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A Historic Failure in the Social Domain

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Abstract:

This is a Social Domain case study using one of the costliest intelligence failures in US military history, the December 16 1944 surprise attack in the Ardennes Forest. The publication of Network Centric Operations Conceptual Framework Versions 1.0 and 2.0 provide a framework for experimentation that can also be used for historical examinations which serve to explain the Social Domain and the components: Interactions, Shared Information, Shared Sensemaking, Awareness, Understanding, and Collaborative Decisions. This case study uses the December 1944 failure of the 12th United States Army Group to (1) make sense of the information gathered in the weeks preceding the attack, (2) to draw the correct implications, and (3) to mitigate the risks of the possibilities. The study finds that inter-personal communications and understandings and personality played a dominate role in the failure. In the presentation the audience will be invited to follow along using the worksheet included as appendix 2 and bin the contents of Ultra and Magic and other signals intelligence, and accounts of the social context of the exchanges of information and the collaborations between the principals on as indicators of one or more of the components of the social domain.

Introduction

The surprise achieved by the German attack in the Ardennes Forest against the U.S. V and VIII Corps on December 16, 1944 was a huge exception to the intelligence advantage that the Ultra and Magic programs provided the Allied forces in WWII. The Allied commander responsible for the sector and forces targeted by the Ardennes Offensive was General Omar Bradley. Prior to the public disclosure of the Ultra program, General Bradley accepted blame for his forces being surprised but also explained himself offering the "calculated gamble"¹ and the "insane opponent"² excuses. After the existence of Ultra was revealed in 1975³ General Bradley put forth the 'over reliance on Ultra' and "the shortage of enemy encoded radio traffic" as explanations for the surprise inflicted on his subordinates and the inhabitants of the Ardennes

Forest. This paper examines General Bradley's explanations using the Social Domain concept as described in the Network Centric Operations Conceptual Framework Version 2.0⁴ and through the participation of the audience concurrently illustrates the Social Domain as well.

This intelligence failure is instructive in the light of recent studies by and on the behalf of the United States Department of Defense Command and Control Research Program (www.dodccrp.org) and the Office of Force Transformation (<http://www.of.t.osd.mil/>) The work of the CCRP has established command and control to be a productive area in which to significantly increase the mission effectiveness of the military via a transformation that is to be made possible by advances in technology. The expectation is that the historic pattern of "empowerment, conspicuously marked at critical junctures by the synergistic combination of a particular technological advance and an innovative social adaptation that together eliminate a debilitating constraint" resulting in great productivity gains will be repeated in the case of command and control in the Information Age.⁵ The CCRP has published a series of books that articulate a vision of the anticipated military transformation and an approach to achieving it. The office of Force Transformation has produced a conceptual framework intended to guide experimentation. The framework appears to be useful for analysis of historical cases such as the intelligence failure of December 1944.

The framework begins with first recognizing that military organizations, personnel, and equipment and the activities thereof are located in four domains: the physical, information, cognitive, and social domains. The physical is the environments of land, sea, air, and space where offense, defense, and maneuver take place. The information domain is the creation, manipulation, value-adding and sharing of information. The cognitive domain is the perceptions, awareness, understanding, decisions, beliefs, and values of the participants."⁶

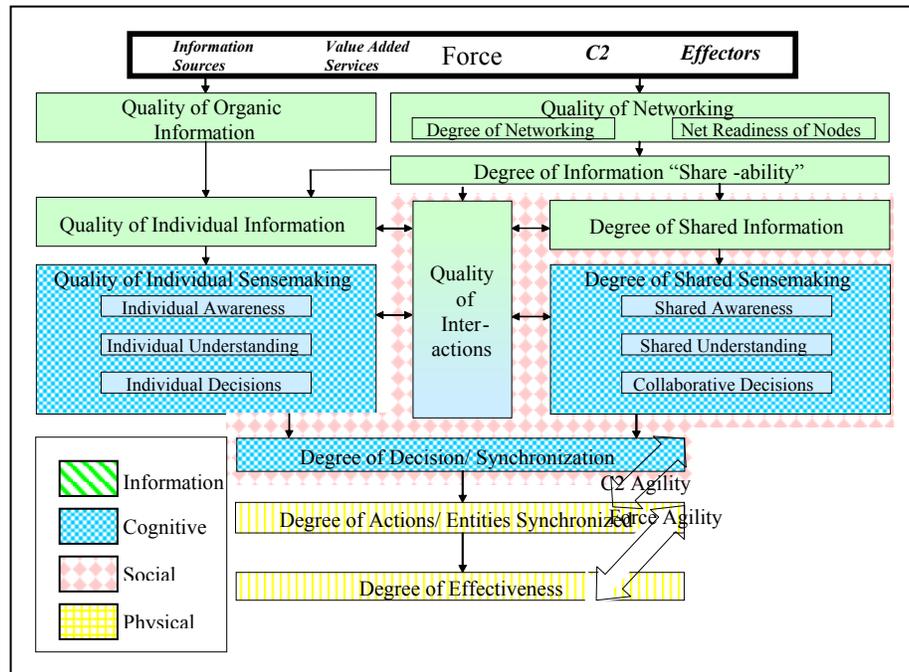


Figure 1: Network Centric Operations Conceptual Framework ⁷

The social domain is the interaction, information exchange, awareness, understandings and collaborative decisions of commanders and staff. “It overlaps with the information and cognitive domain but is distinct from both. Cognitive activities by their nature are individualistic; they occur within the minds of individuals.” ⁸ These activities are sensemaking. “Moving from individual sensemaking to shared sensemaking involves the quality of interactions among different personnel and elements of the [command and control] system.” ⁹ “Shared sensemaking (depicted in figure 1), the process of going from shared awareness to shared understanding to collaborative decision making, can be considered a socio-cognitive activity in that individual’s cognitive activities are directly impacted by the social nature of the exchange.”¹⁰ “Sensemaking addresses those activities carried out at both the individual and collaborative level to (1) “make sense” of the information available within the network in the context of experience/expertise, (2) to draw from this information specific implications regarding potential threats and opportunities that require responsive action, and (3) to organize these inferences into actionable knowledge that can frame key decisions.”¹¹

The Conceptual Framework provides a means for restating the Allied Intelligence failure of December 1944 as the 12th Army Group failure to (1) make correct sense of the information gathered, (2) to draw the correct implications, and (3) to mitigate the risks of a possible German offensive in the Ardennes. This paper identifies the causes of these failures as lying within the social context of inter-personal communications and understandings and personality.

General Bradley followed up the public disclosure of Ultra with his second autobiography, **A General's Life**, in which he noted the failure of Ultra and the related staff failure to warn him of the December Ardennes Offensive:

One major fault on our side was that our intelligence community had come to rely far too heavily on Ultra to the exclusion of other intelligence sources. Ultra had become virtually infallible. But Ultra depended on radio intercepts. ...the German Army had less need of radio communications and more often used secure ... land lines. Moreover, it apparently did not occur to our intelligence community that the Germans could plan and launch an operation with complete radio and telephone silence imposed.¹²

General Bradley claimed the intelligence community could not entertain the idea of the Germans hiding attack preparations with radio and telephone silence. He claimed that Ultra was too heavily relied upon, but at the same time Ultra intelligence had dried up because of the German use of landlines.

The Western Allies had available three direct sources of communications intelligence: two German and one Japanese source. The two German sources included the standard traffic analysis and interception of poorly disciplined radio transmissions from all across the front and the Ultra interceptions and decodes. The Ultra program intercepted, decoded, and distributed German Morse code Enigma encoded messages used by units of all types from all services and the "Fish" (Geheimfernshreiber) encoded teletype messages used by Hitler, the major HQ's, government offices, and the offices of the German state railroad, the Reichbahn. The third was the Magic program that intercepted, decoded and analyzed first the Japanese

diplomatic code and eventually the Japanese army and naval codes.¹³ Because the encoded messages were authentic and of the highest sensitivity and urgency the Ultra and Magic interceptions and decodes became invaluable. General Bradley summarized the impact of Ultra and Magic in his autobiography. He wrote:

As a result of information gained from Ultra and Magic, as well as aerial reconnaissance and other sources, we were extraordinarily well informed about the enemy, his probable intentions, his power and weapons and his weaknesses and vulnerabilities. Seldom in history has an opposing army known so much about it's opponent. ¹⁴

...my G-2's and Ultra reps became highly skilled at interpreting the important material in the (*Ultra*) data and thereafter presented it to me daily. ... Added to the massive flow of Ultra from the Germans was an additional bonus: A Magic source in the ETO. This was Japan's ambassador in Berlin, General Baron Hiroshi Oshima. ... Oshima passed to Tokyo the results of his diplomatic interviews with Hitler and his staff. The importance of Oshima's contribution to our ...intelligence picture may be inferred from an excerpt from a letter George Marshall wrote in the summer of 1944, "Our main basis of information regarding Hitler's intentions in Europe is obtained from Baron Oshima's messages from Berlin reporting his interviews with Hitler and other officials to the Japanese government."¹⁵

The evident role of the Ultra and Magic programs would make it easy to agree with General Bradley's complaints regarding Ultra. But let's first examine how Ultra intercepts were used.

Ralph Bennett's **Ultra in the West** describes how Ultra was prepared and what of Ultra was delivered to the supported HQ's. Mr. Bennet was a duty officer in Hut 3, the office responsible for the analysis and distribution of air and land forces intercepts.¹⁶ Mr. Bennett reports that the intercepts were not delivered as just translations of the message texts, which were more often than not barely meaningful. For each decode the Hut 3 staff prepared a commentary providing context and the probable background held in

the minds of the sender and receiver. The comments were then annotated onto the decoded message. The Ultra's were then sent to the concerned HQ's by the Special Liaison Unit (SLU) radio and teleprinter network. At the supported subscriber a SLU section received the messages.¹⁷ The commands in the field, having received the economical radio messages were deliberately left to conduct the same analysis process performed in Hut 3 in order to give the intercept the context and background needed to make good use of the decode.¹⁸ At the subscriber HQ's there was a difference from the process in Hut 3. The subscribers were free to refer to and had available all other intelligence sources.

In order to make use of the intercepts, the subscribing commands were given small teams of officers or a single officer assigned to the SLU that worked directly with the supported staff¹⁹. Three of these teams provided after action reports in the form of memoranda to the military attaché at the US Embassy in London. These memoranda confirm Mr. Bennett's account, describe the process of integrating newly received Ultra with the Ultra previously received and all other source material, and describe both unique and common experiences with the use of Ultra intercepts in the separate commands.²⁰

Ultra in the 12th Army Group

LTC.'s Charles R. Murnane and Samuel M. Orr operated an office called the Estimates and Appreciation Group and were responsible for receiving and collating Ultra with all other sources and for formulating estimates of the enemy situation and capabilities for the 12th Army Group. ²¹

The first daily Ultra briefing was a General Officers briefing that began at 9:45 AM after the "Open" daily staff briefing and was attended by General Bradley, the Chief of Staff, the four principal staff officers, the chief of Intelligence Branch and the commander and the operations officer of the 9th Air Force. The briefing would proceed in a proscribed order starting with the last 24 hours of Ultra. Then the Chief of the Intelligence Branch highlighted enemy intentions or capabilities as revealed by **all sources**. This was followed by discussion where General Bradley expressed his views on the current situation and his operational plans. Then General Bradley requested comments from the attendees. Last, the 9th AF

commander consulted on the plans for tactical air support or target programs. The needs of the ground forces were announced and the appropriate air support or tactical bombing was agreed upon.

The second daily briefing took place at 11:30 AM and was less formal. In attendance were the G-2 Air, the G-3 Air, the Deputy G-2, the Deputy G-3, Chief of Order Of Battle Branch, Chief of Terrain and Defense Branch, Chief of Supply and Transportation Branch, a member of the G-2 Special Plans, and the Signals Officer. The "last 24 hours" was repeated and then comments on the meanings of the messages were invited. The Chief of Intelligence Branch reviewed the current G-2 Estimate of Enemy Situation and Capabilities and invited comments from the branch chiefs. In addition to attending the briefings, branch chiefs visited the Ultra room throughout the day to review Ultra intercepts in detail and to discuss with the Ultra team the messages of particular interest.

In contrast to the army commands the chief of the 12th Army Group Order Of Battle section, having access to Ultra, was able to guide the interpretation of open sources, control the tenor of the periodic intelligence summaries, and safeguard against dissemination of reports that were contrary to facts established from Ultra information.²²

Ultra in the Third Army

The principal Ultra specialists at Third Army were LTC Melvin C. Helfers, 6 June, 1944 - 12 March, 1945 and Captain George C. Church, who provided the report having served from March 18 to May 15, 1945.²³ The Third Army Ultra liaison officer's duties were the interpretation of Ultra to authorized officers by keeping a portable situation map posted with Ultra and open source information, presenting a regular morning briefing, and by presenting operationally important items to the G-2 upon occurrence.²⁴

The Ultra briefings were held in the office of the Chief of Staff or the Deputy Chief of Staff every morning at 0900 and attended regularly by General Patton. the Chief and deputy Chief of Staff, the G-2, G-2 Executive Officer, Asst. G-2, G-3, Signals Officer, and the commander of XIX Tactical Air Command.²⁵ Integration of Ultra into the command and control process of Third Army was evolutionary. Initially Ultra

material was presented directly to the G-2, Colonel Koch either orally or in writing. The German counter-attack at Avranches, August 1944, was the turning point prompting the institution of the special morning briefing. Capt. Church found that the Ultra intelligence was fully considered in the operational plans of Third Army. The Third Army G-2 viewed Ultra as a check on information from open sources. The G-2 had barred the Order of Battle officer from access to Ultra so that the enemy dispositions would be developed from all other sources without the influence of Ultra. Then the G-2 would compare the results against Ultra.²⁶

Ultra in the First Army

The report of Lieutenant Colonel Rosengarten, the principle Ultra representative in the First United States Army (FUSA), provided a glimpse of the dysfunctional role the FUSA G-2, Col. Monk Dickson played in First US Army operations and consequently establishes a view of Ultra having had a limited use in the FUSA command.

Ultra briefings to the Commanding General were less thorough than those seen in the other commands. In the FUSA, Col. Dickson himself personally integrated the Ultra with all sources. Col. Dickson initially presented Ultra material orally, twice daily to the CG and the Chief of Staff. The signals were shown un-edited, unsorted, and without comment. It was early December that Col. Dickson began accepting the preparation of a twice-daily summary of the Ultras and an explanation of whether the situation had changed and why. Col. Dickson then personally read the document to General Hodges. The FUSA Ultra representative did not have the direct contact with the CG that his counterparts in the other commands had. But on the other hand LTC. Rosengarten was more closely integrated into the G-2 staff work than his peers in the other Armies, having had additional duties entailing the basic work of an army intelligence staff.²⁷

Rosengarten established an objective measure for the utility of Ultra. He poised the question, "did the signals (*the Ultra intercepts*) sent out at the time resolve or confuse the issue" regarding the enemy

situation and capabilities, in the course of the combat operations? His answer was, that "In the main, Ultra did resolve the issues". But he notes that only by blending it with all other sources did it do so. Additionally he found the tactical nature of the Army operations limited Ultra application.²⁸ Furthermore he pointed out; the effective use of the Ultra was complicated by the "personality of the G-2 at FUSA and to his relatively unimportant voice in the Army cabinet".²⁹

In this memorandum Rosengarten explains Col. Monk Dickson's famous Intelligence Summary #37 of December 10, 1944. According to Rosengarten the December 10th Summary, was intended "to warn that, despite the fighting that had taken place during the previous three weeks, the 6th Panzer Army west of the Rhine was uncommitted and, therefore, was available for a counter offensive...".³⁰

This review has established that Ultra was thoroughly and professionally integrated into the command and control process of Third Army. In the 12th Army Group all planning sections had Ultra thoroughly integrated into the applicable functions. Furthermore both operations and intelligence principals collaborated in the interpretation of the Ultra intercepts, the integration with all sources, and in judging the import of each intercept. The 12th Army Group Commander was briefed on Ultra every day and he participated in judging the meaning of the messages. In the FUSA, Ultra did measure up to reasonable expectations even if circumstances within the command reduced the effectiveness of the intelligence staff during the critical period of German preparations for the Battle of the Bulge.

Furthermore this review of Ultra in the field commands establishes that over reliance on Ultra was held in check by the nature of the raw Ultra decodes. The decoded intercepts required context and background from all intelligence sources to make sense of the messages. The good sense of the FUSA and Third Army G-2 officers and the fluid nature of army level operations made it impossible for the intelligence staffs to work only with Ultra material. General Bradley wrote, "One major fault on our side was that our intelligence community had come to rely far too heavily on Ultra to the exclusion of other

intelligence sources. Ultra had become virtually infallible..." The documented processes and limitations refute the claim.

General Bradley continued his indictment with, "But Ultra depended on radio intercepts. ...The German Army had less need of radio communications and more often used secure ... land lines." To the contrary, Mr. Bennett reported that over 11,000 Ultra's were sent out by radio to the field commands between October 1, 1944 and January 31, 1945, half of which concerned the western front. This amounted to a daily average of 40 to 50 Ultra intercepts.³¹ Regardless of the question concerning decreasing number of intercepts this does not indicate German non-use of presumed secure radio links for sensitive messages.

General Bradley's concluding statement, "...Moreover, it apparently did not occur to our intelligence community that the Germans could plan and launch an operation with complete radio and telephone silence imposed", also does not bear up to the record. Ignoring for a moment that the Germans did not succeed in conducting preparations in total radio or phone silence, there is plenty of evidence that the intelligence community could entertain the idea that the Germans could and would at the first opportunity launch an offensive operation and without our communications intelligence detecting it.

On 12 November 1944, four days before the start of the major American November 16 offensive that was supposed to take the Allies to the Rhine, both SHAEF and First US Army issued estimates that identified an offensive enemy intention. The SHAEF Weekly Intelligence Summary #64, judged the German rebuild success (*meaning the establishment of strategic and tactical reserves and the reinforcement of the defensive line*) as preparation for the final showdown before the winter sets in.³² The First US Army Intelligence Summary of 12 November, 1944 stated, "it's a race against time, can the enemy complete his dispositions for his offensive prior to the launching of our attack (*the 16 November 12th Army Group Offensive*). With the approach of winter in the east, it is believed the enemy will stake all on an offensive in the west."³³ So, at HQ's both below and above 12th Army Group the German's intent to launch an offensive is anticipated.

The 17 November 12th Army Group G-2 Periodic Report contains a special annex reporting on the 9th Panzer Division and 15th Panzer Grenadier Division, 27 October, Peel Marshes successful spoiling attack.³⁴ This attack fell upon the eastern flank of Field Marshall Montgomery's 21st Army Group along the Noorder and Van Duerne canals half way between Eindhoven to the west and Venlo to the east. The attack drove 5 miles to the west in 2 days along a 10 mile front. The Peel Marshes region consisted of low-lying marshes criss-crossed with canals, natural streams, and drainage ditches. Terrain that was hardly suitable for mechanized forces.

The annex in the 17 November 12th Army Group G-2 Periodic Report concluded:

- a. With the lengthening nights and with limited air observation and photography during the day, the enemy has demonstrated that he can mass a large force - two divisions with up to fifty tanks - in an assembly area close to our lines without any of our sources becoming aware of it.
- b. Then taking advantage of the morning fog or haze he can attack and be on us with less than half an hours notice. These conditions and proximity of the wooded areas greatly increase the necessity for alert OP's, listening posts, air OP's, aggressive patrolling and defensive preparation for a variety of eventualities. Rapid, complete dissemination of each bit of information to the next higher echelon can frequently produce the picture of lurking dangers and avoid disaster. ...
- d. The German's selection of the swamps west of the Meuse as a spot to employ two of his best mobile divisions alert us to the fact that the enemy cannot be trusted always to attack according to the 'book'. He remains a clever, aggressive foe."³⁵

General Bradley claimed the view of his staff was that the enemy was now fighting by the book. General Bradley wrote in **A Generals Life** that, "The assumption that von Rundstedt was in charge and that future operations would more or less follow the textbook was universally held in the Allied high command. I am not aware that a single soul in authority believed otherwise."³⁶ The 17 November report

from Bradley's own G-2 staff declared for the record that large German attacks could be launched not according to the book and without any detection of the preparations.

General Bradley's claims regarding Ultra are not supportable. The intelligence staffs did not rely exclusively on Ultra, the Ultra traffic did not dry up, and he was generally forewarned that the Germans could launch an attack without detection. Furthermore Ultra and MAGIC as well as other sources did provide specific warning.

Mr. Bennet suggests that the file of Ultra messages "provides ample grounds for questioning the prevailing view that the Germans would remain quiescent until the next big Allied attack and for urging the operational commanders to bear constantly in mind that to not act upon it might be to expose themselves to very great dangers."³⁷

Altogether there were 29 decoded Enigma and Fish messages and groups of messages intercepted between 18 September and December 15 1944 concerning preparations for the offensive. Furthermore there were two series of Magic intercepts of the Japanese Ambassador's reports on his personal meetings with Hitler September 4 and with the Foreign Minister von Ribbentrop November 15 1944 during which the intention to launch an offensive is clearly stated.

Report two of Baron Oshima's meeting with Hitler on September 4 was decoded 8 September and distributed as SRS 1419. The Baron quoted Hitler as saying, "From the beginning we have realized that in order to stabilize our lines it would be necessary to launch a German counterattack... In that attack it is planned to employ Army Group G. ...The offensive I just mentioned will be only for the purpose of stabilizing the present front. However when the current replenishment of the air forces is completed and when the new army of more than a million men is ready, I intend to combine the new units with units to be withdrawn from all possible areas and to open a large-scale offensive in the West." The Baron asked when, Hitler replied, "at the beginning of November."³⁸

Baron Oshima's met with German Foreign Minister Ribbentrop on November 15. The first of his usual three reports on such meetings was decoded and distributed on 20 November as SRS 1492. This summary reported that Ribbentrop claimed Hitler's health had returned and Hitler had reengaged in operational planning and rebuilding the German air force. Hitler is opposed to defense and war of attrition. There is no change in his intentions to undertake a large scale offensive as soon as possible. No definite time or method has been decided on.³⁹

The Baron's second report on 23 November which included the full text of the meeting was distributed as SRS 1495. Baron Oshima asked, had Hitler's intentions changed since the September 4 meeting. Ribbentrop answered, "No. At the moment I can unfortunately tell you nothing... I believe that Germany's plans as in the past are based primarily on an offensive in the West, although the timing, method, etc, cannot now be precisely determined." After citing the effectiveness of the current defense the Baron asked if it wouldn't be wiser to fight a war of attrition. Ribbentrop declared, "Absolutely not! The Chancellor believes we cannot win this war by defense alone and has reiterated his intention of taking the offensive right to the bitter end."⁴⁰

The third report with the Baron's 21 November personal analysis was sent out as SRS 1496 decode 24 November. "In the long run, Germany's leaders confronted with the fact that the battle lines have contracted virtually to the prewar boundaries... will have no choice but to open a road of blood one direction or the other. The chance may come after the enemy's overhasty [*current*] offensive has been repulsed."⁴¹ Considering General Marshall's judgment that the Baron provided the best source on German intentions the November intercepts had to be ominous news.

One had only to look through the Enigma and Fish decodes and all the other sources for sign's of preparations to test the Baron's analysis. The decoded messages are listed in order of occurrence and referenced in the appendix along with the context of related events. There are several major developments that can be followed from September to December 1944.

First is the creation in September of the 6th Panzer Army under Hitler's direct control. The creation of a panzer army was a significant command and control decision tied directly to a specific need. Creation of the Sixth Panzer Army was the first significant action showing that preparations for Hitler's planned offensive had begun. The offensive nature of the command was confirmed when Ultra revealed the command was given to Waffen SS General Sepp Dietrich. He was one of the original Nazi Party members, had been entrusted with some of the most infamous Nazi Party actions, had established a reputation for bravery and for being a driving and tenacious division and Corps commander.⁴² Furthermore Ultra revealed the rebuild program for the panzer units, reported the progress, and the panzer unit assignments to the Sixth Panzer Army as well. Finally Ultra reported the movement to the west bank of the Rhine in November and even the establishment of radio listening silence in the 6th Panzer Army on 10 December, a classic sign for pending attacks.

Ultra reported the Jaegeraufmarsch of the Luftwaffe units. This was the Luftwaffe term for building up of air strength to support an operation. The term was also used in German messages discussing the Allied build up for the invasion of France and was understood by the Ultra analysts. This is doubly significant because the assembly was a complete reversal of the recently implemented Der Grosse Schlag (The Big Blow) plan for the air defense of the Reich. The Big Blow instituted the denuding of the eastern and western fronts in order to achieve a great concentration of fighters over Germany.⁴³ The units included in the Jaegeraufmarsch neither aided in the air defense of Germany nor participated in the missions supporting the western front prior to 16 December.

The fielding of reconnaissance versions of the jet fighters and bombers in the Fall of 1944 revived German aerial reconnaissance on the western front. Ultra intercepted the mission requests for targets supporting offensive missions. Missions started on 29 November targeting the Meuse River crossings were switched to the Arado 234 jet bomber/reconnaissance aircraft on 8 December.⁴⁴ This was a diversion from the urgent port and airfield missions.

These intercepts and other sources of intelligence were not entirely lost on the American commands. SHAEF, 12th Army Group, First and Third US Armies were all concerned about the purpose of the Sixth Panzer Army. On 21 November, five days after the start of the 16 November Offensive, 12th Army Group published Intelligence Summary No. 15 for the week ending 18 November.

So far the enemy has not produced the counter-attack or counter-offensive punch which Sixth Panzer, with perhaps 500 tanks, is capable of delivering. The delay in employing this Army may have been due to transport difficulties or supply problems but it seems more likely that the enemy believed that conditions were not yet ripe for its employment. The necessity for launching a strong counter-attack to stop an Allied thrust toward Cologne or the Ruhr has not yet arisen. On the other hand if the enemy intends to launch a major counter-offensive against any Allied salient East of Aachen designed to reestablish the Siegfried Line positions or to cripple American forces in this area, the most opportune time will presumably come when our attacks have spent their forces and our supplies are dwindling. The enemy is thus in the position of holding his punch and awaiting developments.

If our attack can be contained by the infantry and the tactical reserves that have been committed, it is obvious that the enemy will have no necessity for employing his strategic panzer reserve in an essentially defensive counter-attack. He will then be in a position to launch a major counter offensive or move some or all of the elements of Sixth Panzer Army to Army Group G or to whatever vital area is seriously threatened. However...it is unlikely that he will move Sixth Panzer Army from this area...⁴⁵

On 7 December the SHAEF G-2, Major General Strong, issued an estimate that "suggested the increasingly strong German reserve could be used by the German High Command to rupture Allied lines." He suggested, "a possible German objective might be to disrupt the overstretched US VIII Corps in the Ardennes" The SHAEF Chief of Staff, Lieutenant General Bedell Smith directed MG Strong to visit and brief General Bradley.⁴⁶

On the 9th of December the Third Army G-2 gave General Patton a special briefing pointing to the assembly of forces in the Eiffel (the forest area where the German units assembled for the Ardennes attack) and pointed out the possibilities. Opposite the FUSA VIII Corps were four German divisions in the line and five divisions in reserve representing German forces 2.5 times the strength of Germans opposing Third Army, three and half more divisions then opposed the entire Seventh Army in 6th Army Group to the south, and one division less then the division equivalents in the line opposing all of FUSA. In response Patton authorized limited contingency planning!⁴⁷ The next day the Third Army G-2 published on December 10th in Intel Summary #186 - "Germans probably intend to mount a spoiling offensive".⁴⁸ The same day the FUSA Weekly Summary #37 warned of an "all out counter offensive" predicting correctly as the objective, the annihilation of the First and Ninth Armies.⁴⁹

Immediately afterwards the 12th Army Group began to see the possibilities differently. On December 12th the 12th Army Group Summary tried to put a positive spin on the shallow gains on the ground and the tremendous casualties suffered by the Americans and the French Forces in the course of the November Offensive. The estimate saw the German units as about to dissolve away due to tremendous attrition⁵⁰

Only a short distance to the North East from the 12th Army Group HQ Forward in Luxembourg City the 4th Infantry Division held the front lines, an entirely different view from 12th Army Group prevailed. The 4th Infantry Division was the southern most division of the VIII Corps. The regiment on the division's left was responsible for the southern most sector of the upcoming German attack. On 13 December the G-2 4th Infantry Division briefed the division commander, Major General Raymond O. Barton on the large buildup in the area of Bitburg (near center of German assembly area). General Barton sent his G-2 to consult with 12th Army Group G-2 located just a short distance away in Luxembourg City. The information he brought

back caused General Barton to order all men back to their units from rest areas beyond regimental HQ's. On 15 December the General met with his regimental commanders to work up counterattack plans.⁵¹

On the 14th of December the SHAEF G-2, General Strong, briefed General Bradley on the SHAEF 7 December estimate. General Sibert repeated and defended the conclusion of the 12th Army Group 12 December estimate. General Bradley stood by Sibert and went on and said that he was, "aware of the danger" and had "earmarked certain divisions to move into the Ardennes should the enemy attack there." He dismissed MG Strong with the remark, "Let them come!"⁵²

The Germans did come just two days later. The First US Army chain of command and troops of the V and VIII Corps with the possible exception of the 4th Infantry Division were not prepared for the onslaught, much less warned to look for trouble⁵³ as was warranted by MG Strong's 14 December briefing, the First US Army December 10 Summary, the Baron Oshima November decodes, and the 17 November admonition of the 12th Army Group G-2 that the enemy could launch strong attacks without warning by any sources.

A review of one focused and five comprehensive books of the Ardennes Offensive show that during the period 13-15 December only 16% (4 of 24) of the cited front line reports concerning attack preparations or signs were forwarded to FUSA. Only one of those was forwarded to 12th Army Group. The reception given by the intermediate HQ's for most of the reports was lukewarm or skeptical.⁵⁴

The 28th Division was dead center of the VIII Corps zone. From 10 to 14 December Company A, 1st Battalion, 109th Regiment commanded by Captain Joe Soya occupied positions northeast of Bettendorf overlooking the Our River and the German lines on the extreme right of the Division sector. On the 13th of December his new battalion commander visited his company. In an interview by the author conducted in 1982 Lieutenant Colonel Joe Soya, retired, reported he tried to explain that the Germans were up to something.

He had just taken over the battalion and he came up and I said “we got a situation here where we are constantly being hit by reconnaissance patrols and they will not fight.” “They are strictly recon patrols and they disappear the minute you try to make contact with them. Secondly, all night long the minute it gets dark - they start shooting and the rumble of heavy equipment - tanks moving around in position and what not.” I said, “To me this means something is going on.” He said, “Captain, what’s the matter, are you getting nervous in the service.” And I got [*angry*]. I said, “Look Colonel I’ve been in this damn outfit since St. Lo. I’ve been a rifle company commander in combat since St. Lo, right off the beachhead. And this is 9 months, uh 6 months later, so don’t tell me I’m getting nervous. I’m just trying to tell you something that should be reported back to the S-2, to the G-2.” He said, “It can’t be, this is a quiet area.” I said, “OK - fine.” The next night, the next day we were relieved.⁵⁵

Soya’s company was relieved by I Company and went into regimental reserve with the rest of the 1st Battalion on 14 December.

The 114th Signal Radio Intelligence Company, one of eight SRI companies on the front, was responsible for monitoring the area in front of the US V Corps, the region through which the German 6th Panzer Army formations traveled south to the assembly areas. Jay Von Werlhof, then a Traffic Analyst in the Traffic Analysis (TA) platoon, provided an account of the radio intercepts in the August 2003 issue of *The Bulge Bugle*.⁵⁶

The attack was no surprise to the TA Platoon of the 114th Signal Radio Intelligence Company which had built up the Order of Battle map and identified several units of the Sixth SS Panzer Army between 9 -14 December. But not to embarrass himself or our company’s good reputation in the eyes of higher Command, our 1st Lieutenant refused to send in our first, and then even our revised, report on the build up especially between Monshau and Manderfield. In spite of identities and five point DF (*direction finding*) fixes on eight German divisions within that border, and three others to

the north as well as units in reserve, our lieutenant compared our data with obsolete reports from First Army, 12th Army Group and SHAEF that said there were only four divisions east of the entire Wall between Monshau and Echternach.

While the daily reports we sent to First Army Headquarters and SHAEF showed increasing activity east of the front, *(the)* 1st Lieutenant of our TA platoon, Thomas R. Doyle, refused to send our consolidated report and map of 11 December. He compared G2 records from First Army Headquarters with our data, and cited records that showed some of our identified units to be on the Eastern Front, destroyed, or in rest areas. 

Social nature of the collaborative and individual decision making

According to his biographer the Chief of Staff of the Army George C. Marshall had the opinion that General Bradley simply was not concerned about the enemy. Dr. Forrest C. Pogue, General Marshall's biographer, wrote the author regarding Marshall's thoughts on the German surprise. Dr. Pogue wrote, "he *(Marshall)* mentioned that they *(Eisenhower and Bradley)* said they were stretching their resources along the quiet front to get troops for an offensive." After Marshall finished remembering the reasons he was given for the surprise happening the General asked that the tape recorder be turned off. Dr. Pogue wrote, "He *(Marshall)* then added that he thought this was hindsight and that they *(were)* surprised." ⁵⁷ Dr. Pogue wrote that the taped interview was resumed with Marshall saying:

"There were those, I believe it was General Bradley, who felt that it was desirable for the Germans to attack there (in the Ardennes) and get themselves involved so that a better job could be done in other directions..."

Dr. Pogue added that General Marshall believed even this expectation was hindsight. "He *(Gen. Marshall)* didn't think that the Commanders were all that interested in German actions in October and November."⁵⁸

General Marshall had these insights because he knew the background of the 'calculated risk'. The idea of the "calculated risk" was actually born in September '44, fully two and a half months before the Battle of the Bulge. After the initial run up to the Siegfried Line and before the influx of new divisions and the arrival of 9th Army forces some portion of the line had to be lightly held. Having chosen to take the risks in the Ardennes, Bradley's offensive action to take Aachen in October and to attempt to reach the Rhine in November was possible. General Marshall, the Chief of Staff of the Army, received this explanation while touring the front in early October '44. During his visit he traveled along the VIII Corps Ardennes front and asked why the defense was so thin. He was told the commands had had to take a calculated risk, but the Commanders were not concerned. The terrain and the road net were thought unable to support an attack and that the state of the German forces was too bad to do anything.⁵⁹ Two and half months later the state of the German forces had dramatically improved rendering this assessment of the risk invalid.

If General Bradley was no longer concerned with German action what was he concerned with? The explanation is found in the Allied November 16th Offensive and the failure thereof. Planning for the Allied, November 16, 1944, all out offensive to the Rhine began with the Brussels conference of October 18 and ordered by the SHAEF Directive of October 28 directing a deliberate attack between 1 and 5 November along a 200-mile front to reach the Rhine River.⁶⁰

General Bradley wrote in his first autobiography that he expected to take 30 days to reach the Rhine if his forces quickly broke through the German defenses east of Aachen.⁶¹ Bradley noted, "Within five short weeks the winter attack had cost us 64,000 casualties, almost half of them on a 12 mile stretch of the First Army front... trench foot added another 12,000." This offensive, while partially successful for the First French and Seventh US Armies in the 6th Army Group, found 12th Army Group well short of the objective, the Rhine River. General Bradley in his second autobiography stated plainly

"To put it candidly, my plan to smash through to the Rhine and encircle the Ruhr had failed.

Patton, facing weaker forces, had advanced some forty miles to the Saur, but he could move no

further. Simpson and Hodges had bludgeoned their way through heavy German Forces some eight or ten miles to the Roer. ...in both sectors the Rhine River (and hence the Ruhr) lay well beyond our grasp. ... We were mired in a ghastly war of attrition."⁶²

The importance of the November offensive besides the military significance of the casualties and relaxed grip on the initiative was the new life given to Montgomery's vision for prosecution of the war and General Bradley's reaction. Bradley described the decision to launch the November offensive as resurrecting "once more the perennial dispute between Montgomery and me over the old issue of a single versus the double st."⁶³

Having had enough reflection on the coming disaster ordered by the implementing October 28 Directive Field Marshall Montgomery delivered on 4 November to General Brooke, the British Army Chief of Staff, a memo called "Some notes on the Present Situation." The subject was the October 28 Directive for the attack to the Rhine. He explained how because of the spread out attack "we have to face a winter campaign." Montgomery was convinced that the strategy would only prolong the war. He was enlisting General Brooke's aid in convincing Eisenhower to change the concept to one consisting of a huge left hook.⁶⁴

On 17 November Montgomery wrote Brooke, that SHAEF directives have no relationship to the battle. He wrote that Eisenhower did not know how to direct very large-scale operations. It was his opinion that the Allies were drifting into trench warfare. He saw that SHAEF Command and Control arrangements have Eisenhower at Rheims not paying attention to the fighting and Bedell Smith, SHAEF Chief of Staff, at Paris out of touch. The Field Marshall rhetorically posed the question if he won't assume control then Eisenhower should appoint someone who will. And then he noted, "He (Eisenhower) has never commanded anything before in his career; now, for the first time, he has elected to take direct command of very large-scale operations and he does not know how to do it."⁶⁵

General Brooke in his turn presented the letter to the British Chiefs of Staff and agreed, noting in his diary that "Eisenhower completely fails as a Commander." In his reply to Montgomery he instructed restraint adding that the solution would have to wait for the predictable failure of the November 16 offensive to occur.

"I feel pretty certain that the results of the current offensive will provide us with sufficient justification for requesting the American Chiefs of Staff to reconsider command organization and the present strategy on the Western Front." ⁶⁶

Once the failure came to pass, Montgomery renewed his efforts to remove General Eisenhower from operational control of the ground war and turn that control over to himself. On 26 November Montgomery and Brooke worked up an alternate command structure that would split the three army groups into two, subordinating Patton to Montgomery and placing Bradley in overall ground command. All of this was with the understanding that the left hook strategy executed by his command would be adopted. Brooke tried to enlist Churchill's support of the reorganization. He described the failure of the November Offensive to Churchill, as the "first strategic reverse" since Normandy began." He called Eisenhower's strategy as sheer madness. For his part Montgomery was to convince Eisenhower in a meeting on 28 November.⁶⁷ According to Montgomery Eisenhower agreed with him that the plan in the SHAEF directive had failed and that the Allies had suffered a strategic reverse. But Eisenhower would not agree with any restructuring of the commands.⁶⁸

Montgomery tried to confirm the conversations in writing with a letter to Eisenhower delivered on November 30th.⁶⁹ In the following days Eisenhower conferred with other American Generals and abandoned any adjustment of his thinking to Montgomery's positions.⁷⁰ General Eisenhower took the letter from Montgomery with him on a planned meeting with General Bradley on December 1. According to Bradley, the letter made Eisenhower very angry. After conferring with Bradley, Eisenhower wrote a reply praising Bradley, calling attention to Montgomery's mistakes, rejected ending Patton's Third Army and

Dever's Sixth Army Group attacks, and rejected Montgomery's suggestion for the running of the Maastricht Conference. Strategy (for closing on and crossing the Rhine and breaking into Germany) he wrote would be settled at the conference. ⁷¹

At the 7 December Maastricht Conference General Eisenhower rejected concluding the November Offensive was a failure, rejected all the points Montgomery claims he agreed to ⁷², and set 1 January as the date for a renewed allied offensive. ⁷³

Bradley saw the December 7th Maastricht conference as a high stakes meeting. "The whole future of the war and perhaps my professional future was at stake."⁷⁴ Eisenhower decided to compromise and to reinforce Montgomery's forces with one US army, give Montgomery the main attack mission, continue Patton's and Dever's attacks, and to retain the command setup. Bradley described the result as, "...a classic Eisenhower compromise that left me distinctly unhappy. It tacitly implied that my Twelfth Army Group offensive had failed. Now Monty had been chosen to make the 'main effort,' and henceforth my operations would be "supporting".⁷⁵

By this point the adversarial relationship between General Bradley and the Field Marshall had become personal as well as professional. Besides the strategy disagreement, Bradley took offense at being treated as a "poor country cousin", at Montgomery's snubbing of Eisenhower, at having risked capture or death as a consequence of one such incident, and at having his career put at risk as well as being angered by Montgomery's incorrect decisions at the Falaise Gap and regarding the delayed opening of the port of Antwerp. ⁷⁶ LTG James M. Gavin, then a Major General and commander of the 82nd Airborne Division, wrote about the Americans' relationship with Montgomery.⁷⁷

To many Americans, Montgomery's manner was imperious, his demand for supplies insatiable, and his addiction to the set-piece battle incurable. He gave many Americans the impression that he was teaching the former colonials how to fight a war, and at the same time he was quite willing to use their

lives as well as their supplies and transport while doing so... Montgomery's idiosyncrasies and his so-called flair irritated many Americans. It was almost embarrassing at times to hear what was being said about him in some of the higher American commands.

Montgomery was not happy with 7 December conference either and reported to Brooke that two attack efforts were still a recipe for disaster. He pleaded with Brooke, "If we want the war to end within any reasonable period you have to get Eisenhower's hand taken off the land battle. I regret to say that he just doesn't know what he is doing. And you will have to see that Bradley's influence is curbed." Brooke invited Eisenhower and his deputy British Air Marshall Tedder to a conference with the British Chiefs of Staff and Churchill on December 12 to explain the plan. Eisenhower met alone with Churchill and the entire British Chiefs of Staff on December 12th and he recited the December 7th plan, an extension of his October 28 Directive, but did not convince the Chiefs. General Brooke stated that Eisenhower's plan, already having violated the most important principle of warfare, the concentration of forces, has already brought about the present failure. After siding with Eisenhower in the meeting Churchill afterwards directed Brooke on the 13th to prepare a report against the plan thus taking the initial step to get the Combined Chiefs of Staff to overrule Eisenhower and adopt Montgomery's offensive and organization concepts.⁷⁸ The failure of the November 1944 offensive had precipitated a crisis within the Allied Coalition.

The direction of the western campaign against Germany had become hostage to a major rift on the personal and professional level between the two most prominent of the three Allied Army Group commanders who also were leading principals of their respective nations' military forces. General James Gavin described the coalition crisis.

Confronting the Supreme Commander in early September was one of the most difficult dilemmas that a general commanding coalition armies must face. It was made up of part national pride, part doubts about the actual ability of a senior commander (*Montgomery*), strong personalities that were in conflict, and the whole compounded by a seriously deteriorating logistics situation. ... Geography and the

realities of harbors, docks, roads, railways, and distances all favored Montgomery's making the main offensive. But equally real as the logistics constraints were the political and military pressures on Eisenhower to allow Patton to continue to attack even if it meant holding Montgomery back.⁷⁹

General Gavin catalogued the pressures. First, "the Americans did not trust Montgomery". Second, Montgomery proposed establishing a ground forces commander like the two in place for air and naval forces. The American public, government, and military establishment "would not allow the placement of Montgomery in that position". Nor would the British have accepted placing Bradley in such a position over Montgomery. Eisenhower avoided the choice and retained the ground forces command for himself. He also avoided choosing a single main effort and permitted both Market-Garden and General Patton's offensive operations to proceed simultaneously.⁸⁰ The question over the correct strategy and what command should lead the main thrust remained unresolved through the fall as Eisenhower implemented unsuccessful compromises that leaned indecisively to one side and then the other. General Gavin described the resulting state of the coalition at the beginning of December:

Never were the problems of coalition warfare more in evidence, National interests, national pride, and public opinion seemed to prevail in Allied councils. This, despite the dedication to objectivity and to common victory by the Allied generals, and Eisenhower in particular.⁸¹

Consequently the interactions between the two Army Group commanders were adversarial and winning the struggle became a major objective of the 12th Army Group. Pursuing this additional objective distorted making sense of the information gathered by General Bradley and his staff. General Bradley overlooked that his staff had concluded that the Germans were capable of launching large scale attacks without any warning from any sources. He forgot his staff's warning at the start of the November offensive that should the American attack be held without the use of the 6th Panzer Army then the Germans would be in a position to launch an offensive. He misinterpreted the significance of the Germans carrying on without the commitment of the 6th Panzer Army reserves and the well noticed buildup of air power after

having lost greatly in manpower and formations and more importantly certain key territory. General Bradley missed the fact that the risks to the German line that had been tolerated were not the actions of a "conservative and by the book" commander! He ignored the fact the SS formations were ordered to radio silence when no major American assault, much less a breakthrough, was underway. He ignored the fact that the German reinforcements had started moving to the quiet sector of the Ardennes. He overlooked the November reports by Baron Oshima, who General Marshall had the previous summer called the best source on German intentions, that showed Hitler was in charge and that an offensive would be launched, perhaps after the climax of the November offensive. And finally, his response to a warning by SHAEF was to say "Let them come!" yet he failed to take immediate action to ensure the chain of command to the lowest level was reporting all observations of the enemy. General Bradley arrived at the wrong implications regarding potential threats not because he was poorly served by Ultra but because he was fixed on his contest with Field Marshall Montgomery for control of the ground forces and the concept for the assault into Germany.

Appendix 1: Survey of ULTRA and MAGIC Decodes That Contradict a German Defensive Intention

(Page references from Mr. Bennett's *ULTRA in the West* are in parenthesis)

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| 8 Sept. | <p>☞ <i>MAGIC decode SRS 1419 of Baron Oshima's Sept. 6 part 2 report on his Sept. 4 conference with and quoting Hitler as saying, "From the beginning we have realized that in order to stabilize our lines it would be necessary to launch a German counterattack... In that attack it is planned to employ Army Group G. ...The offensive I just mentioned will be only for the purpose of stabilizing the present front. However when the current replenishment of the air forces is completed and when the new army of more than a million men. is ready, I intend to combine the new units with units to be withdrawn from all possible areas and to open a large scale offensive in the West. The Baron asked when, Hitler replied, "at the beginning of November."</i>⁸²</p> |
| 18 Sept. | <p>☞ <i>SS Operations orders the rest and refit for 1, 2, 9 & 12 SS Panzer Divisions, three heavy Panzer Battalion's, and 1SS Panzer Corps troops. All are assigned to the new 6 Panzer Army, Sepp Dietrich commanding.</i>(192) Assignment of Sepp Dietrich is clear sign of an offensive purpose.(199)</p> |
| By 25 Sept. | <p>☞ <i>Panzer Lehr Div. joins 6 Panzer Army. Locations of all rest areas given.</i>(192)</p> |
| 30 Sept. | <p>☞ <i>MAGIC decode SRS1441 Baron Oshima reports Germany is preparing to fight to the death.</i>⁸³</p> |
| 9 Oct. | <p>Hitler combines two of the options presented to him into an attack through the Ardennes Forest in late November.⁸⁴</p> |
| 11 Oct. | <p>☞ <i>Clothing issues for 9 & 10SS Panzer Divisions in 6 Panzer Army area.</i>(193)</p> <ul style="list-style-type: none"> ▪ OKW begins detailed planning for Ardennes offensive.⁸⁵ ▪ US Army Chief of Staff, General George C. Marshall visits VIII, V, and VII Corps of the First US Army and spent the night at FUSA HQ. General Marshall questioned the thin lines of the VIII Corps in the Ardennes Forest and is told that by relying on the bad terrain of the Ardennes Forest a calculated risk is being taken in order to concentrate enough forces for current operations. (Oct. 5-14 General Marshall together with the Director of War Mobilization, Justice Byrnes visited the ETO in order to conference with General Eisenhower regarding the end of the war, to look over the divisions, to hasten the unloading at the docks, and to orient Byrnes on Army needs)⁸⁶ |
| 12 Oct. | <p>OKW issues security and deception plan.⁸⁷</p> |
| 18 Oct. | <p>SHAEF Brussels Conference begins planning for the 12th & 6th Army Groups November offensive to reach the Rhine. ⁸⁸</p> |
| 20 Oct. | <p>☞ <i>(5 Oct message decoded): The full scope of the rest and refit program for western forces is revealed. .</i>(193)</p> |
| 21 Oct. | <p><i>ORDER OF BATTLE West established supply requirements with OKW.</i>⁸⁹</p> |
| 22 Oct. | <p>☞ <i>6 Panzer Army assigned to OKW. OKH requires Panzer Lehr finish rest & refit by 31 Oct.</i>(192)</p> <p>☞ <i>Rest and refit of 6 Panzer Army formations ordered personally by Hitler.</i>(193) This is an unequivocal proof of Hitler's personal control.(201)</p> <p>☞ <i>Long list of report centers issued for formations of the SS Panzer Army 6. (193-4)</i></p> |
| 27 Oct. | <p>9th Panzer Div. Peel Marshes surprise attack against the US 7th Armored Division starts.⁹⁰</p> |

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| 28 Oct. | <ul style="list-style-type: none"> ▪ SHAEF Directive ordering deliberate attack from 1 to 5 Nov. along 200-mile front to reach the Rhine is published.⁹¹ ▪ The start of Allied offensive is delayed to 10 November because the 9 Panzer Division spoiling attack has pinned down the 7th US Armored Division which is needed for the attack. German attack has achieved complete surprise.⁹² |
| 1 Nov. | OKW orders ORDER OF BATTLE West to maintain secrecy. ⁹³ |
| 3 Nov. | ☞ <i>Reichsbahn communications give away two movements for 5th Panzer and 7th Armies. (41 trains for the 352 VG. Division and 28 trains for another formation) (195)</i> |
| 4 Nov. | 116 Panzer Div. starts surprise counter attack in the Huertgen Forest. ⁹⁴ |
| 5 Nov. | <p>☞ <i>Army Group B called for fighter protection for unloading of important troop transports in arc around Cologne. Thirty more similar signals followed over next 45 days shifting to locations directly east of the Ardennes. (Major effort to move 6Panzer Army West of the Rhine)(194).</i></p> <ul style="list-style-type: none"> ▪ Bradley gives Patton permission to start the Third Army attack early.⁹⁵ |
| 8 Nov. + | <p>☞ <i>Luftwaffe command in Holland wanted special fuel allocation for fighter gruppen arriving. Especially secretive and used phrase 'the special contingency known to you'. Similar messages are issued over the following weeks. (177).</i></p> <ul style="list-style-type: none"> ▪ General's Eisenhower and Bradley visit VIII Corps HQ at Bastogne. They agree that the sector can be held by four divisions feeling that the risk is minimal due to Allied mobility, poor German units, no vital targets could be reached, and the obstacle to supply presented by winter in the Ardennes.⁹⁶ ▪ SHAEF postpones the FUSA and Ninth Army offensive to Nov 16 due to weather.⁹⁷ ▪ Patton starts the Third Army offensive.⁹⁸ |
| 10 Nov | <p>☞ <i>Reichsbahn message gives away movement of 6th Panzer Army HQ & 12SS Panzer Div. to West side of the Rhine. (195-6)</i></p> <p>☞ <i>Director General of Transport Office demands 6th Panzer Army tell all formations to observe strict punctuality. Reports 2SS Panzer 36 hr behind, Panzer Lehr 24 hr, & 12SS Panzer 12 hr behind. (196).</i></p> <ul style="list-style-type: none"> ▪ Patton's Third Army attack bogs down to a slow grind.⁹⁹ Patton's attack is eventually stopped at the Siegfried Line after advancing just 35 to 40 miles.¹⁰⁰ |
| 11 Nov. | ☞ <i>A short-term repair scheme is ordered and is given a code name. This includes the 2nd, 9th, 11th, 21st, and 116th Panzer Div.'s., the 17thSS Panzer Grenadier Div., and the 12th Volks Grenadier Div.(194)</i> |
| 12 Nov | <ul style="list-style-type: none"> ▪ SHAEF Weekly Intelligence Summary #64, judged the German rebuild success as preparation for the final showdown before the winter sets in. ¹⁰¹ ▪ First US Army Intelligence Summary, it's a "race against time, <u>can the enemy complete his dispositions for his offensive</u> prior to the launching of our attack. With the approach of winter in the east, it is believed the enemy will stake all on an offensive in the west." ¹⁰² |
| 16 Nov | ☞ <i>Central Rhineland Luftwaffe ground command called for daily serviceability returns from all airfields 'for the type of aircraft intended in the bringing-up of fighters (Jaegeraufmarsch). Special explanation was provided: the word is special as in its use by the Germans to describe the Allied buildup for D-Day. Subsequent messages reveal unusual number of units in the command. (177-8).</i> |

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| | <ul style="list-style-type: none"> 12th & 9th US Army Groups begin offensive to reach the Rhine. The huge air onslaught, Operation Queen begins the attack. German defense however is intense.¹⁰³ |
| 17 Nov | <ul style="list-style-type: none"> 12th Army Group G-2 Periodic Report, a special annex reports on the surprise attack of the 9th Panzer Division. This report concludes¹⁰⁴ <p>"a. With the lengthening nights and with limited air observation and photography during the day, the enemy has demonstrated that he can mass a large force - two divisions with up to fifty tanks - in an assembly area close to our lines without any of our sources becoming aware of it.</p> <p>b. Then taking advantage of the morning fog or haze he can attack and be on us with less than half an hours notice. These conditions and proximity of the wooded areas greatly increase the necessity for alert OP's, listening posts, air OP's, aggressive patrolling and defensive preparation for a variety of eventualities. Rapid, complete dissemination of each bit of information to the next higher echelon can frequently produce the picture of lurking dangers and avoid disaster. ...</p> <p>d. The German's selection of the swamps west of the Meuse as a spot to employ two of his best mobile divisions alert us to the fact that the enemy cannot be trusted always to attack according to the 'book'. He remains a clever, aggressive foe."</p> |
| 20 Nov. | <p><i>SRS 1492 MAGIC decode of Baron Oshima's report on 15 Nov. meeting with German Foreign Minister Ribbentrop summarizing that Ribbentrop reported that Hitler's health has returned and Hitler is engaged in operational planning and rebuilding the German air force. Hitler is opposed to defense and war of attrition. There is no change in his intentions to undertake a large scale offensive as soon as possible. No definite time or method has been decided on.</i>¹⁰⁵</p> |
| 21 Nov. | <p><i>9th & 10th SS Divisions arrived at Euskirchen (town South-West of Cologne).(197)</i></p> |
| 21 Nov. (5 days after the all out Allied offensive had started) | <p>12th Army Group Intelligence Summary No. 15:</p> <p>"So far the enemy has not produced the counter-attack or counter-offensive punch which Sixth Panzer, with perhaps 500 tanks, is capable of delivering. The delay in employing this Army may have been due to transport difficulties or supply problems but it seems more likely that the enemy believed that conditions were not yet ripe for its employment. The necessity for launching a strong counter-attack to stop an Allied thrust toward Cologne or the Ruhr has not yet arisen. On the other hand if the enemy intends to launch a major counter-offensive against any Allied salient East of Aachen designed to reestablish the Siegfried Line positions or to cripple American forces in this area, the most opportune time will presumably come when our attacks have spent their forces and our supplies are dwindling. The enemy is thus in the position of holding his punch and awaiting developments.</p> <p>If our attack can be contained by the infantry and the tactical reserves that have been committed, it is obvious that the enemy will have no necessity for employing his strategic panzer reserve in an essentially defensive counter-attack. He will then be in a position to launch a major counter offensive or move some or all of the elements of Sixth Panzer Army to Army Group G or to whatever vital area is seriously threatened. However...it is unlikely that he will move Sixth Panzer Army from this area..."¹⁰⁶</p> |
| 23 Nov. | <p><i>Jaegeraufmarsch announced as complete. (178) None of the assemble fighter units</i></p> |

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| | <p>participate in CAP missions for the concurrent rail movements. (201)</p> <p>☞ SRS 1495 MAGIC decode distributes the full text of Baron Oshima's 15 Nov. meeting with Ribbentrop. Baron Oshima asks has Hitler's intentions changed since the Sept. 4 meeting. Ribbentrop answered, "No. At the moment I can unfortunately tell you nothing... I believe that Germany's plans as in the past are based primarily on an offensive in the West, although the timing, method, etc, cannot now be precisely determined. After citing the effectiveness of the current defense the Baron asks if it wouldn't be wiser to fight a war of attrition. Ribbentrop declared, "Absolutely not!. The Chancellor believes we cannot win this war by defense alone and has reiterated his intention of taking the offensive right to the bitter end."¹⁰⁷</p> |
| 24 Nov. | <ul style="list-style-type: none"> ▪ Patton records in his diary, "The First Army is making a terrible mistake in leaving VIII Corps static, and as it is highly probable the Germans are building up east of them."¹⁰⁸ ☞ SRS 1496 decode of Baron Oshima's 21 Nov. message with his personal analysis. "In the long run, Germany's leaders confronted with the fact that the battle lines have contracted virtually to the prewar boundaries... will have no choice but to open a road of blood one direction or the other. The chance may come after the enemy's overhasty [current] offensive has been repulsed."¹⁰⁹ |
| 24 Nov. | <p>☞ Army Group B urgently requests aerial reconnaissance of Eupen-Malmedy area (center of gravity for the 6 Panzer Army advance) and the Prum-Houffalize axis (the axis of advance for the 116th Panzer Division) Repeated almost daily for next three weeks. (197)</p> <p>☞ 2nd SS Panzer Division arrived at Muenchen-Gladbach. (197)</p> |
| 25 Nov | ☞ GAF West ordered to release Flieger Division 3 to OKL (the German Air Force high command) after having just been assigned 6 Nov. (197) |
| 26-27 Nov. | ☞ HQ, 1st SS Panzer Corps arrived South-West of Cologne and assumes command of the 1st, 2nd, 9th, 10th, 12th SS Panzer Divisions and the Panzer Lehr, and 116th Panzer Divisions. (197) |
| 28 Nov. | Eisenhower and Montgomery meet. According to Montgomery Eisenhower agreed with him that the plan in the SHAEF directive had failed and that the Allies had suffered a strategic reverse. But Eisenhower would not agree with any restructuring of the commands. ¹¹⁰ |
| 29 Nov. | Montgomery confirmed the conversations in writing, the wording of which angered Eisenhower. In the following days Eisenhower conferred with other American Generals and abandoned any adjustment of his thinking to Montgomery's positions. He then prepared for the Dec 7 Maastricht conference where a renewed drive to the Rhine would be planned. ¹¹¹ |
| 29 Nov. | ☞ Army Group B starts daily requests for aerial reconnaissance of Meuse River crossings from Liege to Givet. (197) 12th Army Group G-2 sends deputy to England to find out more ¹¹² |
| 1 Dec. | ☞ The 116th Panzer Div. Is located on the East side of the Rhine opposite Cologne. (197) |
| 2 Dec. | <p>☞ Army Group B requests with special urgency for fighter protection for troop movements in the Moselle Valley. The same day a GAF West signal reveals 12 formations involved including the Fuhrer Escort Brigade. (196) The sudden appearance of Hitler's expanded personal guard had to be for an offensive purpose. (202)</p> <p>☞ OKW orders the withdrawal of 1000 trucks from Italy for the 6th Panzer Army. (197).</p> |
| 2 Dec. | <ul style="list-style-type: none"> ▪ 2-16 Dec. the G-2 First Allied Airborne Army Intelligence Summary picks the Ardennes as the likely spot for the expected German attack.¹¹³ |

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| | <ul style="list-style-type: none"> ▪ 12th Army Group Intelligence Summary #17: ¹¹⁴ "Although suffering from the lack of infantry replacements, the enemy was able to contain the drives of Ninth and First Armies without commitment of any of the four SS Panzer Divisions.... The attrition of the divisions in the line in the Aachen sector is producing an acute situation for the enemy but so far he has managed to avoid the piecemeal commitment of the four remaining divisions." <p style="margin-left: 40px;">"Section 2 Enemy Operations para. 2.a. Ninth US Army, The enemy continued to resist bitterly all pressure on the front, and to alternate the available panzer divisions in limited counter-attacks, indicating a continued reluctance to commit the Sixth Panzer Army and the tired condition of the tactical armored reserve of the Fifth Panzer Army."</p> <p style="margin-left: 40px;">"In spite of the indications of heavy attrition and resultant weakness in the Aachen sector, the priority in reinforcements seems very recently to have shifted to areas further South."</p> <p style="margin-left: 40px;">"The enemy's plan in the Third US Army Sector and in the sector of Sixth Army Group may have been to withdraw under pressure to the Rhine... and to the West Wall..."</p> |
| 5 Dec. | <ul style="list-style-type: none"> ☞ <i>Conference of almost all West Front fighter Geschwader CO's held vicinity Cologne. (Includes Central Rhineland Jafue, Jagdkorps I, Jagddivision 1,3 and 5.)(179 & 198)</i> ▪ VIII Corps commander confesses to visiting 9th Army commander that Germans are now building up their forces in front of him instead of rotating the units through.¹¹⁵ |
| 7 Dec. | <p>Maastricht Conference is held at which General Eisenhower rejects concluding the November Offensive was a failure, rejects all the points Montgomery claims he agreed to¹¹⁶, and sets 1 January as date for a renewed allied offensive. ¹¹⁷</p> <ul style="list-style-type: none"> • The SHAEF G-2, Major General Strong, issued an estimate that "suggested the increasingly strong German reserve could be used by the German High Command to rupture Allied lines. He suggested that a possible German objective might be to disrupt the overstretched US VIII Corps in the Ardennes" General Eisenhower directed MG Strong to visit and brief General Bradley.¹¹⁸ |
| 8 Dec. | <ul style="list-style-type: none"> ☞ <i>German aerial reconnaissance entrusted to Arado 234 jet units. Mission targets supporting offensive interests are specified.(197-8, 202-3)</i> |
| 9 Dec. | <ul style="list-style-type: none"> ▪ Third Army G-2 gives General Patton a special briefing pointing to the assembly of forces in the Eiffel (forest area where the German units assembled for the Ardennes attack) and points out the possibilities. Opposite the FUSA VIII Corps were four divisions in the line and five divisions in reserve representing German forces 2.5 times the strength opposing Third Army, three and half more divisions than opposed the entire Seventh Army, and one division less than the division equivalents in the line opposing all of FUSA. In response Patton authorized limited contingency planning! ¹¹⁹ ▪ VIII Corps G-2 estimated that only four divisions were opposite the VIII Corps and that the enemy desires the sector to remain quiet and inactive.¹²⁰ |

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| <p>10 Dec</p> | <ul style="list-style-type: none"> • Third Army G-2 writes in Intel Summary #186 - "Germans probably intend to mount a spoiling offensive".¹²¹ • Prompted by observed detrainning in the vicinity of Bitburg, 12th Army Group terrain expert suggests that Germans are hiding a build up by moving through the Eifel two divisions for every one left there. General Bradley asks Eisenhower for a newly arrived armored division for the Ardennes. Eisenhower gives the division to 6th ARMY GROUP instead.¹²² • <i>Luftwaffe Jagdkorps II message reveals the SS formations are observing radio silence.</i> (204) • FUSA Weekly Summary #37 - Warns of "all out counter offensive" (uses counter offensive and counter attack interchangeably) stating the correct objective, the annihilation of the First and Ninth Armies but misses the actual attack sector.¹²³ |
| <p>11 Dec.</p> | <p>Eisenhower's Chief Of Staff contacted Bradley's G2, BG Sibert and demanded that he get Dickson at First Army straightened out.¹²⁴</p> |
| <p>12 Dec.</p> | <ul style="list-style-type: none"> • 12th Army Group Summary tried to put a positive spin on the shallow gains on the ground and the tremendous casualties suffered by the Americans and the French Forces in the course of the November Offensive. The estimate saw the German units as about to dissolve away due to tremendous attrition¹²⁵ • Eisenhower met alone with Churchill and the entire British Chiefs of Staff where he briefed the December 7th plan, an extension of his October 28 Directive, but did not convince the Chiefs. General Brooke stated that his (Eisenhower's) plan, already having violated the most important principle of warfare, the concentration of forces, has already brought about the present failure. Since Churchill did not side against Eisenhower in the meeting nothing came of the confrontation that day.¹²⁶ |
| <p>13 Dec.</p> | <p>The Third Army Daily Summary #188 now includes a statement that 6 Panzer Army will be held back for counter-attacks against the next offensive to cross the Roer and push to the Rhine.</p> |
| <p>13-14 Dec</p> | <ul style="list-style-type: none"> • G-2 4th Infantry Division briefs division commander on large buildup in the area of Bitburg. <ul style="list-style-type: none"> • G-2 sent to consult with 12th Army Group G-2 • Commander orders all men in rest areas beyond regimental HQ's back to their units. |
| <p>14 Dec.</p> | <ul style="list-style-type: none"> • Col. Dickson, FUSA G-2, heard about the improved morale in the POW cages and that the rumor of an imminent German offensive was the cause. This report together with incoming reports that heavy reinforcements were moving into the region between Duren in the north and Trier in the south (the north-south limits of the base of the German assault) caused a late night discussion with General Hodges. In a moment of revelation, Col. Dickson exclaimed, "It is the Ardennes!" In the course of the continuing discussion, Col. Dickson was ignored and the next day was sent finally on his oft-delayed leave.¹²⁷ • MG Strong, SHAEF G-2, briefed General Bradley and his G-2, BG Sibert, on the SHAEF 7 December Estimate. General Sibert repeated and defended the conclusion of the 12th Army Group 12 December estimate. General Bradley stood by Sibert and went on and said that he was, "aware of the danger" and had "earmarked certain divisions to move into the Ardennes should the enemy attack there." He dismissed MG Strong with the remark, "Let them come!"¹²⁸ |
| <p>15 Dec</p> | <p>Commander 4th Infantry Division met with regimental commanders to work up counterattack plans.¹²⁹</p> |

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| 6-15 Dec. | <i>↳ The Central Rhineland Jafue return strength of serviceable aircraft reports show the number of aircraft on hand increased from 168 to 340 and serviceable planes increase from 105 to 164 in the space of 7 days. Also 510 pilots were present for duty.(198)</i> |
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Appendix 2: Worksheet for *A Historic Failure in the Social Domain*

Components of the Social Domain

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| Quality of interactions | Degree of Shared Information |
| | Degree of Shared Sensemaking |
| | Shared Awareness |
| | Shared Understanding |
| | Collaborative Understanding |
| Degree of Decision Synchronization | |

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- ¹ Omar Bradley, *A Soldiers Story*, (Rand McNally & Company, 1951), 437-8, 461-2,486
- ² Omar Bradley, *A General's Life*, (Simon & Schuster, 1983), 350
- ³ Anthony Cave Brown, *Bodyguard of Lies*, (Harper & Row, 1975), 15
- ⁴ John Garstka and David Alberts, Network Centric Operations Conceptual Framework Version 2.0, A Collaborative Effort of Office of Force Transformation & Office of Assistant Secretary of Defense, (Evidence Based Research, Inc. Vienna, VA, June 2004)
http://www.oft.osd.mil/initiatives/ncw/docs/20AUG04_Version%20-0%20Network%20Centric%20Operations%20Conceptual%20Framework.doc
- ⁵ David S. Alberts, Richard E. Hayes, *Power to the Edge: Command and Control in the Information Age*, (Center for Advanced Concepts and Technology (ACT), June 2003), xiii
http://www.dodccrp.org/publications/pdf/Alberts_Power.pdf
- ⁶ John Garstka, Network Centric Operations Conceptual Framework Version 1.0, (Evidence Based Research, Inc. Vienna, VA, November 2003), 10, <http://www.oft.osd.mil/library/library.cfm?libcol=6>
- ⁷ Garstka and Alberts, 4
- ⁸ Garstka, 10
- ⁹ Garstka, 30
- ¹⁰ Garstka, 10
- ¹¹ Garstka, 30
- ¹² Bradley, *A General's Life*, 351
- ¹³ Bruce Lee, *Marching Orders: The Untold Story of World War II*, (Crown Publishers, Inc, 1995), x-xi
- ¹⁴ Bradley, *A General's Life*, 238
- ¹⁵ Ibid., 237-238
- ¹⁶ Ralph Bennett, *ULTRA in the West*, (Charles Scribner's Son's,1979), 13
- ¹⁷ Ibid., 10
- ¹⁸ Ibid., 10,16
- ¹⁹ Ibid., 9
- ²⁰ Memorandum For Col. Taylor, Office of the Military Attache, American Embassy, London England: Murnane and Orr, *Subject: Report of Lt.Col. Murnane and Lt.Col. Orr on the Use of Ultra at the 12th Army Group*, 23 May 1945; Rosengarten, *Subject: Report on ULTRA Intelligence at the First US Army*, 21 May 1945; Rosenthal, *Subject: Notes on ULTRA Traffic, First US Army*, 27 May 1945; Church, *Subject: ULTRA and the Third Army*, 27 May 1945, NARA RG 457, SRH-023
- ²¹ Murnane & Orr, 1-3.

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- ²² Ibid., 3
- ²³ Church, 1
- ²⁴ Ibid.
- ²⁵ Ibid., 2
- ²⁶ Ibid., 4
- ²⁷ Rosengarten, 7
- ²⁸ Ibid.
- ²⁹ Ibid., 8
- ³⁰ Ibid., 5
- ³¹ Bennett, 191-192.
- ³² Charles B. MacDonald, *A Time For Trumpets*, (W Morrow, c1984, c1985.), 64
- ³³ Rosengarten, 5
- ³⁴ Charles B. MacDonald, *The Siegfried Line Campaign*, (Office of the Chief of Military History, US Dept. of the Army, 1963), 243-6
- ³⁵ 12th Army Group G-2 Periodic Report #165, 17 November, 1944, Annex 2, 3, file 99/12-2.1, RG407, National Archives II
- ³⁶ Bradley, *A General's Life*, 351
- ³⁷ Bennett, 204
- ³⁸ Lee, *Marching Orders: The Untold Story of World War II*, (Crown Publishers, Inc, 1995), 264-5
- ³⁹ Lee, 287
- ⁴⁰ Ibid, 287-8
- ⁴¹ Ibid, 288
- ⁴² Hugh M. Cole, *The Ardennes: The Battle of the Bulge*, (Office of the Chief of Military History, US Dept. of the Army, 1965), 76
- ⁴³ T.W. Elmhirst, ed., *The Rise and Fall of the German Air Force*, (Crown Copyright, 1983), 355 and 373-374
- ⁴⁴ Ibid., 368
- ⁴⁵ 12th Army Group G-2 Periodic Reports, "Weekly Periodic Summary No 15, period ending 18 Nov 44", file 99/12-2.1, RG407, National Archives II, 21 Nov 44, 1a
- ⁴⁶ Trevor N Dupuy, David L. Bongard, and Richard C. Anderson, Jr., *Hitler's Last Gamble*, (Harp, Collins Publishers, 1994), 4
- ⁴⁷ Oscar W. Koch and Robert G. Hays, *G-2 Intelligence for Patton*, (Schiffer Publishing LTD., 1999), 88

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- ⁴⁸ McDonald, *A Time For Trumpets.*, 69; Koch, 94
- ⁴⁹ McDonald, *A Time For Trumpets*, 70
- ⁵⁰ Irving, 329; DePuy, 4; Cole, 57; MacDonald, *A Time For Trumpets*, 72
- ⁵¹ MacDonald, *A Time For Trumpets*, 94
- ⁵² Dupuy, 4 and 40-41; Bradley, *A Generals Life*, 354
- ⁵³ Cole, 56-63; Dupuy, 37-44; MacDonald, *A Time For Trumpets*, 62-79
- ⁵⁴ Cole, 59-63, Tolhurst, 49-50, Dupuy 37-40; Parker 44-45; Toland, 2-5, MacDonald, 74-76
- ⁵⁵ Oral interview Lieutenant Colonel (ret) Joe Soya, 1982, Paul Van Doren Collection, Small Manuscript Collection, George C. Marshall Library, Lexington, Virginia
- ⁵⁶ Jay Von Werlhof, One Man's Decision, *The Bulge Bugle*, vol XXII #3, August 2003, The Veterans of the Battle of the Bulge, Inc
- ⁵⁷ Dr. Forrest C. Pogue, Paul Van Doren, March 18, 1985, Paul Van Doren Collection, Small Manuscript Collection, George C. Marshall Library, Lexington, Virginia
- ⁵⁸ Dr. Forrest C. Pogue to Paul Van Doren, April 2, 1985, Paul Van Doren Collection, Small Manuscript Collection, George C. Marshall Library, Lexington, Virginia
- ⁵⁹ Pogue, *Organizer of Victory*, 484
- ⁶⁰ MacDonald, *Siegfried Line Campaign*, 390-1.
- ⁶¹ Bradley, *A Soldiers Story*, 439
- ⁶² Bradley, *A General's Life*, 343
- ⁶³ Bradley, *A Soldiers Story*, 444
- ⁶⁴ David Irving, *The War Between the Generals*, (St. Martin Press, 1981), 315-6
- ⁶⁵ Irving, 321
- ⁶⁶ Irving, 322
- ⁶⁷ Irving, 323
- ⁶⁸ Irving, 234-5
- ⁶⁹ Bradley, *A General's Life*, 345-6
- ⁷⁰ Irving, 326-7
- ⁷¹ Bradley, *A General's Life*, 346
- ⁷² Irving, 327
- ⁷³ MacDonald, *Siegfried Line Campaign*, 594-5.
- ⁷⁴ Bradley, *A General's Life*, 346

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- ⁷⁵ Ibid., 347
- ⁷⁶ Bradley, *A General's Life*, 232, Gavin, 197; Bradley, *A Soldier's Story*, 422-423
- ⁷⁷ James M. Gavin, *On to Berlin: Battles of an Airborne Commander 1943-1046*, (The Viking Press, 1978), 197
- ⁷⁸ Ibid., 348
- ⁷⁹ Gavin, 194
- ⁸⁰ Ibid, 195
- ⁸¹ Ibid, 198
- ⁸² Lee, 264-5
- ⁸³ Lee, 272
- ⁸⁴ Percy Ernst Schramm, *OKW War Diary Apr. 44-18 Dec. 44*, B034, 265
- ⁸⁵ Percy, 267
- ⁸⁶ Pogue, *Organizer of Victory 43-45*, (The Viking Press, 1973), 477
- ⁸⁷ Percy, 267
- ⁸⁸ Bradley, *A Soldiers Story*,433
- ⁸⁹ Percy, 267
- ⁹⁰ MacDonald, *Siegfried Line Campaign*, 392
- ⁹¹ Ibid, 390-1
- ⁹² Bradley, *A Soldier's Story*, 438
- ⁹³ Percy, 267
- ⁹⁴ MacDonald, *Siegfried Line Campaign*, 392
- ⁹⁵ Bradley, *A Soldier's Story*, 438
- ⁹⁶ Bradley, *A General's Life*, 353
- ⁹⁷ Ibid., 343
- ⁹⁸ Ibid., 342
- ⁹⁹ Irving, 313
- ¹⁰⁰ Bradley, *A General's Life*, 342
- ¹⁰¹ MacDonald, *A Time For Trumpets*, 64
- ¹⁰² Rosengarten, 5
- ¹⁰³ MacDonald, *Siegfried Line Campaign*, 412

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- ¹⁰⁴ Appendix 1, 12th Army Group G-2 Periodic Report No 165, 17 November 1944, 3
- ¹⁰⁵ Lee, 287
- ¹⁰⁶ 12th Army Group Weekly Periodic Summary No 15, period ending 18 Nov 44, 21 Nov 44, 1a
- ¹⁰⁷ Lee, 287-8
- ¹⁰⁸ Bradley, *A General's Life*, 353
- ¹⁰⁹ Lee, 288
- ¹¹⁰ Irving, 234-5
- ¹¹¹ *Ibid.*, 326-7
- ¹¹² MacDonald, *A Time For Trumpets*, 71-72
- ¹¹³ *Ibid.*, 77
- ¹¹⁴ 12th Army Group Weekly Periodic Summary Period ending 2 Dec, 44
- ¹¹⁵ MacDonald, *A Time For Trumpets* 75
- ¹¹⁶ Irving, 327
- ¹¹⁷ MacDonald, *Siegfried Line Campaign*, 594-5.
- ¹¹⁸ Dupuy, 4
- ¹¹⁹ Oscar W. Koch and Robert G. Hays, *G-2 Intelligence for Patton*, (Schiffer Publishing LTD., 1999), 88
- ¹²⁰ MacDonald, *A Time For Trumpets*, 74
- ¹²¹ Dupuy, 69
- ¹²² MacDonald, *A Time For Trumpets*, 72
- ¹²³ MacDonald, *A Time For Trumpets*, 70
- ¹²⁴ *Ibid.*, 72
- ¹²⁵ DePuy, 4
- ¹²⁶ Irving, 329
- ¹²⁷ MacDonald, *A Time For Trumpets*, 76.
- ¹²⁸ Dupuy, 4 and 40-41
- ¹²⁹ MacDonald, *A Time For Trumpets*, 94