STRATEGY RESEARCH PROJECT

THE BATTLE OF THE BULGE
INTELLIGENCE LESSONS FOR THE ARMY AFTER NEXT

BY

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ABSTRACT

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Some argue that military intelligence can no longer be a doctrinally-based organization. Technological changes occur so fast that "technology will drive and doctrine will spin, our intelligence operations." This paper examines Third Army intelligence operations, primarily from September through December 1944, leading up to the Battle of the Bulge, for lessons learned. The paper identifies ten historic lessons that provide the basis for some of our intelligence doctrine today and that can serve as cornerstones for intelligence doctrine and operations in the Army After Next. It then argues that technology should not drive intelligence operations. Rather, well-trained intelligence professionals, who have studied history and understand doctrine and the intelligence battlefield operating system, will deliver intelligence that commanders can use.

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> By "intelligence" we mean every sort of information about the enemy and his country-the basis, in short, of our plans and operations. If we consider the actual basis of this information, how unreliable and transient it is, we soon realize that war is a flimsy structure that can easily collapse and bury us in its ruins.
>
> —Clausewitz, On War[1]

INTRODUCTION

Clausewitz reminds us how unreliable intelligence is. The Army After Next,[2] despite all of its technological improvements, will continue to base its plans and operations on 'unreliable' intelligence. The future portends to be more volatile, complex, uncertain and ambiguous, and we are uncomfortable with this great unknown. Some argue that military intelligence can no longer be a doctrinally-based organization. Technological changes occur so fast that "technology will drive, and doctrine will spin, our intelligence operations".[3]

> Doctrine is the statement of how America's Army, as part of a joint team, intends to conduct war and operations other than war. It is the condensed expression of the Army's fundamental approach to fighting, influencing events in operations other than war, and deterring actions detrimental to national interests. As an authoritative statement, doctrine must be definitive enough to guide specific operations, yet remain adaptable enough to address diverse and varied situations worldwide.[4]

This paper examines Third Army intelligence operations, primarily from September through December 1944, leading up to the Battle of the Bulge, for lessons learned. The paper identifies ten historic lessons that provide the basis for some of our intelligence doctrine today and that can serve as cornerstones for intelligence doctrine and operations in the Army After Next (AAN). This paper argues that intelligence professionals who understand intelligence doctrine are the key to successful intelligence operations.

Although technology will assist in the development of a clearer picture of the battle space (dominant battlefield awareness), technology shouldn't drive intelligence operations, as some would argue. Technology will provide new tools to assist the intelligence professional. Some examples of the tools needed are large databases with multi-levels of security, advanced unmanned aerial vehicles, advanced unattended ground sensors, multi-spectral sensors, sensor-to-shooter architectures and data compression technology. Technology is the science of military intelligence operations. Well-trained intelligence professionals, who have studied history, doctrine and the intelligence battlefield operating system, with their intuitive skills, will practice the art of

military intelligence and deliver intelligence that commanders can use.

Current doctrine states that "intelligence operations follow a five-step process known as the intelligence cycle."[5] The five steps are: plan and direct, collect, process, produce and disseminate. In the intelligence cycle, data is collected. Data that are related to each other are processed and collated into information sets. Data and information sets are analyzed to produce intelligence. Intelligence is then disseminated to commanders. Throughout the cycle, intelligence professionals plan operations to focus and direct the effort.

> Doctrine should reflect new technology and its potential for the future, as well as its effects on Army operations. The US has a major strength in technology. When fielded and incorporated into doctrine, technology affords a significant advantage to soldiers -- one that enables the employment of overwhelming and decisive combat power while minimizing risk to the force. Doctrine seeks to be sufficiently broad and forward looking so that it rapidly accommodates major technological opportunities to give soldiers a battlefield advantage. It sets the conditions to exploit technologies that afford a significant increase in lethality, offers major improvement for protection of forces, exploits key vulnerabilities of potential adversaries, and offers a capability that presents an adversary with multiple threats simultaneously. Advances in technology are continually changing the way warfare is conducted at a pace now greater than ever before. Microprocessing, miniaturization, communications, and space technologies have combined to permit almost real-time intelligence and information sharing, distributed decision making, and rapid execution of orders from a wide variety of forces and systems for concentrated effect. [6]

Technology will only provide new tools and should not be the driving force in intelligence operations. Intelligence professionals will use these new tools to more effectively direct and plan, collect, process, produce and disseminate intelligence for commanders. Doctrine, however, will continue to drive Army intelligence operations.

The next chapter examines the Third Army's intelligence operations leading up to the Battle of the Bulge for intelligence lessons learned; lessons that serve as cornerstones for intelligence doctrine and operations in the AAN; cornerstones that we can firmly rest one foot on as we journey into this complex future.

INTELLIGENCE OPERATIONS BEFORE THE BATTLE OF THE BULGE

On December 16, 1944, the Germans launched their counteroffensive through the Ardennes, a battle known today as the Battle of the Bulge. Colonel (COL) Oscar W. Koch served as Patton's G-2 during the Battle of the Bulge and after the war, wrote about his experiences.[7] This chapter examines the intelligence produced for Third Army, primarily in November and December 1944, to see if there are any lessons to be learned. The paper seeks to identify lessons derived from Third Army's use of a technological advantage or lessons that point to the importance of doctrine. These lessons, if properly applied,

will assist the AAN in conducting future intelligence operations. Today, as in 1945 and in the AAN, "Intelligence officers are made, not born."[8]

The Battle of the Bulge is used as a study because of the alleged Allied intelligence failure in predicting the German counteroffensive. The period offers insight into what part of the intelligence battlefield operating system failed and as a result, what lessons might be learned.

Although not known at the time, the preparation for the Battle of the Bulge began in February 1944, when COL Koch went to England where Patton was secretly forming a Third Army Staff.[9] At that time, Patton directed all of the G-2 planning to focus deep in France on a town called Metz. Patton stated that he did not intend to go south of the Loire River unless it was operationally necessary.

> In broadest terms, Patton had just stated his EEI- Essential Elements of Information- for the planned Third Army offensive on the European continent. Although I didn't know it then, he had just concluded what was to be his only personally-expressed intelligence directive, not only for the cross-channel invasion in Operation "Overlord," but for the rest of the Third Army's operations in Europe until the war's end.[10]

With this guidance, COL Koch began what we call today "the Intelligence Preparation of the Battlefield (IPB)." The G-2 began his assessment starting at the Atlantic coast of France and extending all the way to Metz. Weather and terrain studies

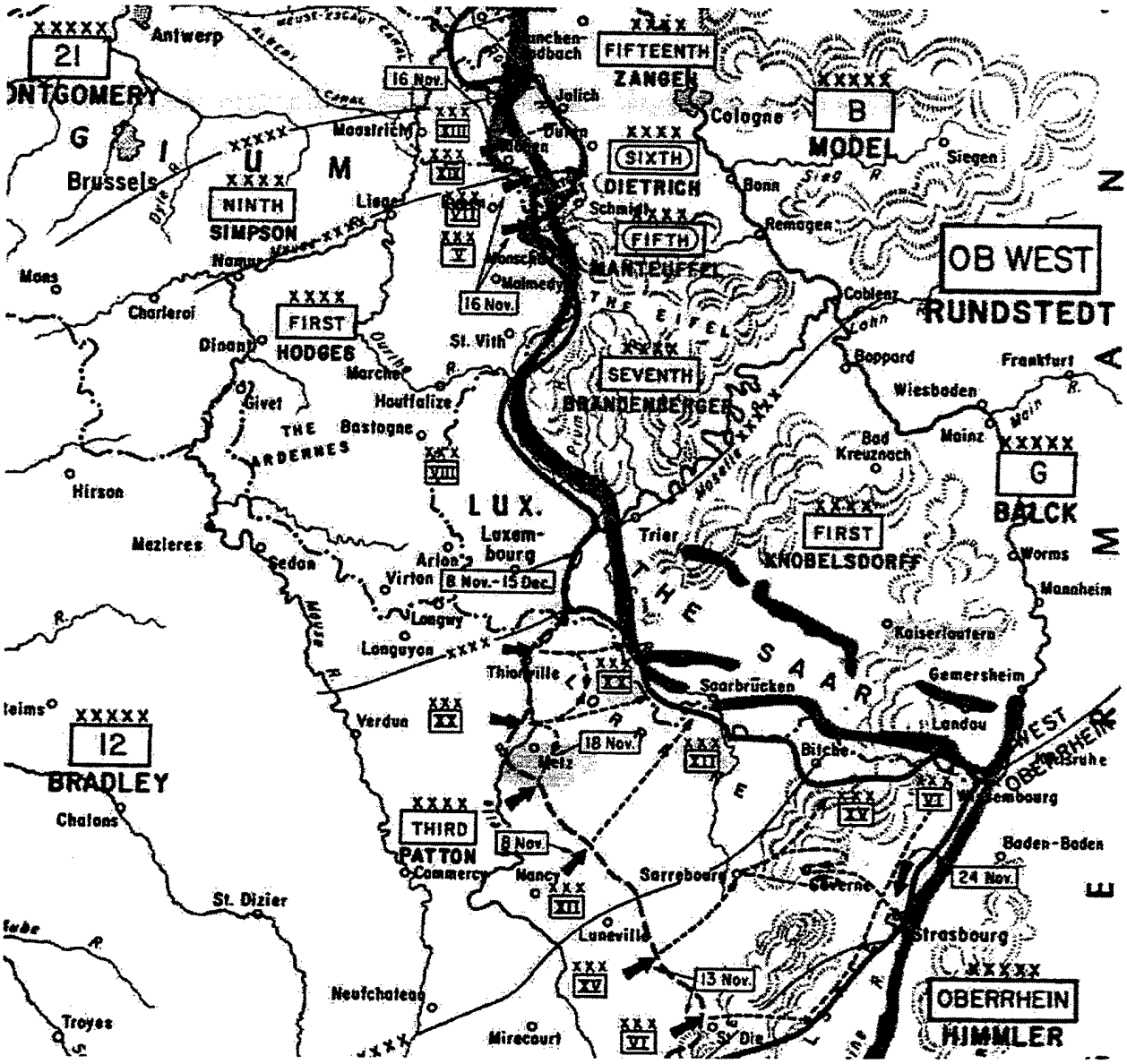
were completed. Order of battle and EEI were developed and subordinate intelligence officers "were told what they, within their commands, might be able to contribute in the search for military information by piecemeal, methodical collection and timely reporting."[11] An intelligence system was organized, manned and trained, from Koch's G-2 staff at Third Army down to subordinate Corps.

This trained intelligence team contributed to Third Army's success from its commitment in early August 1944. In August, COL Koch's estimate of the German situation differed from those of the other G-2s. His steady resolve to conduct his own analysis, instead of being swayed by the majority opinion, was a unique and critical quality of Patton's G-2. On August 28, COL Koch wrote and presented to Patton "Estimate Number 9," a study of the German Army's situation. Unlike the other estimates of the situation being produced by intelligence staffs, which hinted that the German forces lacked cohesion, COL Koch wrote that the Germans were conducting an orderly withdrawal and "it can be expected that the German armies will continue to fight until destroyed or captured."[12] In September and October of 1944, for a variety of reasons that will not be discussed here, the Allies' advance slowed.

By late November 1944, COL Koch began to identify the German elements that would participate in the German counter-offensive.

He had identified five reconstituted Panzer divisions of the Sixth Panzer Army, along with six-reformed paratroop divisions of the First Paratroop Army. On November 23, 1944, in the Third Army G-2 periodic Report #165, COL Koch wrote that the Germans had reconstituted a reserve "for either piecemeal or coordinated counteroffensive employment."[13] This analysis was written 23 days before the Germans began their offensive. COL Koch did not indicate when he thought this counteroffensive might take place. The ability or inability to do predictive intelligence will be discussed as one of the lessons learned in the next chapter.

Two weeks later on December 7, the Third Army G-2 Periodic Report cited 13 divisions in reserve, with the major concern the large Panzer concentrations now west of the Rhine.[14] "By December 9, the situation north of the Moselle demanded special attention. The principle that the purpose of intelligence is to assist the commander in accomplishing his mission and to protect the command from surprise was plainly applicable."[15] COL Koch presented a detailed briefing to Patton and the Third Army staff on the German situation facing First Army's VIII Corps and threatening Third Army's northern flank.



Map 1[16]

The Germans had four infantry divisions in contact with VIII Corps, with two Panzer divisions (an estimated 105 tanks) in reserve and another three Volks Grenadier divisions in strategic reserve.[17] At the time, VIII Corps was comprised of three divisions, covering a front of eighty miles, and an armored division in reserve. Based on a comparison of the American and

German forces, the German nine divisions were equivalent to five and a half American infantry divisions and one and a half armored divisions. COL Koch thus established the Germans' disposition. Based upon this disposition, he determined that the Germans had three courses of action.

The Germans' first possible course of action was to commit the reserve Panzer and Volks Grenadier Division in either First or Third Army's area of operations in order to strengthen his defenses. The Germans' second possible course of action was to maintain his reserves in order to divert Allied forces from reinforcing the Allied offensive. A large German reserve would be designed to force the Allies to hold a larger reserve to counter the potential German threat. Finally, the Germans' third possible course of action was to launch a counter-offensive.

COL Koch continued the brief by stating that to support a counter-offensive, the Germans had the capability of putting one thousand planes into the air for a short period of time. In addition, the German reserves had been refitted and had been in a quiet sector for some time.

> A brief terrain estimate was also given. Comparable to that in the northern portion of the Third Army's XX Corps zone, the terrain was rolling and open, generally favorable to cross-country movement. No major stream or ridge system dissected the area. It had an abundance of good cover and concealment. There were no organized lines of defensive positions.[18]

COL Koch concluded the brief by pointing out that the Germans' build-up had been gradual and secret. Based on COL Koch's briefing, on December 9th, Patton ordered limited planning to meet the potential threat to the North. On December 13th, a high ranking German prisoner stated that the German high command had hopes of achieving a large-scale break through. The Germans based their hopes on their intelligence estimates that the Allied positions were not constructed in depth and that Allied soldiers were war weary.[19] On December 14th, COL Koch reported in G-2 Periodic Report No. 186; "It is evident from the determined hoarding of Sixth SS Pz Army units that the enemy is making every effort to employ this Armor in a coordinated effort. He is already bending over backward to avoid piecemeal commitment."[20] Within 48 hours, on December 16th, the German Sixth SS Panzer Army along with the Fifth Panzer Army and the Seventh Army counterattacked in the Battle of the Bulge.

Twelfth Army Group and First Army were caught by surprise. At the time, neither Twelfth Army Group nor First Army G-2s predicted the German counter-offensive. General Omar Bradley, the Commanding General of Twelfth Army Group, stated that the First Army's G-2 estimate suggesting a possible attack in the Ardennes was not convincing enough for either the VIII Corps or First Army Commanders to take action.[21] One reason that

commanders may not have taken action was the lack of ULTRA intelligence.

Today, in order to have a complete and accurate understanding of the intelligence picture during the Battle of the Bulge, one has to take into account what ULTRA information was available. In Hut 3, at Bletchley Park, Northwest of London, encoded German radio message traffic was processed, and what emerged were translated and interpreted messages known as ULTRA. ULTRA was the Allies communications intelligence (COMINT) capability to decipher the 'unbreakable' German code-machines.[22] Small units known as Special Liaison Units (SLU) were established down to Army level to receive ULTRA information from Bletchley Park.[23] Since the information contained in ULTRA was from the German messages themselves, most commanders accepted the information as valid and accurate. The above accounts were written prior to the declassification of the ULTRA secret.

"Information provided by ULTRA was not to be reported in G-2 summaries, periodic reports, or intelligence estimates unless it could be truthfully ascribed to some other source."[24] ULTRA was available in late September 1944 and reflected the initial withdrawal from the front of all of the SS units, 1st, 2nd, 9th, and 12th SS Panzer Divisions, 17th SS Panzergrenadier, three separate heavy (Tiger) tank battalions and the headquarters of the 1st SS Panzer Corps. All were resubordinated to the Sixth SS

Panzer Army.[25] In October, ULTRA continued to reflect the assembly areas for the divisions or dealt with the training areas where the divisions were to refit. In November, ULTRA reflected the movement of German aircraft to the West and began to report in detail troop movements by rail and the related air requests. After the Battle of the Bulge, German prisoners-of-war indicated that many of the movement orders, for movement of ground units to the West of the Rhine, were sent by courier only and that radio traffic was not used.

F.W. Winterbotham, who served at Bletchley Park and administered the SLUs wrote: "...probably the most pertinent cause of the surprise of von Rundstedt's [Field Marshal Gerd von Rundstedt, Commander, OB West] offensive was the absence of high-grade Ultra before the battle."[26] He went on to comment on why the various G-2s' warnings were not heeded.

> There is no doubt in my own mind that the Intelligence staffs and the commanders at SHAEF army groups and army headquarters who had for the past two and a half years, and in the case of the British for four and a half years, had the enemy's intention handed to them on a plate, had perhaps come to rely on Ultra to such an extent that when it gave no positive indication of the coming counter-attack, all the other indications were not taken seriously enough[27]

The answer to whether there was an intelligence failure leading up to the Battle of the Bulge varies depending upon one's perspective and at what level of command they served.[28]

General Omar N. Bradley, who commanded 12th Army Group during the Battle of the Bulge, wrote in his memoirs "Even U.S. intelligence is not infallible-and certainly, neither is command."[29] He went on to say:

> While the G-2 at First Army did accumulate a few vital shreds of intelligence for the record, he no more evaluated that information to predict the Bulge than did any other of the clairvoyants who afterward claimed that distinction. Although First Army's observations could have been read so as to suggest the *possibility* of attack in the Ardennes, its warnings were not convincing enough…. Nor was my own G-2 at Army Group, Brigadier General Sibert, sufficiently impressed by these reports to come to me with a warning. It was impossible for me even to scan the intelligence estimates of subordinate units. As a consequence, I looked to my own G-2 and to Army commanders to keep me informed on the enemy's capabilities.[30]

Years later, after examining Koch's papers, Bradley would change his opinion when he wrote: "From November 20 onward, Koch's daily intelligence reports pointedly noted the re-forming and refitting of German panzer divisions…and on several days…raised the possibility of a limited enemy counterattack."[31]

COL Koch wrote that it was obvious that the Allies were surprised. Generals Eisenhower and Bradley did not realize the size of the German reserve forces nor did they believe that those reserve forces would be committed to a counterattack in the Ardennes. Instead, they believed that whatever reserve forces the Germans could muster would be used in the defense.[32]

COL Koch points out that Third Army was not privy to any unique information.

> The fact remains, however, that all the intelligence information on which the Third Army G-2 Section based its predictions was available to other commands. Our intelligence reports were widely distributed to higher, lower, and lateral echelons of command. In addition, much of the information which was the basis for our concern came from other units. Abundant information was at hand to support deductions made by Third Army intelligence staff and clearly outlined in the December 9 briefing at Nancy-a full week before the German offensive began.[33]

When one looks back at the Third Army intelligence reports, with the knowledge of what actually occurred, it is easy to see the prophetic nature of COL Koch's estimate. However, if one objectively examines G-2 periodic Report No. 186, written only 48 hours before the Germans counterattacked, one could also argue that the German counterattack was one of four enemy capabilities and was listed as number two in the likelihood of occurrence. COL Koch still believed that the Germans were most likely to continue to defend and delay to block the Third Army advance and attack on the Siegfried line.[34]

COL Koch, summarizes the entire issue on the intelligence failure prior to the Battle of the Bulge by stating:

> Certainly there was an intelligence failure preceding the Battle of the Bulge. But it was not the total blindness to the enemy buildup which is indicated in prevailing accounts of that historic clash. "Intelligence failure" connotes a breakdown in the intelligence service's collection techniques. The Allied failure leading to the tragedy of the Bulge was

in evaluation and application of the intelligence information at hand.[35]

Colonel Robert S. Allen, Chief of Combat Intelligence within the Third Army G-2, summarized the failure by stating "It was not Intelligence (evaluated information of the enemy) that failed. The failure was the commanders' and certain G-2s', who did not act on the Intelligence they had."[36] This failure will be examined in the next chapter as part of the lessons learned, when we discuss predictive intelligence and the relationship between a commander and his intelligence officer.

Is the environment in which Army forces will operate in the future so different that the lessons learned from history are of no value? Will the application of technology change the nature of the intelligence battlefield operating system such that the past does not point the way to the future? The next chapter examines lessons learned, from this small snapshot of history, that are still applicable for the commander and the intelligence officer in the AAN.

INTELLIGENCE LESSONS FOR THE ARMY AFTER NEXT

There are cornerstones of intelligence that were applicable in World War II, that are applicable today and that will be applicable in the AAN. Examining the intelligence operations of

Third Army prior to the Battle of the Bulge and the Allied intelligence failure points out ten key lessons that serve as cornerstones for the intelligence profession. The lessons below are not in any order of importance, but are fundamental to intelligence doctrine and operations.

The first of these lessons is **in order to plan any operation, intelligence comes first.** This is an obvious lesson and not a new one. Patton understood the need for comprehensive intelligence planning when he focused the G-2 effort on Metz, France prior to the D-Day invasion. Our Army planning process recognizes this in the development of the Intelligence Estimate and this will hold true in the AAN. "Commands are organized, task forces are formed, troops are trained, uniform and equipment is prescribed, transportation requirements are computed, naval and air support are arranged-all on the basis of intelligence."[37] This concept of the need for intelligence to lay the foundation for plans and operations was true in 1944 and will be true 81 years later in 2025. The implication for operations in the AAN, is that today we are developing the information databases to be used in the future. There is another related lesson.

The second lesson is that the **Intelligence Preparation of the Battlefield (IPB) remains a critical task.** "IPB is a

systematic, continuous process of analyzing the threat and environment in a specific geographic area."[38] IPB was used in Third Army during World War II.

> But at all echelons, the commander must know the enemy he faces or is about to face-his characteristics, his strengths and weaknesses, the detailed location of his forces, the various types of armament he possesses, his tactics, and his military capabilities and limitations. He must know the terrain the enemy controls-the hills, the valleys, the roads, the rivers. He must know the weather, what it may bring during daylight and darkness in all seasons of the year. He must know what temperatures to expect, how much sunshine, how much fog-or rain-or moonlight.[39]

The job of the professional intelligence officer was and remains to be the staff officer who examines the effects of weather, terrain and the enemy on the conduct of operations. Intelligence Preparation of the Battlefield remains a solid analytical methodology for the AAN.

Lesson three reflects the amount of intelligence a commander and his staff need in order to successfully execute the mission; the **commander must know everything intelligence can determine to satisfy his requirements.**

> Without intelligence the commander is blind. Only through the reasoned application of information supplied by intelligence is he able to make sound tactical decisions. Particularly at the high echelons of command, the commander must know everything intelligence can determine about the country in which he is to engage the enemy. He must know its resources, natural and acquired; the details of its political structure; its economy; the attitudes of its people, their ideologies and characteristics; its climate, and its transportation and communications

> system. In short, the commander must know that country as well as he does his own-or better.[40]

What level of detail will intelligence have to provide in order to support Army operations in 2025? If a commander wants to insert a computer virus into a C2 system, then intelligence must provide all of the information on the enemy's C2 system, required to conduct this type of operation. Some of the intelligence that might be required is: the type of hardware and software used; the type of communication paths between nodes; the precise locations within buildings where equipment is housed; the precise blue-prints of buildings; the power sources for the various nodes; and the tactics, techniques and procedures used to operate the C2 system, just to name a few.

The fourth lesson requires a modification to our current intelligence cycle; **evaluation needs to be added back into the intelligence cycle as a separate step.** At the end of World War II, COL Koch wrote: "Even as new intelligence techniques and practices were found and improved upon, the basic processes remained the same: direction, collection, collation, **evaluation**, interpretation, and dissemination [emphasis added]."[41] Today the intelligence cycle is defined as planning and direction, collection, processing, production, and dissemination.[42] The two appear to be similar, but there is a subtle lesson that appears to have been lost or is buried and needs to reemerge for the

conduct of successful intelligence operations in the AAN. That lesson is the criticality of the evaluation of information in order to ensure its reliability.

The evaluation of information consists of two parts. The first is the reliability of the source and the second is the validity of the information as compared to other information, data or intelligence. Today, our doctrine reflects this need as a subset of collection: "Different types of collection capabilities may be needed so information from one source type can be tested or confirmed by others…."[43]

In the AAN, our adversaries will recognize that our operations are based on the need for information dominance. Key to information dominance is intelligence, what we know about the enemy. Information dominance is the delta between what we know about the enemy as compared to what the enemy knows about us. FM 100-6 has the following definition: "*Information dominance* is defined as--The degree of information superiority that allows the possessor to use information systems and capabilities to achieve an operational advantage in a conflict or to control the situation in operations short of war, while denying those capabilities to the adversary."[44] Clausewitz warns us of the unreliability of intelligence, "The only situation a commander can know fully is his own; his opponents he can know only from unreliable intelligence."[45] One way to mitigate the

unreliability is to evaluate the data before processing it into intelligence.

Related to lesson three, a 'commander must know everything', intelligence support to any operation begins today with the collection and data basing of information and intelligence. Lesson five is **that to conduct future operations, large databases of information must be collected, evaluated, processed and stored today.** This is perhaps the most important area where technological solutions are needed. Solutions to data collection, storage, and dissemination are needed for successful operations in the AAN.

Tied directly to the reliability of intelligence, are two more lessons, lessons six and seven, concerning predictive intelligence. COL Koch said that the intelligence failure of the Battle of the Bulge was in "evaluation and application of intelligence information at hand."[46] Intelligence, especially predictive intelligence, is directly related to risk. On November 23rd and on December 9th when COL Koch presented his estimate of the German capability to launch a counteroffensive, he did not "predict" when, or if, such an offensive would take place. He believed the mission of the G-2 organization was to meticulously examine the details and lay out the enemy's capabilities. "The intelligence task was to say what the enemy *could* do and let the commander gamble on which of those

alternatives the enemy would choose."[47] In contrast to COL Koch, our doctrine today states: "Predictive: Intelligence should tell the commander what the enemy is doing, can do, and his most likely course of action (COA). It should anticipate the intelligence needs of the commander."[48]

Predictive intelligence has an underlying fundamental assumption. That assumption is that a key decision has already been made to predict. Not until December 13th, did Hitler finalize December 16th as D-Day for the Ardennes offensive.[49] On November 23rd or December 9th, any attempt by COL Koch to predict the date of an offensive operation would have been nothing but a guess.

Analysis is based upon an in-depth study of an enemy's history, past practices and capabilities, and a knowledge of his leadership and doctrine. From this analysis, and based upon an enemy's capabilities, the intelligence officer can attempt to predict enemy intentions (most likely course of action). Prediction is always accompanied by a certain degree of risk. The degree of risk acceptable in an operation is a command decision. As FM 34-1 points out: "Intelligence reduces uncertainty on the battlefield, but it cannot eliminate it entirely. The commander will always have to accept some risk."[50]

After World War II, the Secretary of War convened a board to examine military intelligence operations. The board stated:

> There has been, at all levels, a lack of understanding of the proper function of intelligence. Primary emphasis has been on furnishing conclusions as to enemy intentions rather than on presenting facts bearing on enemy situation and capabilities. Commanders have expected the intelligence sections to tell them what the enemy was going to do, instead of presenting the facts from which the commander might make the necessary determinations or assumptions, and the intelligence officers have attempted to meet the requirement. In essence, the process has been one of transferring an important command responsibility from the commander to his G2.[51]

Our doctrine needs to be consistent and clear. The sixth lesson is - - it is **the responsibility of intelligence officers to deliver to their commander, "timely, objective, useable, reliable, complete, accurate and relevant" intelligence <u>that is based on an enemy's capabilities</u>.**[52] Intelligence, like our doctrine states, must tell a commander what an enemy is doing and what he can do.

The seventh lesson has to do with the relationship between a commander and his intelligence officer. When an intelligence officer is asked to predict the most likely course of action, it is critical that a commander understand how reliable the prediction is, or stated another way, how much risk is involved. General Colin Powell, as the Chairman, Joint Chiefs of Staff told his J-2, "Tell me what you know; equally important, tell me what you don't know, and then tell me what you think."

Doctrinally, we expect our intelligence officers to predict for commanders the enemy's most likely course of action. This is incorrect; intelligence officers have a staff responsibility to assist the commander in this endeavor. Prediction, identifying the enemy's most likely course of action, does not transfer a commander's responsibility to assess and accept risk. The seventh lesson is that **it is a commander's responsibility to ultimately decide the enemy's most likely course of action.**

Lesson number eight makes your **commander's area of interest the area of interest to the G-2 section.** Third Army paid attention to their northern flank and was therefore prepared to counter the German offensive. "Even though the enemy buildup was not on the Third Army front, it was of vital importance to our mission. It was a hard and fast rule in Patton commands that we overlap other areas sufficiently, intelligence-wise, to protect our flanks."[53] Our doctrine today states: "Area of Interest: In the context of IEW operations, the AI is the AO [area of operations], the battle space, and the regions beyond the battle space. IEW operations directed at the AI attempt to identify enemy forces or other potentially hostile forces outside the battle space which could jeopardize current or future operations."[54] The same will hold true for the AAN. With an Army based in the United States and the need to project power globally, commanders will require intelligence from where their

units are based, all the way to where their units will be employed.

The ninth lesson is **that you cannot analyze another headquarters' analysis.** Too often today, young analysts 'cut and paste' intelligence articles together for their commanders. Although Third Army did not conduct collection operations opposite First Army's VIII Corps, COL Koch and his staff did analyze the 'raw' information available and reached their own conclusions for their commander. "While we had no reason to challenge the competence of intelligence received from other quarters," COL Koch said, "we were simply minding our own business in analyzing and interpreting such reports in the light of our own needs."[55]

A final and tenth lesson has to do with the study of history and understanding the art of intelligence. The ability to understand how to bring to bear the intelligence battlefield operating system is complex. Understanding the relationship between the various steps in the intelligence cycle is difficult. In the AAN, with all of the technological innovations that will assist in the conduct of intelligence operations, it will still be the human element, based on human experience, that will produce intelligence. Today in the Army, there are few "all-source" intelligence officers who have the experience and can leverage the entire intelligence community on

behalf of their commanders. Experience can be gained over time and through the study of history. The final lesson is that the study of history, primarily **historical intelligence operations, teaches valuable lessons to the intelligence professional.**

CONCLUSIONS

Technology will provide new tools that will improve the science of military intelligence. However, technology will not drive future intelligence operations. Well-trained military intelligence professionals, who understand intelligence doctrine, the intelligence battlefield operating system and the needs of their commanders, will use their intuitive skills to drive future intelligence operations. History teaches the military intelligence professional valuable lessons that can serve as cornerstones in future operations. This paper identifies ten key lessons from intelligence operations prior to the Battle of the Bulge, that are cornerstones upon which the professional intelligence officer can depend in a volatile, uncertain, ambiguous, and complex world.

The ten key lessons are: one, in order to plan any operation intelligence comes first; two, IPB remains a critical analytical methodology; three, commanders must know everything intelligence can determine to satisfy their requirements; four, today, in order to support future operations, large databases of

information need to be collected, evaluated, processed and stored; five, evaluation needs to be a separate step in the intelligence cycle; six, intelligence professionals are responsible for delivering to their commanders timely, objective, useable, reliable, complete, accurate and relevant intelligence that is based on an enemy's capabilities; seven, it is a command responsibility to decide the enemy's most likely course of action; eight, intelligence professionals need to focus on their commander's area of interest; nine, you cannot analyze another headquarters analysis; and finally, ten, the study of historical intelligence operations teaches valuable lessons to the intelligence professional.

History indicates that doctrine must be definitive enough to guide intelligence operations, and yet be flexible enough to address a variety of diverse situations. Army intelligence must use its doctrine to drive technological innovations to support future operations.

COL Koch summarized by saying:

> General Patton appreciated the fact that collection of intelligence took time. That intelligence was not a matter of crystal gazing and that no occult power could be called upon to give the answers. He knew that there was nothing mysterious about it, nothing but conscientious application and hard work.[56]

Word count = 5,696

ENDNOTES

[1] Carl von Clausewitz, On War, ed. and trans. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976), 117.

[2] The Army After Next is an Army that is fielded and ready to fight our nation's war and respond to other contingencies in the 2025 timeframe.

[3] LtGen Minihan, Director, National Security Agency, in numerous public presentations.

[4] Department of the Army, Operations, Field Manual 100-5 (Washington D.C.: U.S. Department of the Army, June 1993), 1-1.

[5] Department of the Army, Intelligence and Electronic Warfare Operations, Field Manual 34-1 (Washington D.C.: U.S. Department of the Army, 27 September 1994), 2-15.

[6] FM 100-5, 1-1.

[7] Brig. Gen. Oscar W. Koch and Robert G. Hays, G-2: Intelligence for Patton (Philadelphia: Whitmore Publishing, 1971). This is a superb book and an easy read for those who are interested in military intelligence history. One copy is maintained in the Military History Institute at Carlisle Barracks, Pennsylvania.

[8] Ibid., xvi.

[9] Ibid., 53.

[10] Ibid., 53-54.

[11] Ibid., 56.

[12] Ladislas Farago, PATTON: Ordeal and Triumph (New York: Dell, 1963), 551-552. Although Patton was not in complete agreement with his G-2, he recognized that Koch was the type of G-2 he needed. Patton kept Koch as his G-2 throughout the war.

[13] Koch, 82.

[14] Ibid., 83.

[15] Ibid., 84.

[16] Thomas E. Griess, ed., Atlas for the Second World War: European and the Mediterranean, The West Point Military History Series, (Wayne, NJ: Avery Publishing Group), 70. Reproduced with permission of the publisher via the Copyright Clearance center, Inc.

[17] Koch, 85.

[18] Ibid., 86.

[19] Ibid., 89.

[20] Headquarters, Third United States Army, G-2 Periodic Report No. 186, 14 December 1944 (Carlisle, PA: Military History Institute), 5. Referred to as G-2 Periodic report No. 186.

[21] Omar N. Bradley, A Soldier's Story (New York: Henry Holt and Co., 1951), 462.

[22] F.W. Winterbotham, The Ultra Secret (New York: Dell Publishing, 1974), 11-31.

[23] Charles B. MacDonald, A Time For Trumpets: The Untold Story of the Battle of the Bulge (New York: Bantam Books, 1985), 60.

[24] Ibid.

[25] Ibid., 62.

[26] Winterbotham, 255.

[27] Ibid.

[28] MacDonald provides a background on the G-2s at 12th Army Group and First Army as well as an overview of the various intelligence disciplines and what they provided to commanders and their G-2s.

[29] Bradley, 462.

[30] Ibid., 463-464.

[31] Omar N. Bradley and Clay Blair, A General's Life (New York: Simon and Schuster, 1983), 353.

[32] Koch, 109.

[33] Ibid., 109-110.

[34] G-2 Periodic Report No. 186, 9.

[35] Koch, 110.

[36] Colonel Robert S. Allen, Lucky Forward: The History of Patton's Third U.S. Army (New York: Vanguard Press, 1947), 207.

[37] Koch, 9.

[38] Department of the Army, Intelligence Preparation of the Battlefield, Field Manual 34-130 (Washington D.C.: U.S. Department of the Army, 8 July 1994), 1-1.

[39] Koch, 10.

[40] Ibid., 9-10.

[41] Ibid., 133.

[42] Department of Defense, Joint Doctrine for Intelligence Support to Operations, Joint Pub 2-0 (Washington D.C., 5 May 1995), II-3. Pub 2-0 defines all of the parts of the intelligence cycle for those who are not familiar. Referred to as Pub 2-0. FM 34-1, 2-16, reflects the same intelligence cycle.

[43] Pub 2-0, II-5.

[44] Department of the Army, Information Operations, Field Manual 100-6 (Washington D.C.: U.S. Department of the Army, August 1996), 1-9.

[45] Clausewitz, 84.

[46] Koch, 110

[47] Ibid., 109.

[48] FM 34-1, 2-7.

[49] MacDonald, 48.

[50] FM 34-1, 1-14.

[51]Assistant Secretary of War for Air Robert A. Lovett, "Report of Committee Appointed by the Secretary of War to Study War Department Intelligence Activities." memorandum for Secretary of War, Washington, D.C., 5 December 1945, 4. Also referred to as the Lovett Board Report. A copy of the report is maintained at the Military History Institute, Carlisle Barracks, PA. In addition, see Major Douglas A. Campbell and Major Robert W. McKinney, "Predictive Intelligence An Old Lesson Unlearned," Military Review 70 (August 1990): 52.

[52] Pub 2-0, IV-15.

[53] Koch, 110.

[54] FM 34-1, 4-5.

[55] Koch, 110.

[56] Ibid., 166.

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