.

Local leaders take the first step by developing a knowledge database that explains more than job positions and locations. Intelligence personnel identify the regions, subjects and specifics in which they believe they are knowledgeable with additions and notations by local management. Leaders can assist analysts in identifying their present and desired roles in the community by annotating the analysts' effectiveness.¹⁷ Degrees earned, courses taken, special focus areas, extra research conducted, and foreign experience add dimensions to personnel files. This database will also contain evaluation support forms, professional and intellectual publications, final efficiency reports, and evaluation reports. In other words, intelligence analysts provide an in-depth résumé that speaks to almost every facet of their knowledge.

Second, those in-depth résumés populate an IC personnel database at the national level. When crises occur in otherwise obscure regions, the IC can search for knowledgeable individuals via a search engine that runs key word queries through the knowledge database. The search engine creates a listing of individuals with knowledge on the subject with contact information. This would resemble either the yellow pages or something similar to *My Space* or *Facebook*. Organizations can use the database for better background information on personnel or building a working group and joint task force. The right knowledge is only a phone call or email away. Prospective employers or intelligence units could proactively prepare and search for incoming

analysts that meet the unit's needs. Unfortunately, the database is only the first step. The antiquated and relatively unresponsive human resource function requires a jolt as well.

The IC should enter a joint human resources umbrella. As proposed by a student at the Army War College in 2005, a consolidated joint human resources system limits redundancies as well as functionally distributes personnel accordingly.¹⁸ This Joint IC human resources plan makes knowledge consolidation, assigning protocols, and personnel recall more effective and efficient. Analysts from several organizations could come together more readily and effectively to meet the needs of the moment. The Army Military Intelligence homepage boasts as one of its goals, “to assign the right officer to the right job at the right time.”¹⁹ The entire IC personnel management system should strive for this lofty goal; a Joint human resources department allows all military and civilian personnel an opportunity to do just that. Suppose the right person is not a civilian or an Army analyst, but rather a Marine. The Joint human resource umbrella allows these variances to meet the needs.

Next, the consolidated intelligence human resources department must respond to the IC needs. In order to provide the right people at the right place, the IC must know where they are located, information which the intelligence database will provide; and then deploy those people and their knowledge to the right place. Contingency operations cannot wait for the next assignment cycle. Commands responsible for forming working groups and Joint Task Forces must retain the ability to search the IC knowledge database and call on the person they need most, whether for short or long-term operations.

Finally, an overhaul of the rewards, promotions, and pay scale for IC personnel can limit interagency moves that take knowledgeable analysts away from their area of expertise. Again, the ISG keenly identified that “Analysts are rotated to new assignments, and the on-the-job training begins anew.”²⁰ The result is a virtual recreation of knowledge as new personnel or inexperienced personnel attempt quick learning curves, digging through the gigabytes of data found in the current knowledge centers. Analysts can best serve the IC as intelligence practitioners in the area they know best. Intelligence personnel returning from OIF, for example, can continue providing

valuable situational understanding in an effective and efficient manner, adding insight and experience to stateside intelligence operations supporting those in Iraq.

The knowledge gained overseas is invaluable and wasting or ignoring it through mandatory transfers, timed-based promotions or retirement is criminal. Analysts should receive pay raises and promotions based on analytic abilities and capability to provide knowledge at the appropriate locations and times. Rank and pay increases should reflect merit and not movement throughout an organization. Much like a competition between local plumbers, whoever gets the most calls from the yellow pages and provides the best service, gets the future business, thereby making the most profit. Military analysts should also focus more attention on practicing the art and skill of intelligence operations rather than meeting career gates guaranteeing promotion and retirement. The only way to ensure this is by providing promotion and pay incentives based on intelligence professionalism. Finally, retirement for analysts should not be the end of their active intelligence careers. Retirees carry the “know how” with them and their anecdotal and tacit knowledge will also prove invaluable. A system of payments can provide incentive for retirees to continuously update their knowledge database and provide feedback to requests for information.

Conclusion

The IC’s great strides in managing knowledge miss an excellent opportunity in capturing the tacit and anecdotal knowledge found in its personnel. Civilian and military analysts often transfer or receive promotions to positions that do not take advantage of their experience. The result is an analyst pool with generally very few years of on-the-job training and only limited means to contact the subject matter experts. Creating a joint human resources capability that consolidates a listing of the knowledge each intelligence analyst holds into an intelligence knowledge database will more efficiently and effectively provide the right person, at the right place, at just the right time. OIF is a missed opportunity where knowledge of the thousands of intelligence personnel with experience covering Iraq dissipates in the community with limited oversight. Today, the IC cannot efficiently identify the analysts with experience in specific areas without weeks of research and consternation. With one eye on the future, the IC

can create the personnel knowledge database and a responsive Joint human resources capability to face the next crisis with true knowledge superiority. 

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Intellipedia: Leading a Transformation in Knowledge Management within the Intelligence Community

By Chief Warrant Officer Two Brian Harris

Introduction

Intellipedia, the Intelligence Community (IC) wiki, was officially launched in April 2006. Despite celebrating its second anniversary, many analysts see it as simply a place to quickly develop a web page or post files. Most analysts do not appreciate the broader, revolutionary aspects of this software platform. To the dedicated users, however, Intellipedia is serving as a catalyst that is transforming Knowledge Management (KM) practices, communication, networking, and other aspects of an outdated IC culture.

Background

After the September 11, 2001 attacks, the IC received intense criticism for failing to predict the events of 9/11. Because the attacks “fell into the void between the foreign and domestic threats,”¹ the 9/11 commission determined that one of the reasons for failing to predict 9/11 was lack of information sharing within the government. While the Department of Homeland Security helps to fill this intelligence void, it is impossible to identify all of the information gaps that exist. One of the Commission’s recommendations is that, “Information procedures should provide incentives for sharing, to restore a better balance between security and shared knowledge.”²

In 2004, Dr. Calvin Andrus of the Central Intelligence Agency’s (CIA’s) Center for Mission Innovation submitted his now-seminal paper, *“The Wiki and the Blog: Toward a Complex Adaptive Intelligence Community”*³ to the journal *Studies in Intelligence*. The paper argued for the potential of Web 2.0 tools, characterized by their end use generated content, to transform the IC. In 2005, then Director of National Intelligence (DNI) John Negroponte issued the National Intelligence Strategy which highlighted the need to, “Remove impediments to information sharing within the IC, and establish policies that reflect the need to share (vs. need to know) for all data, removing “ownership” by agency of intelligence information.”⁴

In April 2006 the Office of the Director of National Intelligence’s (ODNI) Intelligence Community Enterprise Services (ICES)⁵ officially launched Intellipedia, a wiki for the entire IC to use. A wiki is, “software that allows users to collaboratively create, edit, link, and organize the content of a website, usually for reference material.”⁶ the best example of a successful wiki is the Internet encyclopedia Wikipedia. Along with various other “social software” tools, Intellipedia is available on three networks: the Top Secret JWICS (Intellipedia-TS); the Secret level SIPRNet (Intellipedia-S); and the “Sensitive but Unclassified” (SBU) DNI-U/Intelink-U (Intellipedia-U). It uses the free and open source MediaWiki software used to run Wikipedia, so it looks and functions almost identically.

Despite some similarities, there are key differences between Wikipedia and Intellipedia:

- ◆ Because Intellipedia resides on secure networks and is used by partners within the Intelligence, Defense, Homeland Security, Law Enforcement, and Diplomatic Communities, contributions are typically focused on the Joint mission of national security and defense.

- ◆ There are no anonymous edits on Intellipedia. Every edit, every change, can be traced (attributed) to the person who made it.
- ◆ Intellipedia is more than merely an encyclopedia. It is designed as a tool for everyone (e.g., collectors, policy personnel, engineers, analysts, targeteers) to build knowledge, communicate, and establish a virtual workspace. Users—dubbed Intellipedians—are encouraged to use the system for all collaborative work-related activities that support the intelligence cycle.

The IC is taking best practices following the lead of well-established wiki communities like Wikipedia. Since Wikipedia’s phenomenal success and growth, many businesses have implemented internal corporate wikis. These wikis have allowed high-tech organizations to rapidly share, prototype, and collaborate. Several corporate studies of wikis suggest that avid use can reduce email by 30 or even 75 percent and cut meeting times in half.^{7,8}

Intellipedia as a Catalyst for Transforming both KM Practices and IC Culture

Intellipedia is facilitating KM change along several lines and is being pushed both top down by the ODNI (with leadership from the CIA) and from the bottom up as a wide variety of employees recognize how useful it is. Intellipedia offers a radically different way of producing and disseminating intelligence, and offers tools for breaking down some of the traditional barriers to collaboration. It is, in short, supporting a broad cultural change across the IC.

◆ Intelligence Production, “It’s What we Know.”

The best way to understand the revolutionary nature of the software is to look at a comparison (see Figure 1) between building a product using a traditional approach with building a product using Intellipedia. Traditionally, a supervisor instructs an analyst to look at topic XYZ. The analyst will then spend a few days

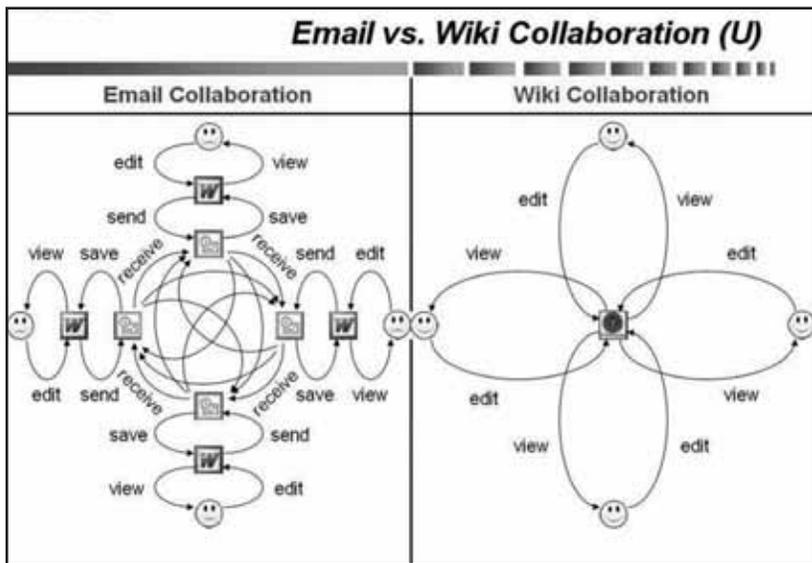


Figure 1. Comparison of email and wiki collaboration

or weeks sifting through local shared folders, reading message traffic, digesting finished reports, and then writing a finished product. The product would be emailed to the supervisor and a few others review it, who then send back their thoughts for corrections. This process is repeated a few times until the product is “right.” The product is then emailed to a webmaster and a few days later it gets posted on the organization’s website. The analyst then moves on to the next project and rarely, if ever, receives feedback on his efforts. A few weeks or months after the product is posted, it is out of date and less relevant.

Here is one possible process using Intellipedia. An analyst is asked by a supervisor to look at topic XYZ. The analyst spends a few hours getting familiar with the topic, and then searches Intellipedia to see if someone else is already working on a similar issue. The analyst finds a related article, and checks the history (logs) of the page to see who else is working on the article and how recently it was updated. The analyst reads the article and any associated references, and then begins the collaborative process by posting some tentative thoughts on the discussion page which lies behind every article on Intellipedia.

The next day, the analyst is notified that someone has responded to his post on the discussion page. The analyst replies with some additional thoughts and questions about the article, and the conversation (and relationship) begins. The analyst checks the linked user page of anyone who responds to determine who they are and what their expertise is. Over the next several days, the analysts update the article as it evolves. The analysts learn from each other and get to know one another. Other analysts jump in as

they see the collaboration occurring, and the assessment of the topic gets more and more robust as the community benefits from each others' diverse perspectives and backgrounds. In return for their help, the analysts may note what related articles are being worked on and contribute some portion of their time to these articles as well. This broadens an analyst's knowledge base and helps encourage future collaboration among analysts.

As the page develops, the supervisor keeps tabs on progress using the "watch" function. The supervisor occasionally chimes in and provides thoughtful feedback on the discussion page, or posts new questions. As the deadline approaches the supervisor will let the analyst know whether the Intellipedia article suffices to answer the question by itself, or that a "finished" product is needed which can be derived from the Intellipedia article while making sure to give credit to collaborators and citing the "living" document on Intellipedia.

After the analyst moves on to the next assignment, he can easily monitor the wiki page and can see how it continues to be updated by others who follow the topic in the IC. The new users benefit from the previous conversations on the discussion page and the analyst benefits by receiving ongoing feedback and updates about the topic.

The wiki paradigm is a far superior model. Articles are integrated together through numerous hyperlinks which puts the intelligence in context. When analysts reads a wiki article, if they are unfamiliar with a particular term or concept, they can frequently follow a link to additional information. Furthermore, Intellipedia is a very rich environment. Users can upload spreadsheets, presentations, documents, images, video, and audio. Through the use of Intellipedia, analysts learn from each other and new professional relationships are formed.

This article was also developed on Intellipedia. I posted a draft and solicited feedback from a few individuals I worked with in the past. Within a week, I had feedback from seven people at three different agencies and multiple organizations across the U.S. The article is *far* better than when I started it by myself, and as a result of the collaboration I've also made several new contacts I respect who may be able to help in future assignments.

◆ **Intelligence Collaboration: Need to Share given precedence over Need to Know.**

Throughout the Cold War and up until the last few years, the IC culture was typified by the expression, "need to know." Not only was classified information compartmented, but people without a clearly related mission were denied access to information. As one blogger with the Markle Foundation Task Force on National Security puts it, "If someone is the custodian of a highly relevant data item, how will they "know who needs to know?" And conversely, if someone else is in need of this highly relevant data item, how will they "know whom to ask?"⁹

We are currently in the midst of a cultural shift largely where "need to share" is being given precedence over "need to know." In April 2007, DNI's Mike McConnell announced his *100 Day Plan for Integration and Collaboration*. The plan included six integration and transformation focus areas, two of which were, "Create a Culture of Collaboration," and "Accelerate Information Sharing"¹⁰ by moving from "need to know" to a culture of "responsibility to provide." While this shift raises additional risks for classified information, the risk of another massive intelligence failure is far greater.

"Need to know" is rarely discussed on Intellipedia. Once you have access with the proper security clearance and have a knowledge or interest about a topic, you're encouraged to contribute to it. This sort of cross training allows Intellipedia to tap knowledge which might otherwise be lost. Perhaps an analyst recently returned from Iraq, for example, and worked near Basrah. In old school thought, he no longer has a "need to know" intelligence related to Basrah. On Intellipedia, however, he is encouraged to spend some part of his time contributing to Basrah related articles; it's a ridiculous waste not to capture this person's front line knowledge.

This "need to share" also translates into massive savings in time and money by reducing redundancy of effort. We have all seen intelligence products by multiple agencies on the same topic. When you consider

the amount of redundant manpower that went into each product's research, drafting, and reviewing, it becomes obvious that there must be a less redundant way. Intellipedia offers a place to pool collective working knowledge which can then be accessed for a more tailored, finished product. (See Figure 2)

However, Intellipedians recognize that not everything can be included in Intellipedia. There are many, many relationships, sources and methods that cannot be conveyed to such a broad audience. To help articulate how tools like Intellipedia can still protect necessary sensitive information, the concept of a "breadcrumb" was coined by Don Burke of the CIA. A breadcrumb is a link or contact information to information of greater sensitivity. In this regard, the link can control access and the information is protected while still allowing readers to know that more information exists. If readers are so inclined, they can follow the breadcrumb and request additional access. With this concept, Intellipedians believe that protection of information is actually improved because a conscious step is taken to identify and segregate the bits of data that are truly sensitive.

◆ **Radical Transparency in Knowledge Management.**

Intellipedia is completely transparent. Every edit is traceable back to its author. There are no anonymous edits, and everyone's contributions are visible to anyone in the IC, regardless of rank or agency. This radical transparency is a seismic shift in our culture of secrecy, but has huge benefits.

This transparency helps us archive knowledge that has traditionally been lost. Over the last decade, email has been the primary software tool for collaboration. Email collaboration is a cumbersome process, and when analysts change agencies or retire, the knowledge about a topic is lost. By having transparent, public discussion pages which are topically organized, those conversations are available to anyone who is interested in that topic.

Radical transparency supports accountability and virtual community policing. If you contribute something great on Intellipedia, everyone knows it. If you contribute something boneheaded, everyone knows that too. The community provides its own quality control for articles, so knowing who did what and when is critical.

Collaboration among individuals also increases with transparency. Because every change is logged and publicly available to anyone with access to the network, an analyst can quickly check to see what their cohorts at different agencies are currently working on to see if there are new opportunities to network and collaborate. A good example would be a defense industry analyst who develops a good article on Company X. During that process, he receives some great feedback from an analyst at the CIA. After the Company X project is wrapped up, the analyst can see what his friend at the CIA is working on by reviewing his edit logs in order to see if there are new opportunities for work together.

Finally, the transparency also benefits management. A manager can quickly and efficiently review his watch list and see the most recent version of each of his analyst's projects without having to dig through shared folder or email. He can tell which analysts have been busy editing, and which have not. When it comes time for performance evaluations, the manager can review exactly what the analyst contributed as well as feedback which may have been left on project discussion pages or the analyst's personal discussion page. This provides a sort of "360 degree" evaluation by peers cross the IC.

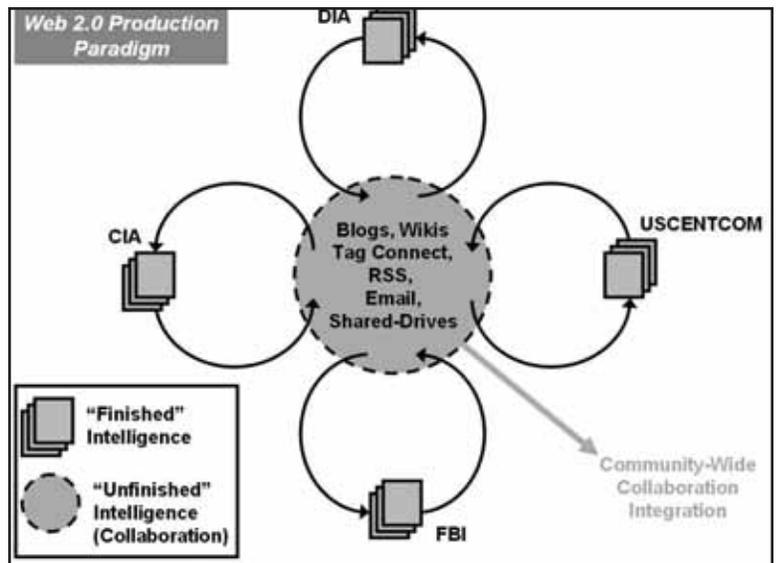


Figure 2. Intellipedia as pooled knowledge

◆ **The User Page – Social Networking for the IC.**

Intellipedia is *social software*. A large part of the power of Intellipedia comes from its Facebook-like user pages which help analysts not only contact one another, but also get to know each other virtually. Analysts are encouraged to post their educational background, what they've worked on in the past, what their current interests are, where they've been assigned, and any other information they deem pertinent.

Each person's user page also has an associated discussion page. Think of this like a cork board outside someone's office; messages left there are directed to that person, but they are public so anyone who might benefit can see them as well. These discussion boards can benefit managers who can see comments left for their analysts, and can also benefit the analysts themselves because they can track conversations between their peers.

This social nature has both tangible and intangible benefits for the IC. From a tangible perspective, it breaks down barriers to collaboration by allowing any cleared analyst to work on any article they have knowledge or experience with. This helps to capture knowledge which would otherwise be lost because it may fall outside of a formal tasking.

From an intangible perspective, analysts get to know each other via the user pages. It is much easier contacting someone who comes across as a person rather than simply an impersonal email address attached to a product. The user pages on Intellipedia help to build these relationships; some of the information users post on their personal pages may include hobbies or other interests. This personalization of the page helps to build a collegiate environment among Intellipedians. In a traditional environment, I might sit down with another analyst over coffee and we would discuss not only business but also some personal niceties. It builds the relationship. So too does some mention of personal interests on one's user page.

These relationships provide a substantial intangible benefit. Not only does it foster ongoing collaboration and trust, but it will benefit retention as analysts become socially connected to the larger community. Job satisfaction, too, is another invaluable intangible. Remember that Intellipedia is largely volunteer run at this point; despite this, Intellipedia on JWICS has experienced rapid growth over the last several years. Why? It is a lot of fun. I've spoken with many analysts who come in early or stay late to work a little longer with this tool. It is exciting to see who is working with you, what changes have been made, and what others think. It is a wonderful thing to feel like a part of the bigger picture instead of a small cog in the machine.

◆ **Flattening Hierarchies, Speeding Dissemination, and Cutting Red Tape.**

Intellipedia's own development provides a great illustration of how radically different this software is. While traditional software is generally purchased commercially off the shelf or built from scratch to government specifications, the MediaWiki was freely available for use. The software is entirely web based, which enables broad-based collaboration since local administrative policies to install it are circumvented. Intellipedia has only one full-time paid contractor; all the rest of the content, guidelines, committees, and customized templates are created by the community of users, the Intellipedians.

The benefits of this collaboration and speed can be illustrated with an example from 2006. When a small two-seater plane crashed into a Manhattan building, an analyst created an Intellipedia page within 20 minutes. Within two hours, that page was edited over 80 times by users at nine different agencies, and they concluded that it was not a terrorist act. Pushing a similar product through the traditional bureaucracy could have taken days.¹¹

Intellipedia also has a "flattening" effect on the IC which further fosters cooperation and speeds dissemination of intelligence. All Intellipedians, regardless of rank, have equal power to edit articles (with the exception of a handful of system operators). Because of the radical transparency, individuals are judged primarily on their editing record and information on their user page. Informality is the general rule, particularly on JWICS and individuals frequently go by first names. Part of this flattening is that Intellipedians see each other as more than just a name, rank, and email address. All this is highly beneficial because it slashes through

the traditional red tape of intelligence dissemination, fosters collaboration between Intellipedians who are all viewed as peers, and mitigates the risk of group-think on discussion pages because no one person can squelch a train of thought by mere virtue of authority.

Intellipedia is Not Perfect; Nor will it Ever Be

Over the last year, I've witnessed a variety of battles as people mired in the traditional cultural mindset have pushed back against wiki collaboration. Individuals have been concerned about the lack of ownership, the absence of quality control, and by the very concept of posting something that is not "finished."

The naysayers are losing the battle as more and more agencies are encouraging its use. The number of articles and users on Intellipedia-TS has grown exponentially in both content and community over the last two years (See Figure 3), and ODNI reported that, "Each day, 50 to 100 new articles are posted and 3,000 to 6,000 articles are edited by users." The CIA is leading the way, and offers its analysts week-long sabbaticals to learn how to incorporate Intellipedia into their production. In March 2007 Intellipedia was even featured on the front page of the CIA's Internet website.¹³ In December 2007, Ambassador John Negroponte, the Deputy Secretary of State, issued a message which strongly encouraged all State Department employees to leverage Intellipedia.¹⁴ Finally, users across Army commands are beginning to use Intellipedia from the tactical to the strategic level. For example, analysts at U.S. Central Command were publicly recognized for their collaborative work on chlorine use in improvised explosive devices by Tom Fingar, Deputy Director of National Intelligence for Analysis.¹⁵

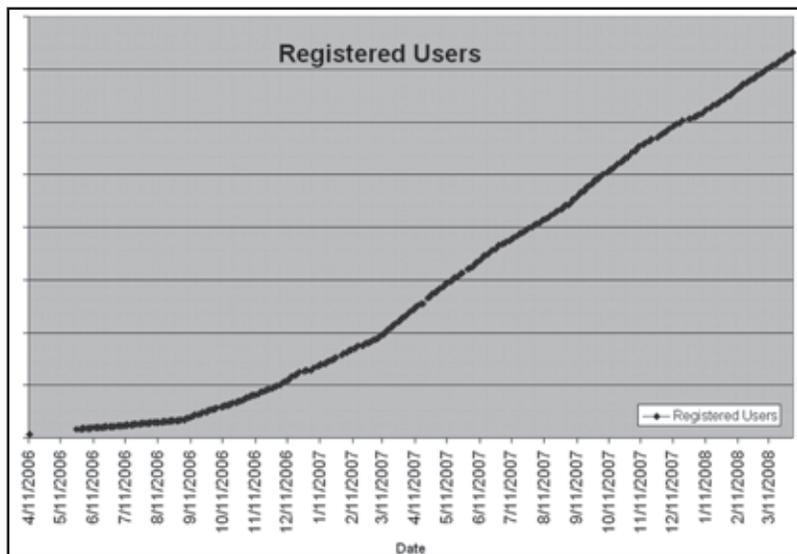


Figure 3. Rapid growth in registered users on Intellipedia-TS¹²

Recommendations and Conclusion

To summarize, Intellipedia is transformational software that offers tools to make production faster, facilitate collaboration, allow for management oversight, and reduce wasteful reporting redundancy. It provides a place for analysts to capture their knowledge on diverse topics and organize it in an agency neutral environment. It is, above all, social software designed to foster collaboration, discussion, and the analytic process across agencies.

Recommendations. I've trained several units on Intellipedia over the last year and have some tremendous success stories. Based on this experience, I have a few suggestions for middle management:

- ◆ Provide training to everyone on Intellipedia. This needs to go beyond the, "Here's how you search, here's how you edit." Our training institutions must emphasize the, "need to share," the culture of collaboration, and the social aspects of Intellipedia. Intellipedia is simple to learn, but the culture requires some adjustment.
- ◆ Every person in the IC should have a Passport account. This is a five minute, self registration process that allows users to edit Intellipedia as well as opening up a variety of other software tools such as Blogs, Tag Connect, iVideo, etc.
- ◆ Make some portion of your analyst's evaluations based on their work on Intellipedia and the collaboration they are getting from outside your organization.
- ◆ Use the tool, it is incredibly flexible. People are using it for everything from organization pages to developing intelligence products. It is used at all levels from strategic (developing the NIE for Nigeria) to tactical (posting images taken by collectors in Iraq).
- ◆ "Watch" articles you care about. Make checking your watchlist a part of your daily routine.

- ◆ Try enhancing other existing processes. For example, could your weekly reports be moved to a wiki page? Could briefings or articles (like this one) be built better and faster using Intellipedia? Could meeting agendas be built collaboratively using Intellipedia in order to slash meeting times?
- ◆ 80/20 rule: I would recommend you encourage your analysts to spend 80% of their time working on their assigned tasks, and 20% contributing to related articles or anything that they have an expertise or interest in. The best way to foster collaboration is to collaborate with others.

Intellipedia is a critical tool for today's transnational, fast evolving operational environment, regardless of what network you work on or agency you belong to. It offers a central location for members of the IC to pool knowledge and collaborate in an operational environment which changes faster than any we've seen. This collaborative environment will help avoid missing critical intelligence that might fall between the cracks of agencies. It offers a revolution in the KM system and culture of the IC. 

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CW2 Brian Harris is a Training Officer, Detachment 1, Western Army Reserve Intelligence Support Center (WARISC). He has co-authored numerous featured articles on Intellipedia including a "Top 10" for 2007. He has 12 years of experience as an analyst, and holds two graduate degrees. He is available to instruct Intellipedia and other social software. More information about the author can be found on his User page on Intellipedia-U: https://www.intelink.gov/wiki/Chief_Harris.

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Arabic Immersion Acquisition Language Training for



HUMINT Linguists

by Peter Shaver



Due to current foreign language training and mission requirements, military occupational specialty (MOS) 35M, Human Intelligence (HUMINT) Soldiers are again receiving language training to enable their MOS skills. The first iteration of the experimental immersion language program began 4 February and will end 14 November 2008. This will be followed by a four week in-country immersion for selected students to improve their modern Standard Arabic proficiency and learn Iraqi dialects. Eighteen recently graduated HUMINT advanced individual training course students were chosen to participate based on their Defense Language Aptitude Battery (DLAB) test results. The course, developed by the U.S. Army Intelligence Center (USAIC) and the Defense Language Institute Foreign Language Center (DLIFLC), is an immersion isolation program.

As opposed to in-country immersion learning where students live in the target country and interact with native speakers, these students are isolated in an artificial “Arabic” environment in a refurbished wing of Riley Barracks at Fort Huachuca, Arizona. Here they live, study, and train. The area includes classrooms, a library and media center, and a large study room all culturally enhanced with posters, pictures and other realia that provide an authentic immersion atmosphere.

Instructors are DLI trained native speakers of the target language with advanced English proficiency. There are five DLI civilian instructors and two military language instructors (MLI). The MLIs supervise directed study after class hours and organize the weekend activities in addition to mentoring and peer tutoring.

The immersion course is activity based, interactive, and constructive. In addition to classroom training,

students organize and participate in weekend language and cultural activities outside the classroom, visiting Arabic communities in Tucson and Phoenix, and role playing in scenarios organized in an “Arabic” community setting. Their one day off, Sunday, is a free day where they may choose to relax on or off post. However, the students will report back on Monday and using Arabic only, describe their Sunday activities. After 2 to 3 weeks, if they are required to complete administrative or medical errands, they will complete them in pairs with one student acting as an interpreter. They will eat together during breakfast, lunch, and dinner in the dining facility where the conversation will be in Arabic; a native speaker will facilitate these exchanges.

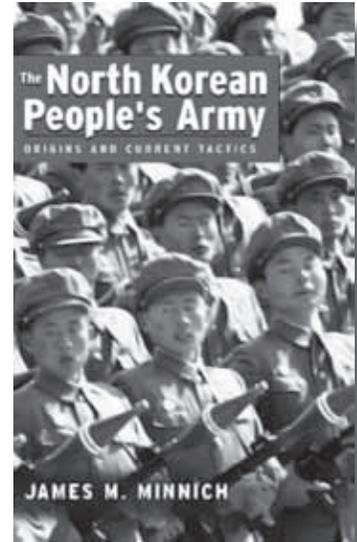
Students will be administered the Defense Language Proficiency Test (DLPT) at the conclusion of the course. Pre- and post-course questionnaires and on-going course summative and formative course assessments by the instructors will provide course feedback and progress evaluations. We expect outcomes to result in 2/1+2 as measured by the DLPT before immersion; The Language MOS Enhancement Program (LMEP) will be implemented at the end of the course to familiarize the students with specific job skill language that will support HUMINT operations. Qualified students will be sent to a 4-week in-country immersion at the conclusion of the course, probably in Jordan and Egypt. ✪

Pete Shaver is the Director, MI Foreign Language Training Center, and the Immersion Course Program Manager. He can be reached at (520) 538-1042 or peter.shaver@us.army.mil.

Professional Reader

*The North Korean People's Army:
Origins and Current Tactics
by James M. Minnich*

*(Annapolis, MD: Naval Institute Press, 2005), 197 pages,
\$27.95, ISBN 1-59114-525-2 (cloth).*



Shrouded in official mythology designed to glorify the Kim family, the North Korean People's Army (KPA) lacked a comprehensive English-language study of its origin and current organization. Lieutenant Colonel James M. Minnich, currently the Director for Policy Operations, Training, and Liaison in the Joint U.S. Military Affairs Group-Korea has filled this gap. Currently the world's third-largest army, the KPA served as the foundation of power for the North Korea's first leader, Kim Il Sung and his son, Kim Jong Il. Drawing on numerous primary sources from both North and South Korea, Minnich presents an authoritative and accessible study on the development of the KPA. Minnich traces the evolution of the army from the various partisan groups fighting the Japanese occupation with a special focus on the rise of Kim Il Sung who, with Soviet support, marginalized other Korean partisan leaders to emerge as North Korea's supreme leader and eventually an official demigod.

He divides his work into three sections. The first third of the text discusses the partisan and political origins of the KPA up to moments before the invasion of 25 June 1950. Here, Minnich's work shines brightest-presenting the history and formation of the KPA. His command of primary sources and his ability to discern the likely truth behind decades of official mythology results in an authoritative presentation of the origin and development of the KPA. The second section discusses the current organization of the army based largely on material used by the South Korean military staff colleges. Minnich's presentation of the current tactics is broad and general. He discusses the seven forms of offensive maneuver, the two forms of defense, and artillery tactics. Minnich provides a valuable service by making the South Korean view of the KPA available in English, a feature not available in the other basic English language resource, Joseph Bermudez's *The Armed Forces of North Korea*. The final division of the book discusses KPA command and control as well as its organization and major weapon systems as of the year 2000.

The only noticeable shortcoming in the book is its adaptation from academic thesis to published book. Minnich's language is clearly academic from the introduction forward in a tone best suited to a thesis committee. This tone follows the reader for the length of the entire book, although the rewards are well worth it.

Minnich's information is the most recent available and his assessments are judicious. Understanding the history behind the KPA will assist policy analysts and foreign affairs specialists in making informed policy recommendations. Intelligence analysts will benefit from the updated tactical doctrine presented in the second and third segments of the book. This book is a necessary resource for anyone interested or involved in US/North Korean relations. ❄️

Reviewed by: Chief Warrant Officer Three Kevin Scot Gould

The American Black Chamber by Herbert O. Yardley

*(Annapolis, MD: Naval Institute Press, 1931),
375 pages, \$18.95, ISBN 1-59114-989-4*

Bluejacket Books of the Naval Institute Press is to be congratulated for its recent reissue of Herbert O. Yardley's 1931 controversial and revealing American intelligence classic. Even today after years of hot journalistic scoops, memoirs of retired clandestine service officers and the release of declassified documents, his revelations cast a direct light on American espionage operations in World War I and the post war period and revealed them to a startled citizenry and the world.

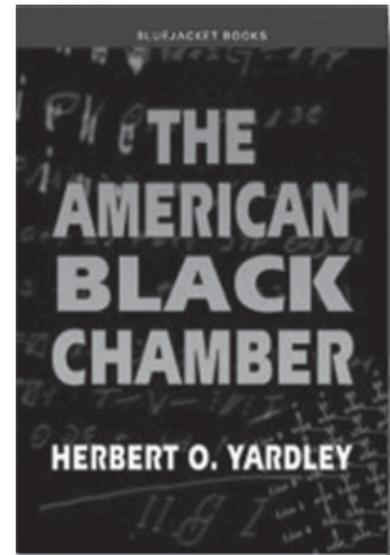
Yardley was born in 1889 in Worthington, Indiana, the son of a railroad telegrapher of English colonial stock. After high school young Yardley passed a civil service examination and qualified as a clerk in the Department of State in Washington, D.C. He worked in the code room of the State-War-Navy Building (now the Old Executive Office Building), next to the White House.

His book is actually an autobiography of his career as an American intelligence officer during World War I and the early twenties. The newly married young man from the rural Midwest was fascinated by the exchange of diplomatic traffic between the Department and the embassies and legations overseas and the use ciphers and codes for security of the messages. He soon discovered that he could crack most of this encrypted material on his own. He approached his superiors and expressed his concerns about the Department's lack of communications security. He came up against a wall of indifference and a general don't-rock-the-boat attitude.

The entry of the U.S. into World War I changed the situation. Yardley contacted Major Ralph Van Deman of U.S. Army Intelligence with his proposals for communications security. The brash young clerk impressed the man he referred to as "the father of Military Intelligence" enough to gain an officer's commission and receive an assignment to set up a Cryptographic Bureau. Yardley assumed more responsibility on the job and eventually became involved in operations and liaison with Allied intelligence services. After the war he served with the American delegation at the Peace conference.

Then in the 1920s Yardley took over the first American peacetime cryptanalytic service, MI-8, known as the Black Chamber. The State Department and the U.S. Army funded the organization, which was located in New York City. The operations of the unit were very successful and of great assistance to Foreign Service policy planners and military strategists. However, in 1929, President Hoover's Secretary of State, Henry L. Stimson, discontinued the unit's operation with the comment "Gentlemen do not read other people's mail."

In 1931 an embittered Yardley wrote his "The American Black Chamber," revealing to his fellow Americans and the rest of the world the operations of the clandestine unit. However, the author escaped punishment for an act considered traitorous by most of his fellow citizens, he had broken no law. Actually there was no legislation regarding the revelation of such state secrets and its punishment. Yardley eventually dabbled in intelligence work for friendly foreign governments, wrote books and worked for the U.S. in unclassified positions during World War II. This autobiographical study reveals an extremely intelligent man with a tremendous ego that blinded his sense of duty to his country.



The Reader of Gentlemen's Mail: Herbert O. Yardley and the Birth of American Codebreaking
by David Kahn

*(New Haven, CT: Yale University Press, 2004),
318 pages, \$32.50 ISBN*

In this revealing biography, one of America's best known authorities on the history of intelligence, recounts the rise and fall of the gifted code breaker, Herbert O. Yardley. Even today in national security circles he is viewed either as a hero or a traitor. Kahn opens his study with a Preface and A Short Course in Codes and Ciphers to provide background on the arcane science of cryptography. Then he swings into the life story of an "All American Boy."

Yardley was born on 13 April 1889 in Worthington, Indiana. His father was a railroad telegrapher. While growing up, young Yardley occasionally helped his father and gained some basic experience in communications. In 1912 the State Department in Washington, D.C., hired him as a clerk. Two years later he married a hometown girl, Hazel Milam. They established their home in the national capital.

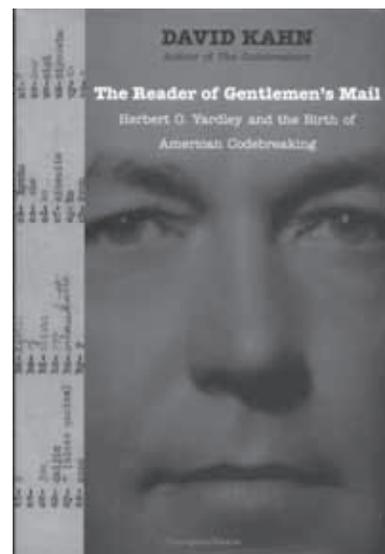
Yardley worked in the State Department code room located in the State-War-Navy Building (now the Old Executive Office), next to the White House. He became fascinated by the coded communications traffic between the Department and the American embassies and legations abroad. Eventually he discovered that he could break the enciphered messages on his own. Somewhat alarmed by his own success, he approached his superiors to warn them about this breakdown in communications security. They advised him to mind his own business and refrain from rocking the boat. However, the entry of the U.S. into the World War changed Yardley's destiny.

On his own the young government clerk approached Major Ralph Van Deman, the head of Army Intelligence, with his concerns about American communications security. The major was impressed. He arranged for Yardley's commission as a Signal Corps first lieutenant in command of Military Intelligence Section 8 (MI-8). The author notes "Thus began America's first official cryptologic agency."

Yardley was successful in his new assignment. He recruited a staff of well qualified personnel, who took to their tasks as intelligence officers with enthusiasm. The unit assisted in the roll up of several enemy spy networks through intercepting and cracking the communications traffic. In time Yardley travelled to Europe and engaged in liaison with chiefs of the Allied intelligence services including Captain (later Admiral) Reginald Hall, Director of Royal Navy Intelligence. However, the author points out that Hall believed that the young American was boastful and indiscrete. Accordingly Anglo-French intelligence cooperation with the American allies was proper but scarcely enthusiastic.

After the Armistice in 1918 Yardley spent time in Paris working with the American delegation to the Versailles Peace Conference. It was a worthwhile learning experience. When the U.S. government established an official Cipher Bureau, the American Black Chamber, to support War Department intelligence operations and State Department secret diplomacy, Yardley was chosen as its permanent peacetime leader and posted to New York City.

During the 1920's Yardley and his team successfully carried out a series of sensitive assignments. However, in 1929 the old puritanical sense of morality reared its head. Henry L. Stimson became Secretary of State. The author describes Yardley's concern about the new superior, "With previous secretaries of state, he had not felt anxious. With Stimson he did. And he was right. When told about the bureau and its work, Stimson exploded."



He went on to disband the Black Chamber with the comment, "Gentlemen do not read each other's mail." Yardley found himself with a family to support and no job. He was certainly down on his luck. Finally, out of desperation he decided to write a book about the "Black Chamber." and its operations. It was a best seller and the author cashed in on royalties. Most government officials and military officers condemned his behavior and revelations of state secrets as traitorous. However, Yardley was guiltless. He had broken no laws. There was no American legislation restricting the publication of classified government operations.

Yardley carried on writing free lance articles for the popular press and Hollywood productions. During the Sino-Japanese War in the late thirties he served two tours in China as a cryptographer for the Chinese Nationalists in their resistance to the Japanese invaders. Shortly after his return to the States the Japanese attacked Pearl Harbor. Yardley offered his services to the various U.S. intelligence services but his previous associates remembered his apostasy after World War I and refused his offer. However, the Canadians were in the process of setting up a communications intercept service. They made inquiries in Washington about Yardley. Some of his old friends vouched for him. The Canadians proceeded to set Yardley up as an intelligence chief in Ottawa. However, his past caught up with him again.

Commander Alastair Denniston, the "wee Scot," who was chief of the British Government Code and Cypher School, strongly objected to Yardley's posting during a visit to Washington and Ottawa. The author notes that, "Canada bowed to the mother to the east and to the giant to the south" and so the Canadians discharged Yardley. He returned to Washington. The author concludes this episode with comment, "Canada recovered. Yardley did not."

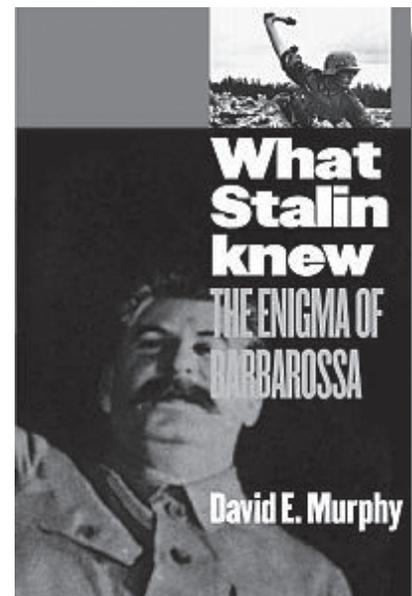
Between the wars he ran a restaurant of his own. Then in World War II after the Canadian fiasco he worked for the U.S. government in an unclassified post. After 1945 he became a regular at the National Press Club in Washington where he engaged in another of his passions, poker. He wrote a book, "The Education of a Poker Player," which sold well. Yardley died on 7 August 1958 at his home in suburban Silver Spring, Maryland. He was buried in Arlington National Cemetery. The author concludes: "With his death there passed into history the most widely known, most inspirational, most colorful cryptologist of all time."

What Stalin Knew: The Enigma of Barbarossa by David E. Murphy

*(New Haven, CT: Yale University, 2005),
310 pages, \$30.00, ISBN 0-300-10780-3*

On the morning of 22 June 2941, the German Wehrmacht and the Luftwaffe launched a coordinated surprise invasion of the Soviet Union. The Red Army defenders were taken completely unaware and gave way to the concentrated German military power. The American and British intelligence services, although aware of a German build up in eastern Europe, were shocked at the initial German success and Soviet confusion and panic. David E. Murphy, a retired Chief of the Soviet Division in the CIA, undertakes to resolve many of the mysteries till surrounding this sudden move by Hitler that brought the Soviet Union into World War II as an ally of Great Britain. He also tries to evaluate what appeared to be the complete failure of the Soviets to estimate German plans and military preparation on the Eastern Front. The author, with his background in Soviet affairs and in a position to take advantage of the Cold war thaw after the Soviet collapse regarding access to intelligence in Moscow, presents intriguing insights into this baffling enigma.

After a period of bad blood between Hitler and Stalin following the Nazi seizure of power in Germany, Berlin, 1939, made overtures to Moscow for a diplomatic rapprochement to secure the eastern flank in the



event of war with the Allies in the West. The signing of a non-aggression pact in August 1939 between Germany and the Soviet Union paved the way for the German invasions and occupation of Poland. The Soviets moved into the Baltic states and eastern Poland. With their eastern flank secured the Germans then turned to the West and invaded and occupied Denmark and Norway. In the spring of 1940, they overran the Netherlands, Belgium, and France and drove the British from Western Europe. Next the Luftwaffe mounted a campaign to destroy the Royal Air Force in the Battle of Britain. It failed. The Germans followed with the Blitz, a series of night bombing raids that lasted until early spring 1941.

In the East during this period, relations between the Germans and the Soviets were distant but correct. The Soviets honored their commitments to supply the Germans with oil and other military supplies. The Germans occasionally apologized for accidental over flights of Soviet territory. The author provides an informative insight into the ongoing Soviet intelligence operations in German and occupied Western Europe during this lull. Actually since their success in taking power in the USSR after World War I, the Soviet intelligence and security services had been very active in Western and Central Europe. The GRU, the military intelligence organization, worked diplomatically through the formal attaché system. On the other hand, they developed and ran clandestine agent networks. Ironically one of the most successful GRU illegal agents was Richard Sorge, A Russian born German journalist, who worked in Tokyo. He developed numerous well placed German and Japanese sources, who provided valuable information as a result of close German-Japanese collaboration as allies. During late 1940 and early 1941, Sorge reported regularly on German plans for military operations against the Soviet Union.

Another Soviet foreign intelligence organization was the NKVD, a forerunner of the better known KGB (Committee for State Security). The KGB originally targeted White Russian exiles abroad, who plotted against the Soviet Government. In time the organization expanded its operations to include foreign objectives. In comparing the Soviet services, Murphy notes that the GRU had an analytical unit to evaluate information collected abroad. On the other hand, the KGB disseminated its data directly to specific customers for their interpretation. The author notes “Stalin insisted on this procedure and made clear that he alone would judge individual reports and their implications. His problem was his limited ability to understand things foreign. Already blinkered by Marxist-Leninist ideology and of a conspiratorial cast of mind, Stalin was a poor judge of the reporting. The most telling evidence was his fixation on the idea that Hitler could not, would not, attack the USSR until he had conquered England.”

By 1941, Soviet intelligence had already established well developed networks in Britain, the U.S. and continental Europe, even in German military and Nazi political headquarters in Berlin. All through early 1941 they alerted Moscow to a German build-up in the east. Soviet Border Troops and customs officials also reported on German activities along the frontier. Warnings from the British, who desperately needed allies, and the neutral U.S. also reached the Soviets, all to no avail. Soviet intelligence chiefs were reluctant to challenge Stalin’s viewpoint and arouse his wrath. Hitler and his entourage meanwhile engaged in a number of deception operations emphasizing continuing preparations for operations against Britain and increased cooperation with the USSR.

Then in mid-June the Germans struck, overcame initial Soviet resistance and plunged into the USSR. The author comments “It would take Stalin, who had rejected as disinformation the scores of intelligence report predicting the attack, several hours, even days before he could bring himself to acknowledge war’s reality.” Then followed what Murphy describes as “A Summer of Torture” for Stalin, the Soviet leaders, and their people.

Eventually Stalin regained his control and rallied the Soviet people. With the aid of the Western Allies, the Soviet military eventually stopped the Wehrmacht, drove it back into Germany and captured Berlin. The author concludes, “The blame for the catastrophe of 1941 falls not only on Stalin but on the system of government by fear that he created over the years.” The author has certainly contributed a well researched and balanced study about one of World War II’s great puzzles. 

These three books reviewed by: John Carroll



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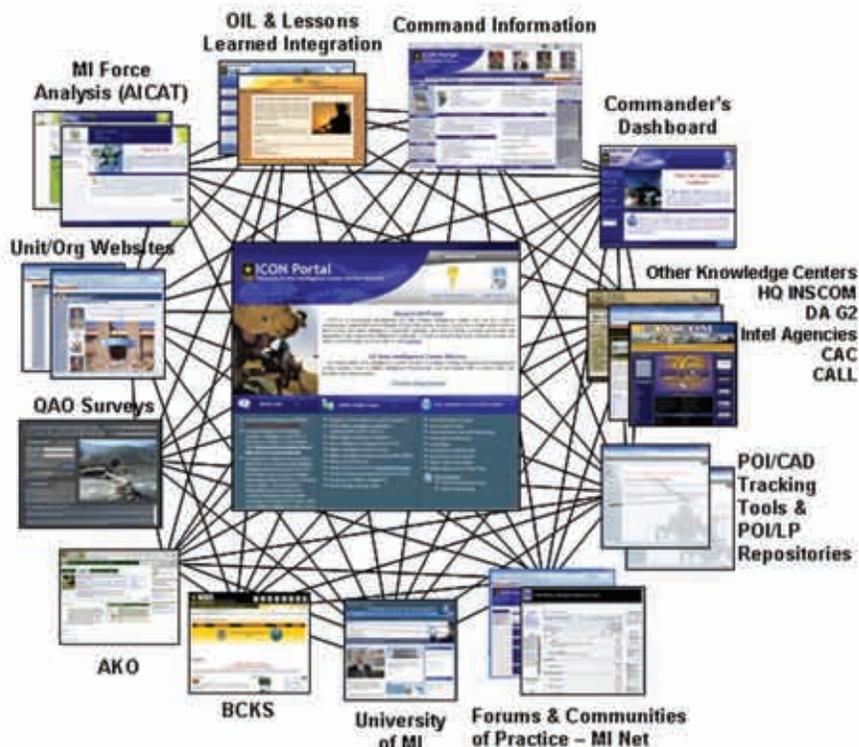
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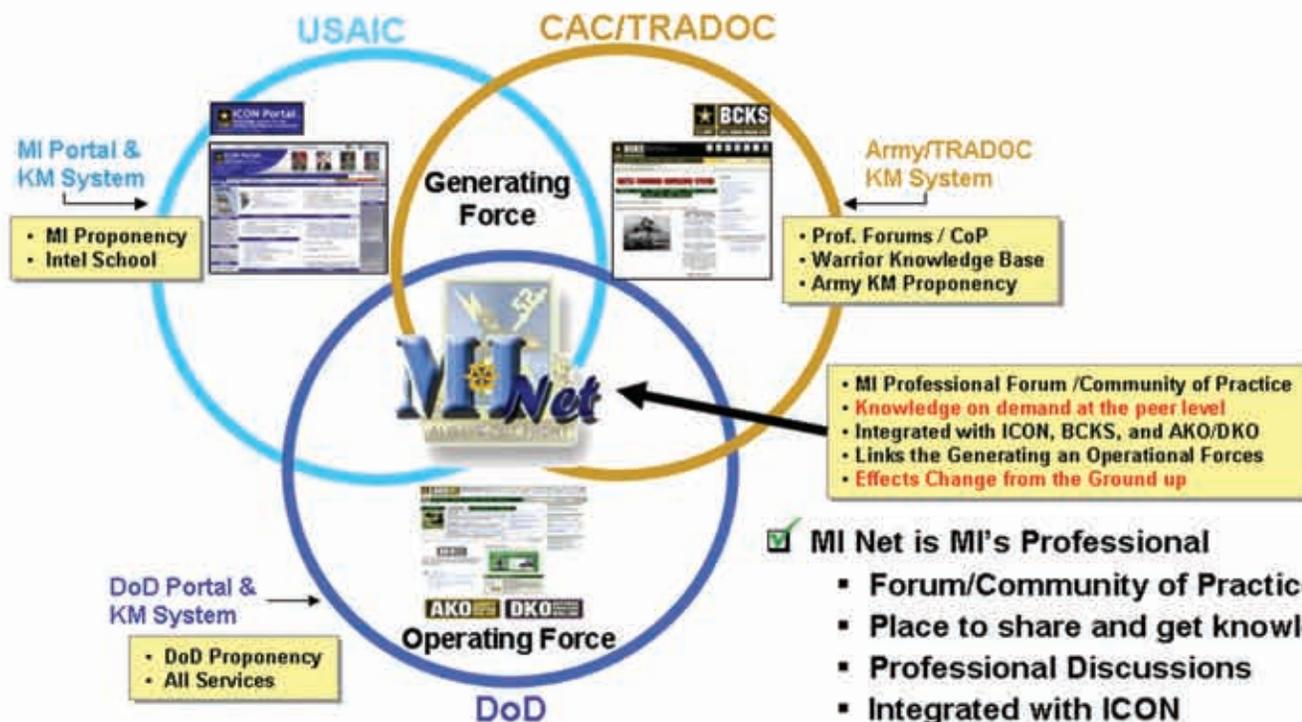
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