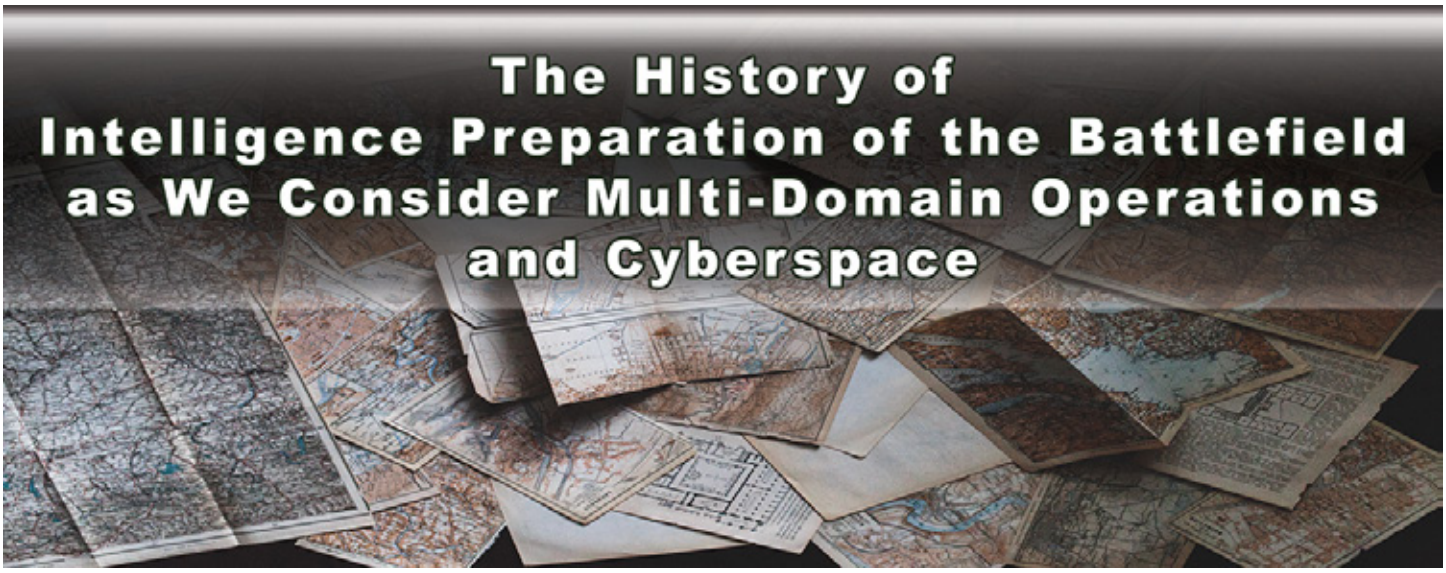

by Ms. Katherine R. Coviello

Author's Note: I originally wrote this piece in the early 2000s, so some of the doctrine references cited have since been updated. However, I chose to leave those references in their original form, as the article is a study in the history and origins of this piece of intelligence tradecraft.

Introduction

The U.S. Army initially invented, and then implemented, the intelligence preparation of the battlefield (IPB) process in the 1970s. As detailed in an interview with MAJ George Gaun, U.S. Army retired, the initiative for the process emerged in the fall of 1975, during MAJ Gaun's tour of duty at the U.S. Army Intelligence Center (USAIC), Fort Huachuca, Arizona, from 1975 to 1978. In September 1975, BG Eugene Kelly, Commanding General of USAIC, sent a "snowflake," that is a white piece of paper, to request that the Director of Concept Development prepare the IPB concept and then brief it in November 1975. At that point, IPB became an acknowledged U.S. Army term and acronym, although the basic process and concept in and of itself was "not wholly new" according to MAJ Gaun. The IPB process as developed at that time was a basis by which the Army military intelligence (MI) force organized and systemized the process into a graphic description of the enemy, weather, and terrain.

Initial Steps to Create the Process

The IPB process as developed at USAIC also involved depicting a Soviet division via a template where it deployed doctrinally. Through this process, IPB assisted MI personnel to develop and conduct an analysis of how the enemy could be expected to deploy. From this analysis, the IPB allowed the MI officer to verify this anticipated force disposition by tasking collection that would show whether the enemy actually deployed in this manner. MI personnel had to prove to the operations personnel in the G-3 or S-3 elements of their command that this process worked. In order to ensure successful intelligence support to operations, the MI officer had to collaborate with the S-3 to develop, and then implement and exercise, his collection plan frequently in order to keep his threat intelligence databases current.

When asked about employing IPB in the cyberspace domain of warfare during his interview for this research, MAJ Gaun noted that this would be a significant challenge for IPB, as the terrain of the network could potentially be much more volatile. In the traditional battlefield, terrain changes very little and not very quickly. But in the cyberspace domain of warfare, networks either can be relatively stable in their configuration or can change quite rapidly.

The Development of Effective Templates

While the IPB process was undergoing its initial concept development, MAJ Gaun worked on developing the templating part of the process with the U.S. Army Forces Command opposition force at Fort Hood, Texas. Templating involves developing layouts of force structures as they would doctrinally employ themselves for various maneuvers and activities on the battlefield. For example, a Soviet motorized rifle regiment would assemble and move in a very doctrinal fashion as it was conducting a movement, such as a tactical march from a rear assembly area to join an element engaged in combat. USAIC developed templates that provided analysts with a representative picture of these forces for a variety of situations, which the analysts had to adjust for the battlefield terrain and other factors, such as force disposition. The templates were eventually mass-produced and distributed on onionskin paper, which analysts would use

U.S. Army photo by CPT Russell Gordon

Soldiers with the Ukrainian Land Forces brief U.S. Army Soldiers with 3rd Battalion, 15th Infantry Regiment, 2nd Infantry Brigade Combat Team, 3rd Infantry Division on their company mission course of action March 18, 2016, as part of a military decision-making process practical exercise at the International Peacekeeping and Security Center near Yavoriv, Ukraine.

when working the IPB process on acetate overlays within tactical operations centers and other intelligence cells. Templating works very well when an opposing force practices its activities in a doctrinally, repetitive fashion.

MAJ Gaun's team completed a study that involved development of the templating process, eventually ending up with various templates, including unit, event, and decision templates. The template process resulted in a proven method whereby a junior person in an intelligence section could put the information together and identify the probable enemy force and course of action. Subsequent analytical efforts against Soviet forces conducting maneuver exercises in Europe proved time and time again that templating was a reliable tool that could be employed to predict the force disposition and anticipate their future activities, all of which the combatant commander desired.

Spreading the Word about IPB

The IPB process continued its development at USAIC under the guidance of MAJ Gaun as other MI professionals joined his effort to develop IPB for the conventional battlefield, including LTC Samuel V. Wilson, Jr., at the time a captain. MAJ Gaun and LTC Wilson often exchanged ideas with regard to the IPB process. MAJ Gaun articulated the information and LTC Wilson documented it. LTC Wilson was charged with spreading the word about IPB through efforts such as videos and published articles. An example of this is in an article that LTC (then CPT) Wilson wrote in 1977 for the *Military Intelligence* journal (which later became the *Military Intelligence Professional Bulletin*). In the article, titled "What Can Be Done Now?" he discusses IPB at length."[1]

LTC Wilson was assigned to the Intelligence Concepts Branch, Directorate of Combat Developments, USAIC. He initially worked on the IPB process in the spring and summer of 1977, when BG Kelly tasked him to develop two instructional videos. His assignment as an action officer to this particular project came as a result of his strong communications skills. One video covered the overall IPB concept, while the other discussed how to conduct related analysis and use the IPB process with enemy doctrine, specifically Soviet doctrine. The intended purpose was to provide a video for classroom use to teach the IPB method. The videotapes were disseminated to various Army MI units worldwide.

The IPB process also was used to emphasize the defense of the Fulda Gap, which was a key avenue of approach for the Soviet forces were they to invade West Germany. Due to the target-rich environment in such a defense, there was a distinct need to know what critical nodes and high-value targets on the battlefield, when destroyed or disabled, could impede the Soviet advancement. The U.S. Army needed a smart way to identify these high-payoff targets, to allow U.S. forces the maximum payoff when selecting targets to disrupt the Soviet plan of advance. The Army needed to know how it could employ its intelligence collection systems to identify which of the multitude of targets were the high-payoff targets, thus enabling surgical offensive strikes on select targets. The IPB process helped the Army meet these intelligence needs.

Employing IPB in Korea

Following his work on IPB development at USAIC, LTC Wilson went on to employ the IPB process during his follow-on tours of duty. He used the process and then taught it while assigned to the U.S. Army Command and General Staff College at Fort Leavenworth, Kansas, from 1980 to 1981. Then, while assigned to Korea from 1983 to 1984, he experienced his first chance to employ IPB in an operational environment, while at the division level with the Team Spirit exercises. The division G-3 operations officer embraced the

IPB process, as did the chief of staff, the division commander, and the assistant division commander for maneuver. The IPB products that LTC Wilson developed while with the 2nd Infantry Division went into the war plans. LTC Wilson frequently tasked the terrain detachment for these efforts, which resulted in the element being kept well manned and staffed, to include staffing with 96B Intelligence Analysts. According to LTC Wilson, the IPB process worked "brilliantly" in Korea because of the dogmatic warfighting system of the North Koreans. In Korea, LTC Wilson developed 15 different IPB overlays that included the likes of weather and decision support templates. The South Koreans working with United States MI personnel also embraced the process; in fact, LTC Wilson recalled attending a briefing of the IPB process that was delivered in Korean.

LTC Wilson's experience with IPB led to his assignment to "Tactical Battlefield Counterintelligence," where he was designated a counterintelligence staff officer. There he worked with GEN LePue to essentially "red team" the U.S. forces during exercises. By employing the IPB process against the limited blue force data he had, LTC Wilson was able to successfully determine the U.S. forces' course of action. This helped the IPB process gain credence with U.S. operations personnel, and LTC Wilson summed its successful implementation when he said, "It was an amazing intelligence time."

U.S. Air Force photo by SrA Christina D. Ponte

A U.S. Air Force intelligence analyst uses a combat mission plotter to diagram exercise enemy threats on a map.

The use of the traditional IPB process was not limited just to exercises and preparations against Soviet and North Korean forces. It was also used during exercises against Iraq. When commanding the 106th MI Battalion in Alaska, LTC Wilson and his unit used IPB during Exercise Brim Frost, where he remarked that it was interesting to see it deployed in an arctic environment.

The Four-Step IPB Process

The process was identified in FM 34-130, *Intelligence Preparation of the Battlefield,* published in 1994. As described in the 1994 manual, the four-step process is a continuous cycle that recurs during preparations leading up to conflict and continues throughout the engagement until the threat is terminated or neutralized:

- Step 1: Define the battlefield environment.
- Step 2: Describe the battlefield's effects.
- Step 3: Evaluate the threat.
- Step 4: Determine threat courses of action.[2]

IPB for the Cyberspace Domain of Warfare

As the U.S. Army intelligence force progressed into the information age, the use of IPB for the cyberspace domain of warfare logically followed. This process was emblazoned in the minds of countless Army MI officers and enlisted analysts during their training at USAIC and Fort Huachuca; it was further inculcated by repeated applications during countless staff exercises, field problems, and rotations through the national and joint training centers. It became a habitual method by which intelligence personnel attacked any problem. The Army initially developed IPB to counter the threat represented by the Soviet forces, as well as the North Koreans in the Pacific theater of operations; however, intelligence analysts learned to adapt and employ the IPB process in a variety of less traditional engagements, spanning from Operation Just Cause in Panama through the coalition and joint-level Balkans peacekeeping efforts of Operation Joint Endeavor. While the tactics of threat elements spanning from gangs of thugs to paramilitary forces to the nontraditional ethnic forces such as encountered in the Balkans did not easily lend themselves to doctrinal templating, much of the other facets of IPB did.

Emerging from a history of IPB in the tactical and strategic traditional warfare venues, IPB for the cyberspace domain of warfare developed with these strong traditions and proven methodologies. Over time, it was modified and updated, and its development continues still today throughout the Department of Defense and beyond.

Endnotes

1. Samuel V. Wilson, Jr., "What Can Be Done Now?" *Military Intelligence* (April–June 1977): 2-7.

2. Department of the Army, Field Manual 34-130, *Intelligence Preparation of the Battlefield* (Washington, DC: U.S. Government Publishing Office, 8 July 1994 [obsolete]).

Ms. Katherine Coviello serves as Special Advisor for Materiel Enterprise Intelligence and Security to the U.S. Army Materiel Command (AMC). There she provides senior intelligence and security expertise, judgment, and advice on national, joint, coalition, and Army intelligence matters in accordance with the AMC Commanding General's priority intelligence requirements and operational requirements. She has served in this position since May 2015, following her assignment as the senior signals intelligence staff officer with the Office of the Under Secretary of Defense for Intelligence at the Pentagon. Ms. Coviello holds a bachelor of arts in history from Bridgewater State College and a master of science in strategic intelligence from the National Defense Intelligence College.

U.S. Army photo by SPC John Cress Jr.

A U.S. Soldier, left, of 2nd Battalion, 12th Cavalry Regiment, 1st Brigade Combat Team, 1st Cavalry Division, an Armenian soldier, center, and a Danish soldier update map information during exercise Combined Resolve III at the Joint Multinational Readiness Center in Hohenfels, Germany, November 7, 2014.