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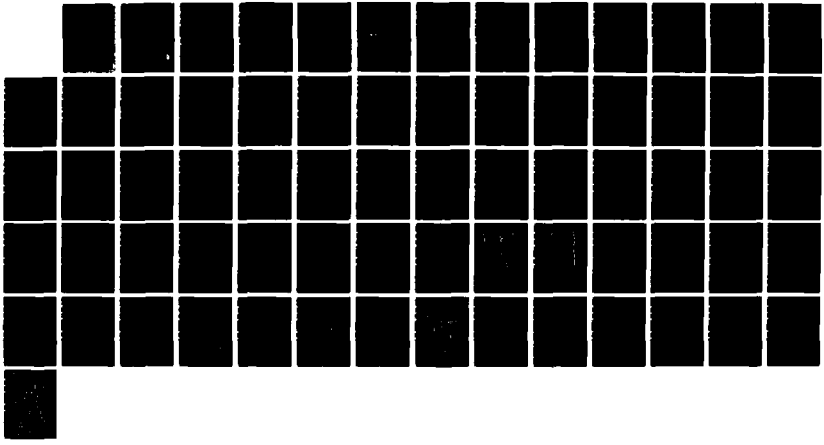

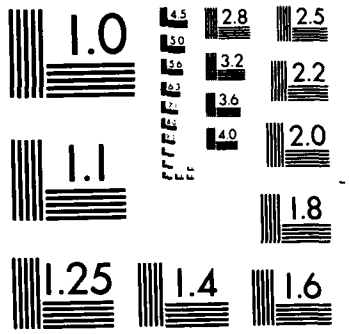
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JOMINI AND THE ARDENNES:
AN ANALYSIS OF LINES OF OPERATION AND DECISIVE POINTS

by

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The study first sets the strategic and operational setting then traces the general conduct of the operation from the corps and army perspective. The first phase studied is the German offensive and American defensive from 16 December to 26 December 1944. The second is the American offensive and German defensive from 22 December 1944 to 28 January 1945. In the theoretical analysis of these two phases, the paper examines the applicability of lines of operation and decisive points for the planning and conduct of major

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ABSTRACT

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This paper examines the applicability of the theories of the 19th Century military theorist, Baron Antoine Henri Jomini, to modern 20th Century mid- to high-intensity conflict. To do this it briefly reviews the core of Jomini's most famous work, The Art of War. It then tests two key Jominian concepts, lines of operation and decisive points, against the reality of a major 20th Century operation, the German counteroffensive in the Ardennes in December 1944.

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I. INTRODUCTION

The 1986 version of United States Army Field Manual 100-5, Operations, includes an appendix discussing three concepts which it contends are "central to the design and conduct of campaigns and major operations..."[1] One of these concepts concerns use of lines of operation to "define the directional orientation of a force in relation to an enemy."[2] This reference to lines of operation is one of the few surviving remnants of the military theory of one of the most influential military thinkers of the 19th Century, Baron Antoine Henri Jomini.

Despite tremendous influence on the military thinking of armies throughout the world for almost a century, in the modern era, Jomini's works have fallen into disrepute. As early as the 1943 version of Makers of Modern Strategy, critics considered much of his work obsolete and irrelevant in modern warfare.[3] By the 1986 version of that work, John Shy wrote:

> ... these 'lines of operation' are simply reflections of the pseudoscientific nature of his theorizing ... certainly obsolete terms ... [that] are of no serious interest except as they apply to a particular historical form of warfare.[4]

Hew Strachan also relegated Jomini to the scrap heap of historical curiosity when he wrote in European Armies and the Conduct of War that the "strategy enunciated by Jomini and his disciples had a pronounced eighteenth-century feel about it."[5]

However, as the reference to FM 100-5 illustrates, the writings of Jomini may still have relevance to the modern military planner. Michael Howard in his 1965 essay on Jomini contended:

> This cumbrous analytic vocabulary is the more unfortunate since it obscures what was perhaps the most important legacy which Jomini left to future military thinkers... For Jomini it mattered where the battle was fought and how the battle was fought.[6]

In cutting through the 19th Century language, Howard stressed the importance of Jomini's concepts on the manner in which the general conducted campaigns. Through the selection of the appropriate line of operation to attack at the decisive point along the flank of the opponent, the campaign would be decisive. However, if the commander failed to plan his campaign properly, the result would be a costly and indecisive battle.[7]

This monograph will test the validity of two key Jominian concepts for the planning and conduct of campaigns and major operations. Specifically, this paper will examine the relevance of the Jominian concepts of decisive points and lines of operation to a 20th Century mid- to high-intensity European conflict. To do this it will first establish the theoretical framework that Jomini believed a commander should use in conducting his operations. Next, it will test this framework against a historical example from World War II to determine its feasibility in modern

warfare. Finally, using the evidence drawn from the case study, it will draw conclusions concerning the potential relevancy of these Jominian concepts to modern operational art.

THEORETICAL FRAMEWORK

Jomini believed that the key to the conduct of the operational art in war could be reduced to four maxims. These simple truisms included the use of strategic movements to maneuver the mass of the friendly army against decisive points in the theater of war. In this manner the commander could aggressively engage fractions of the enemy's force at the critical time with the bulk of his own army.[8] The choice of the correct line of operation was the primary means of achieving this goal and "... the fundamental idea in a good campaign plan."[9]

Since this concept was at the core of the Jominian writings on strategy, it was essential to understand the battlefield framework where lines of operation played such a central part. This framework began with the theater of war which encompassed the entire space in which the two opposing groups of states might come in conflict. Jomini then subdivided this into potential theaters of operations. The theater of operations included the territory through which the opposing armed forces could attack or must defend. Every theater of operations had a base of operations and an objective point to attack or defend. To advance from the base of operations to the

objective point, armies moved through a zone of operations along a line of operations.[10]

Jomini emphasized the importance of several types of key points within the theater of operations. The most important was the objective point. The aim of the war, as defined by the political circumstances, drove the selection of the objective point. These could be either a maneuver point or a geographic point depending upon the political objectives and the relative military capabilities of the two sides. The maneuver point was force oriented and gained its importance from the relative positions of the opposing forces. A geographic objective point was terrain oriented and could be anything from a capital city to a terrain feature which supported further operations. Proper selection of these objective points greatly aided the operational commander in the destruction or dislodgment of the enemy army.[11]

Two other types of points Jomini discussed were strategic points and decisive points. Strategic points were any point of the theater of war which had major military significance. This might include a communications center or major military concentration. However, all strategic points were not necessarily decisive points. To be a decisive point, the point had to be capable of exerting a major influence upon the results of the campaign or major operation. Decisive points could also be either

geographic or force oriented. Geographic oriented decisive points might include significant terrain features or communications centers. Maneuver decisive points resulted from the relative position of the troops on both sides. This was most frequently an exposed flank but could also include weak areas in the opponents front of operation.[12]

From the selection of decisive and objective points, Jomini believed the commander then chose the lines of operation on which his army would operate. Within a theater of operation, a line of operation extended from an army's base of operation through the decisive points to the objective point. While decisive points provided some directional orientation for the force, lines of operation were more than a simple route between two points. More generally, a line of operation was a mobility corridor which was broad enough to accommodate the force as well as allow some lateral shifting of forces to permit necessary maneuver.[13]

Jomini wrote that selection of the proper line of operation was critical to the success of an operation. The correct line could enhance the magnitude of a victory or minimize the effects of a defeat. To support this contention, he described an entire series of different types of lines of operation including strategic, interior, exterior, double, simple, concentric, divergent and accidental lines.[14] Within this vast variety of choices,

Jomini believed "that simple and interior lines enable a general to bring into action by strategic movements upon the important point a stronger force than the enemy."[18] However, he qualified this assertion by writing that interior lines lose their advantage when the masses become so large that the size of the mass hinders mobility and makes it more vulnerable.[19]

METHODOLOGY

The preceding survey provides a brief overview of Jomini's conceptual framework for the conduct of operations. This paper will now test the validity of the theory presented. In doing this it will follow the guidance of Michael Howard and attempt to cut through some of the dated rhetoric in order to deal with the ideas behind the words. Because Jomini believed it was important where and how armies fought battles, he left a system to aid the commander in establishing the most favorable terms for the conduct of those battles. The specific elements of that system which this paper will examine are the concepts of decisive points and lines of operation.

To analyze the validity of these concepts, this paper will examine the German counteroffensive and the American reaction in the Ardennes in World War II. This action was chosen because it provides examples of operational offensive and defensive actions by two modern, experienced armies. It provides the opportunity to test Jomini's

conceptual framework against four major operations conducted over the same terrain. These include the German offensive from 16 December 1944 to 26 December 1944 and its defensive from 26 December to the end of the campaign on 28 January 1945. Conversely, the Americans were on the defensive during the first phase and the offensive during the second phase.

II. CASE STUDY: THE ARDENNES OPERATION 16 DECEMBER 1944 TO 28 JANUARY 1945

STRATEGIC SETTING

To understand the Jominian operational framework's potential applicability to the Ardennes operations, it is first necessary to examine the strategic setting for the campaign. By September 1944, the Allies had advanced to the borders of Germany in the pursuit across France but had outrun their available supplies in doing so. Concurrently with the supply crisis, the nature of the conflict changed as the Allies tried to penetrate the concrete barriers of the West Wall. These two simultaneous events dictated that the Allies temporarily slow offensive operations as they attempted to improve their logistics posture. Through the opening of Antwerp in November 1944, and the extensive use of Marseille in southern France, the logistical situation gradually improved enough to begin planning for large scale offensive operations in early 1945.[17]

When General Dwight D. Eisenhower met with his senior commanders at Maastricht, Belgium on 7 December 1945 to discuss potential operations, the Allies fielded 65 divisions stretched along a 500 mile front from the North Sea to Switzerland. Organized into three army groups, the Allies deployed these forces in two major concentrations. The largest mass was north of the Ardennes region with Field Marshal Sir Bernard L. Montgomery's 21st Army Group of two armies supported by the Ninth Army from 12th Army Group. A second potential striking force, Lieutenant General George S. Patton's Third Army, part of Lieutenant General Omar N. Bradley's 12th Army Group, concentrated south of the Ardennes. The thinly spread forces of Lieutenant General Courtney Hodges' First Army stretched through the Ardennes between these two concentrations. Lieutenant General Jacob L. Devers' 6th Army Group of two armies extended the front south to Switzerland with a second major economy of force in the Alsace region of France.[10]

With this deployment, Eisenhower planned to conduct operations into Germany along two major axes. He directed Montgomery to conduct the main attack north of the Ardennes to capture the Ruhr industrial region. He further authorized Bradley to launch a secondary offensive with Patton's Third Army south of the Ardennes toward the Saar industrial region. Bradley's other army, the First Army,

was to protect Montgomery's southern flank by economizing forces in the Ardennes region.[19] (See Map 1, page 41)

In contrast to the Allies at this point, Germany's strategic options were rapidly diminishing. In the east, the Germans traded space for time. This strategy allowed the Russians to reach the gates of Warsaw and Budapest by the end of their offensives in December 1944. However, the Russians on the Vistula were still over 300 miles from Berlin while the Allies on the Rhine were only 75 miles from Germany's industrial heartland, the Ruhr. Given these strategic realities, Chancellor Adolf Hitler decided on a major offensive in the west before turning east to fight the Russians.[20]

Hitler rationalized that a major offensive along the seam of the American and British forces would split the Allied armies as well as the Alliance as a whole. He could theoretically accomplish this by an attack through the lightly defended Ardennes region where his forces lay only 100 miles from the strategic port of Antwerp. An attack in this region would also eliminate the threat to the Ruhr industrial region and be potentially feasible with fewer forces.[21]

To support this offensive, the Germans began preparations as early as September, 1944. For the next three months, they assembled almost the entire war production of the Third Reich with 75% of new tank

production and 85% of all new airframes being allotted to the Western Front. They transferred 17 divisions from the Eastern Front to the Western Front and assigned 18 of 23 newly organized Volksgrenadier divisions to the Western Front. Through these measures, the German armed forces were able to deploy 76 divisions on the Western Front with almost 30 of these divisions concentrated in the Schnee Eifel region of Germany opposite the Ardennes.[22] They organized this concentration into the Fifth Panzer, Sixth Panzer and Seventh Armies under Army Group B.

The German staffs analyzed the entire front for feasible employment options for these forces. From five possible major operations, the military favored and recommended a relatively conservative approach which envisioned a shallow envelopment. In this proposal, the main thrust through the Ardennes would turn north to meet a secondary thrust coming down the Aachen corridor. This option would have encircled the United States First and Ninth Armies. However, Hitler rejected it and insisted on a strong single thrust through the Ardennes toward Antwerp.[23]

This plan, codenamed "Watch on the Rhine," envisioned the use of all three armies attacking abreast along a 60 mile front through the Ardennes. The plan called for a concentration of forces in Germany to the east and northeast of the Ardennes. Sixth Panzer Army in the north

was to conduct the main attack south of the Monschau corridor to seize Meuse crossings south of Liege, Belgium. It would then turn north to exploit toward Antwerp. Fifth Panzer Army was to attack through the center of the Ardennes to protect the left flank of the Sixth Panzer Army. Finally, Seventh Army had the mission to protect the southern flank of the entire offensive.[24] (Map 2, page 42)

OPERATIONAL CONTEXT

The terrain through which the Germans chose to attack through had little of intrinsic military value. However, at that point, their front lay only 100 miles from Antwerp, a major operational and strategic objective. Tactically, the Ardennes presented the attacker with many challenges. Dense forests covered almost one third of the region while the remainder consisted largely of open rolling hills. However, much of this open area was marshy, which, unless frozen, restricted trafficability to the roads. The road net was well established for a rural area. However, these roads usually followed one of the numerous, twisting streams or rivers which eventually came to a bridge, crossroads or defile which a defender could easily block. Within this entire region there was only one narrow corridor conducive to military movement -- the five mile wide Losheim Gap in the north. (Map 3, page 43)

Despite the potential defensive terrain advantages, the Germans believed, based on their 1914 and 1940 experiences, that they could traverse the region with large mechanized forces. For an east to west attack, the terrain presented the greatest difficulty initially, then became increasingly open as the forces moved toward the Meuse. In the two previous campaigns the Germans quickly penetrated their opponents' initial defensive positions and pushed screening forces to the Meuse within 24 hours. These screening forces secured significant road junctions such as Bastogne or St. Vith as well as minor river crossing sites. If they could duplicate this feat, the German High Command believed their major problems would be movement control of the large forces in the terrain canalized rear areas.[25]

The Germans planned on several tactical and operational factors to insure the requisite rapid success. Tactically, they intended to use massive amounts of artillery for an opening preparatory bombardment. The infantry would then assault the opposing forces to gain a penetration which the first echelon of armor forces could exploit to the Meuse. Once across the river, the second echelon of Panzers would continue the exploitation to Antwerp.[26]

As the offensive's main striking force, the Sixth Panzer Army commanded by Oberstgruppenfuehrer der Waffen-SS Josef ("Sepp") Dietrich, planned to lead with the 1st SS Panzer Corps attacking down the northern half of the

Losheim Gap. In accordance with the tactical concept, a Volksgrenadier and parachute division would make the initial penetration, followed by exploiting forces of two SS Panzer divisions. The 67th Corps of three Volksgrenadier and one Panzergrenadier divisions had the mission to protect the northern shoulder of this penetration. The second echelon consisted of the 2d SS Panzer Corps of two SS Panzer divisions. The Sixth Panzer Army had five major roads along which to advance and assigned four of these to the Panzer formations. Dietrich allotted one day for the penetration, a second to exploit through the open marshy Hohe Venn, a third to reach the Meuse and a fourth to secure the crossings.[27] (Map 4, page 44)

The Fifth Panzer Army, commanded by General der Panzertruppen Hasso von Manteuffel, had the mission to protect the left flank of the main effort. To accomplish this, von Manteuffel planned to commit all three of his corps simultaneously the first day. The 47th Panzer Corps, in the south, which consisted of three Panzer divisions and one Volksgrenadier division, was the army's main effort. After crossing the Our River, it was to race to seize Bastogne, then protect the left flank of the army as the corps exploited to the Meuse crossings south of Namur. The 58th Panzer Corps, with one Panzer and one Volksgrenadier division, would cross the Our River in the center of the

Army zone, then advance through Houffalize toward crossings north of Namur. Finally, the 66th Corps of two Volksgrenadier divisions had the mission to capture St. Vith on the first day then support the 58th Panzer Corps in the center. Von Manteuffel planned to use infantry infiltration to seize the ridge overlooking the Our River on the morning of the first day. He then planned to use his Panzer formations to continue the exploitation that afternoon. Beyond that, he did not have an ambitious timetable like his fellow commander in the Sixth Panzer Army.[28] (Map 5, page 45)

The Americans facing this planned onslaught were considerably weaker. In the north, Major General Leonard T. Gerow's V Corps deployed the inexperienced 99th Infantry Division along a 12 mile front against the Sixth Panzer Army. Fortunately, the veteran 2d Infantry Division was in the 99th Division's sector conducting an attack toward the Roer Dams. In the center facing the Fifth Panzer Army, the VIII Corps, commanded by Major General Troy Middleton, spread three infantry divisions over an 85 mile front. Two of these were recovering from catastrophic losses in the Huertgen forest fighting of November while the third division had no combat experience. An armored division had recently joined the VIII Corps defense to provide armored reserves in the north and south. A cavalry group guarded the Losheim Gap and maintained contact with patrols from the V Corps.[29]

PHASE I: 16 DECEMBER -- 26 DECEMBER 1944
GERMAN OFFENSIVE AND AMERICAN DEFENSIVE

On 16 December 1944 the Germans launched their offensive with three armies from Monschau in the north to Echternach in the south. The scale and complexity of these operations and the American response dictates that they be examined in phases to simplify explanation and understanding. The two phases that will be studied are the German offensive operations from 16 December to 26 December and the American offensive operations from 23 December to 28 January 1945.[30]

At 0530 hours, Army Group B attacked across a 60 mile front. On the two extremities of the army group, the forces made only limited progress. In the far north, the 67th Corps, Sixth Panzer Army, attacked prepared American defensive positions in the vicinity of Monschau. By the end of 17 December, the corps had sustained such heavy casualties that it was unable to continue the offensive. Far to the south, in an attempt to protect the southern flank of the entire offensive, the German Seventh Army, commanded by General der Panzertruppen Erich Brandenberger, also moved forward. (Map 6, page 46) Attacking without any Panzer support, this army advanced against two regiments of American infantry. When the army stopped advancing on 19 December, it reached almost as far west as Neufchateau. At that point, it reoriented its forces so

that it had three Volksgrenadier and one parachute division facing south to meet any American attack from that direction. In this manner it was prepared to defend the southern flank of the German penetration. (Map 7, page 47)

The 1st SS Panzer Corps, Sixth Panzer Army, launched the German main attack. It met unexpectedly strong resistance from two divisions of the American V Corps. In attempting to open the northern roads for their Panzers, the Germans made repeated attempts to penetrate or outflank the American position. The 1st SS Panzer Corps battered itself for five days against the American defenses on the Elsenborn Ridge in an attempt to widen the northern shoulder. Its only success was to free a lone reinforced Panzer regiment, Kampfgruppe Peiper, which penetrated the American defense and attempted to outflank the developing shoulder to reach the Meuse River. Since the Germans were unable to support this success, by 23 December the Americans destroyed this isolated element in the confines of the Ambleve River valley. (Map 8, page 48) Due to this strong American resistance along his main line of operation, Dietrich shifted the 2d SS Panzer Corps to the south in an attempt to follow the earlier penetration. However, rapidly arriving American reinforcements extended the northern shoulder and stopped this effort by 25 December. Despite the possession of the most powerful forces, the Sixth Panzer Army stopped far short of the Meuse River crossings. (Map 9, page 49)

The rapid American response to this threat played an instrumental role in blunting this main German attack. The 2d Infantry Division immediately stopped its attack and began to withdraw in conjunction with the 99th Infantry Division. Together they formed a strong shoulder anchored along the Elsenborn Ridge. The stout defense of these two divisions coupled with the concentration of V Corps artillery on the Elsenborn Ridge, effectively denied the 1st SS Panzer Corps its intended main line of operation. (Map 8, page 48)

However, the Americans also had to contain the German spearheads which bypassed this defensive position to the south. To do this the Americans rapidly shifted units from the forces committed in the First and Ninth Army sectors farther to the north as well as from the SHAEF strategic reserves. The 1st Infantry Division moved to extend the V Corps western flank while the 7th Armored Division entered St. Vith to help the remnants of the 106th Infantry Division defending that key crossroads town. The XVIII Airborne Corps headquarters with two divisions extended the V Corps flank further to the west and assumed control of the defenders of St. Vith. These forces succeeded in stopping Kampfgruppe Peiper and containing the elements of the 2d SS Panzer Corps which tried to bypass the Elsenborn Ridge positions. (Map 9, page 49)

In the center, the Fifth Panzer Army had the greatest success. The 66th Corps quickly penetrated the defenses of the inexperienced 106th Division and advanced on St Vith which strong American reinforcements held until the night of 22-23 December. The 58th Panzer Corps in the Fifth Panzer Army center destroyed the regiment defending in its sector. By 19 December, in conjunction with the 47th Panzer Corps to its south, it had opened a 20 mile gap in the American lines between St. Vith and Bastogne. On that date two Panzer divisions, one from each corps, were exploiting through this gap. By 23 December, two more Panzer divisions joined them to race toward the Meuse through this penetration in the VIII Corps sector.

The 47th Panzer Corps, the Fifth Army main effort overcame determined but scattered American defenders. By 20 December, the corps approached Bastogne and began to surround it with Panzer divisions moving both north and south of the town. These Panzer forces continued to exploit west in conjunction with the 58th Corps while the reduction of Bastogne fell to the following infantry forces. These Volksgrenadier divisions, augmented by some Panzers, besieged Bastogne until the Germans began to withdraw forces from the salient in January. (Map 10, page 50 and Map 11, page 51)

Because of the relative success of these forces compared to Sixth Panzer Army in the north, Hitler designated the Fifth Panzer Army as the German main effort on 20 December. On 23 December, he also released a Panzer and a Panzergrenadier division from the theater reserve to reinforce the success of the two lead corps of the Fifth Panzer Army. Despite delays on 24 December, in the following two days these lead German corps advanced to within four miles of the Meuse River. In doing so, they reached the limit of their ability to advance without further supplies and reinforcements. However, these could not be pushed forward with Bastogne still in American hands. (Map 12, page 52)

The Americans responded immediately across the entire front to these massive German attacks. In this center sector, the individual soldiers put up strong, local defensive fights which enabled senior commanders to respond to the larger threats. The arrival of the 7th Armored Division in St. Vith enabled that division, plus remnants from two infantry regiments, to hold that critical crossroads town until 22 December before withdrawing into the defensive line of the northern shoulder. Additionally, the 101st Airborne Division from SHAEF reserve arrived in Bastogne throughout 19 December only hours before the spearheads of the German 47th Panzer Corps. There, they joined with remnants of two combat commands of armor to

hold against repeated German attempts to capture the town. Despite these initial American efforts, Fifth Panzer Army shattered two American infantry divisions to open the 20 mile gap in the center of the VIII Corps' original sector.

Not until the VII Corps, commanded by Major General J. Lawton Collins, joined the battle on the far western flank of the northern shoulder did the Americans stop the German spearheads. Originally, Montgomery intended to hold these two infantry and two armored divisions in reserve as a strong counterattack force. However, when the spearhead from the Fifth Panzer Army began threatening the northern shoulder, Collins committed his forces -- first to further extend the northern shoulder then to counterattack the Germans as they approached the Meuse. Consequently, the American 2d Armored Division conducted a major counterattack on 26 December which destroyed the lead elements of the German main effort, the 2d Panzer Division. It was the timely conduct of this counterattack which signaled the end of the German offensive and American defensive actions on the northern shoulder. (Map 11, page 51)

PHASE I: THEORETICAL ANALYSIS

The first phase of this campaign provides excellent opportunities to examine the applicability of Jominian concepts both for the planning and execution of major operations. From the very beginning, German planning

emphasized the concept of lines of operation. They made detailed plans for their own lines of operation as well as examining those lines in relation to the current Allied lines of operation. The German plan called for two armies to advance along two parallel lines of operation. Each army would have to penetrate the American forces to its front, advance along designated routes to the Meuse and cross near Liege in the north or Namur in the south. They would then turn almost ninety degrees to the north and advance past Brussels to Antwerp. This latter turn would cut the northern Allied armies' lines of operation. (Map 2, page 42)

Within this overall concept, each army's operations plan designated lines of operation for its subordinate corps. The Sixth Panzer Army had five roads to the Meuse in its sector. It assigned priority on the four southern roads to the leading Panzer divisions while leaving the single northern road to the supporting Volksgrenadier corps. Furthermore, the army's main effort, 1st SS Panzer Corps planned to advance through the Losheim Gap, the sole armored corridor through the Ardennes. The Fifth Panzer Army took a different approach by advancing with three corps abreast. With this relative dispersal, the army assigned each corps a line of operation toward the Meuse so that its seven divisions advanced in a 24 mile zone against four American regiments.

Once the operation began, the Fifth Panzer Army directed its main effort, the 47th Panzer Corps of three Panzer and one Volksgrenadier divisions at Bastogne. When this corps in conjunction with the 58th Panzer Corps achieved a breakthrough north of Bastogne, the Germans reinforced their line of advance with divisions from the Sixth Panzer Army and the theater reserve. In this manner Army Group B changed its concept of operations from an advance along two parallel lines of operation to an advance along a single reinforced line of operation. (Map 12, page 52)

This extensive concentration along a single constricted line of operation serves to illustrate Jomini's contention about the hazards of concentrating too great a force on too narrow a line of operation. Such a decision eventually proved catastrophic to the Germans. With limited maneuver space, particularly behind the spearheads, the Germans could not move sufficient supplies or reinforcements forward to sustain further advances. By 23 December, von Manteuffel recognized the requirement to choose between continuing to push his spearheads forward or reducing resistance along his lines of operation to his rear.

The American use of lines of operation in the defense is less clear cut than that of their attacking opponents. Prior to the initiation of the German offensive, the Americans advanced east along parallel lines of operations

to the north and south of the Ardennes. (Map 1, page 41) However, when the Germans attacked, the Americans had to shift their orientation to a north-south axis. In the First Army sector, Hodges moved reinforcements from assembly areas in the north of the fighting in a southerly direction to commit them facing south. In doing this, he also extended his line of operation from east to west as each subsequent division attempted to lengthen the shoulder of the defensive line by guarding critical crossroads. In this manner the 1st Infantry, 30th Infantry, 82d Airborne, 3d Armored, 84th Infantry and 2d Armored divisions each arrived from the north and began their defensive stands to the west of the previously arriving division. This deployment eventually formed a concentration of forces on the northern shoulder which faced south rather than east as they had days earlier on the offensive. (Map 9, page 49)

The second Jominian concept under examination is that of the decisive point -- that place, area or force, possession of which along a line of operation gives its owner an advantage over his opponent. This phase of the Ardennes operation provides numerous excellent illustrations of this concept for both the German offensive as well as the American defensive.

Prior to beginning the operation, the terrain available to the Germans to the east of the Ardennes, could be considered a decisive point for the future operation. To

succeed, the operation required absolute operations security and a believable deception plan. The Schnee Eifel region in Germany east of the Ardennes furnished both. The German railroad system provided sufficient rail lines into the region to allow rapid concentration of large forces during periods of darkness. The area also contained numerous small villages and extremely dense forests which provided impenetrable concealment from observation for these assembling forces. Furthermore, the Schnee Eifel was just to the south of the area for the concentration of the Sixth Panzer Army. The Germans allowed the Americans to detect this latter army to fuel the deception that they intended it as a counterattack force against First United States Army in the Rhine valley south of Cologne.[21] (Map 1, page 41)

The German Sixth Panzer Army plan envisioned two decisive points along the line of operation en route to the objective point of Antwerp. The first, a maneuver decisive point, was the penetration of the American defensive positions. The second, a geographic decisive point, was the crossing of the Meuse near Liege. Since the Meuse is a particularly difficult river to cross, possession of crossing sites over that river would surely have been a decisive factor in the success of the operation. However, the Germans never reached that phase of their operation. (Map 4, page 44)

The first point, penetration of the American defensive positions, proved to be decisive for the entire operation. In this critical area, the Sixth Panzer achieved a breakthrough along only two of its five intended routes of advance. In its attempt to widen its penetration, the army continued to attack increasingly stronger American defensive positions with ever weaker attacking forces. By the time the Germans shifted their main effort to the south, the once powerful Sixth Panzer Army was too weak to contribute significantly. By failing to expand this shoulder, the resultant single line of operation was too constricted to permit adequate maneuver for the multitude of forces eventually in the salient.

The Fifth Panzer Army recognized three decisive points along its line of operation prior to its arrival at its objective point of Antwerp. Like Dietrich, von Manteuffel recognized the importance of rapidly penetrating the thin American defensive positions. However, unlike Dietrich, whose use of mass failed to achieve a penetration, von Manteuffel decided to attempt to infiltrate his infantry between the thinly spread American defenders. This approach proved spectacularly successful -- particularly in the north where 66th Corps surrounded and captured two regiments of the 106th Division. Combined with the 58th Panzer Corps' success in the center of its sector, the Fifth Panzer Army opened a twenty mile wide gap in the American VIII Corps. (Map 5, page 45)

Although the 47th Panzer Corps eventually succeeded in penetrating the 28th Division along the main line of operation, the delay proved critical in the race for the second, geographic decisive point for the Fifth Panzer Army, Bastogne. As Hugh M. Cole stated in his official history, The Ardennes: Battle of the Bulge, "Bastogne, with seven entrant roads, naturally dominates the road complex in this area whether movement be from east to west as attempted by the XLVII Panzer Corps, or from the south to north, as planned for the American III Corps."[32] Von Manteuffel recognized this and in conjunction with the 47th Panzer Corps commander, he conducted two map exercises to determine the best manner to capture the city which lay nineteen miles from his crossing sites of the Our River.

Despite this planning, the Germans lost the race to Bastogne. Consequently, they decided to bypass this second decisive point to attempt to reach their third point along their line of operation, the Meuse crossings. With the twenty mile wide penetration north of Bastogne, the Germans pushed four Panzer divisions west toward the crossing sites. However, in an area constricted in the north and without possession of the decisive communications node of Bastogne, they could not push sufficient forces forward to capture their final decisive point against reinforced Allied forces.

On the defensive, the Americans conducted their entire defense based on the concept of decisive points. The doctrine prevalent in the American Army at the time partially drove this response. According to Cole:

> One piece of military thinking dominated in all the higher U.S. military headquarters and is clearly traceable in the initial decisions made by Eisenhower, Bradley, and the army and corps commanders ... that the salient or bulge produced by a large scale offensive can be contained and finally erased only if the shoulders are firmly held.[33]

Within this common operational framework, the shoulders of the penetration became decisive points for the American commanders.

These commanders directed extensive efforts to ensure that American forces kept the salient as narrow as possible by holding the shoulders. These efforts began at the SHAEF level on 17 December with Eisenhower directing the 10th Armored Division north and the 7th Armored Division south to help hold the shoulders. In the south, this quickly stabilized the situation because the German Seventh Army went onto the defensive after only three days. Here, the 4th Infantry Division with help from the 10th Armored Division contained a limited penetration and established the southern shoulder. (Map 13, page 53)

However, the northern shoulder became one of the most intensely contested regions of the operation. Both Gerow and Hodges took actions as early as 17 December to

strengthen this shoulder. After placing the 2d Division on the defensive, the V Corps ordered the 1st Infantry Division south to reinforce and extend the shoulder. This was the first reinforcing division to arrive in the threatened area. Gerow also established a massive 23 battalion artillery concentration on the Elsenborn ridge. Together these actions provided time for Hodges to move the XVIII and VII Corps south to further extend the northern shoulder. (Map 8, page 48)

These infantry divisions of V Corps with the help of the artillery, blunted and constricted the movement of the most powerful formations of the entire attack, the four SS Panzer divisions of Sixth Panzer Army. By holding the northern shoulder around Elsenborn Ridge, they denied the Germans use of three of their five intended routes through the northern Ardennes. The defense of the 99th and 2d Infantry Divisions was the most important maneuver decisive point of the northern shoulder and perhaps the entire campaign.

This constriction in the north contributed to the criticality of three additional geographic decisive points in the center of the region. From north to south these were St. Vith, Houffalize, and Bastogne. Each was a major road center which facilitated both north-south and east-west movement through the region. With the concurrence and support of higher commanders, the VIII

Corps commander decided to base the corps defense of the Ardennes on these three points by strengthening them with whatever forces became available. With the 20 mile gap in his center, Houffalize quickly fell to the Germans. It was eventually along the line of operations which passed through Houffalize that the Germans achieved their greatest penetration. (Map 3, page 43)

To the north, possession of the St. Vith road junction was decisive for several reasons. Not only did it clog German road lines of communications, the only rail line through the Ardennes passed through it. This greatly affected major German resupply efforts which were based upon rail transport. It also severely constricted potential German maneuver options. With the Sixth Panzer Army's northern routes already blocked, it needed the more southerly routes passing through St. Vith. However, this town lay in the Fifth Panzer Army zone so the army which needed it most could not attack it. Within the Fifth Panzer Army zone, the routes through St. Vith provided the best routes for attack on Bastogne. Consequently, successful American defense of St. Vith contributed to both the the defenses of the northern shoulder and the last decisive point of Bastogne. (Map 4, page 44 and Map 5, page 45)

Bastogne's decisive nature centered on the seven roads which entered the town from all directions. With this extensive road net, Bastogne dominated the road transportation complex for the entire southern Ardennes region. Possession offered its owner a critical pivot point for further maneuver as well as facilitating resupply of those operations. Possession by a defender allowed that force to severely constrict and interdict any line of operation used by an offensive force.

Not only did Gerow base his concept for defense on these points, the entire chain of command up to Eisenhower took steps to ensure that Allied forces retained possession of these points. Hodges, sent the second reinforcing division available in his sector, the 7th Armored Division into St. Vith to reinforce the remnants of the 106th Infantry Division. These forces held from 18 December until 23 December, when the XVIII Corps commander authorized their withdrawal. In holding St. Vith, they slowed the German offensive sufficiently to allow the senior American leadership the requisite time to conduct the operational transfer of forces to blunt the German penetration short of the Meuse.

Like St. Vith, Bastogne received immediate attention from all senior commanders. Within the VIII Corps sector, the first division to arrive from the SHAEF reserve, the 101st Airborne Division, entered this decisive crossroads

town on 18 December and immediately began to establish the defensive perimeter. They were joined on 19 December by the remnants of a regiment of the 28th Infantry Division and combat commands of the 9th and 10th Armored Divisions. Taken together, the first four arriving American reinforcement divisions all proceeded immediately to identified decisive points. The American commanders planned their defense to hold these decisive points and deployed their forces accordingly.

PHASE II: 22 DECEMBER 1944 -- 28 JANUARY 1945
AMERICAN OFFENSIVE AND GERMAN DEFENSIVE

At a 19 December meeting, the senior American leadership, particularly Eisenhower, established the Allied concept for the containment and eventual elimination of the German offensive salient. This included an immediate counterattack from the south to relieve Bastogne, as well as containment and eventual counterattack from the north. Within this framework, Patton's Third Army began to execute plans for a counterattack even before the German spearheads reached the limit of their advance.

The soldiers of Brandenberger's Seventh Army were the first to experience the effects of the American counterattack. On 22 December, Patton sent the III Corps of three divisions, spearheaded by the 4th Armored Division, attacking north to relieve Bastogne. Upon relief

of Bastogne on 26 December, Patton intended to widen the relief corridor and continue to drive north to linkup with American forces defending the northern shoulder. To execute this, the XII Corps attacked on the east of III Corps while the reorganized VIII Corps advanced on the west. On 31 December, the Third Army attacked with these three corps abreast across the entire southern shoulder of the German penetration. The III Corps again spearheaded the offensive out of the penetration at Bastogne as the Third Army fought its way north against stubborn resistance to attempt to linkup with the First Army. (Map 14, page 54)

On the northern shoulder, the Americans first had to stabilize the situation, before they could resume the offensive. With Collins' counterattack of 26 December against the tip of the German salient, they accomplished this prerequisite. However, the new Allied commander of the northern shoulder, Montgomery, withheld authorization for the Americans to conduct a large scale counterattack against the northern shoulder until 3 January 1945. By that date he had introduced the British XXX Corps at the tip of the salient and concentrated five divisions under VII Corps at the waist. The VII Corps then attacked across a twelve mile front to link up with the southern thrust and attempt to cut off the German salient at the waist. (Map 15, page 55)

By 16 January, the lead elements of the two converging American armies, the First and Third, met in the vicinity of Houffalize. At that point the Americans reoriented from their north-south drives to push east to eliminate the remainder of the salient. Through a combined attack of both the First and Third Armies, the Americans reestablished the front by 28 January along the lines held at the beginning of the German offensive over a month earlier.

As the Americans launched their attacks from the south, von Manteuffel recognized that he might not be able to accomplish his original mission with the forces available. He placed his dilemma before his superiors, informing them he had insufficient forces to both cross the Meuse and capture Bastogne. With the defeat of his advanced armored formations short of the Meuse on 26 December, he had no choice but to attempt to eliminate the resistance at Bastogne before any possible resumption of the offensive.

Consequently, von Manteuffel began shifting forces from throughout the salient and reserve to attempt to eliminate the American pocket at Bastogne. With the Americans still on the defensive in the north, he moved forces south to attempt to cut the slender III Corps corridor into the Bastogne. On 30 December, he mounted a coordinated attack with the 47th Panzer Corps attacking the corridor from the west and and an SS Panzer division and Volksgrenadier

division from the east. When this attack failed, he massed his remaining strength for an attack from the north. On 4 January 1945, a force of two depleted SS Panzer divisions, a Volksgrenadier division and a Panzergrenadier division made a final attempt to capture the town. However, this attack quickly faltered against the American III Corps strength around Bastogne. While failing to capture the crossroads town, these attacks significantly slowed Third Army's concurrent push north.

These desperate attempts against Bastogne severely reduced the German strength facing the northern shoulder. Only a weakened II SS Panzer corps of an SS Panzer and two Volksgrenadier divisions remained to oppose the American VII Corps attacks from that direction. By 10 January, the converging American attacks forced the Germans to withdraw the exposed units facing the British in the tip of the salient. To protect this withdrawal and slow the Americans advance, the Germans shifted two divisions to the north shoulder from the fighting around Bastogne. However, despite strong delaying actions, they had insufficient strength to prevent the American linkup at Houffalize.

As the Americans pushed east from Houffalize, the Germans tried to extricate as much force as possible from the salient. On 12 January, Hitler ordered the four SS Panzer divisions into assembly areas around St. Vith and eventually withdrew them completely on 22 January.

Simultaneously, von Manteuffel shuttled his Wehrmacht Panzer divisions north and south to stem the most serious threats while the remainder of his army conducted a fighting withdrawal to the east. In this manner, despite extreme traffic congestion at the Our bridges and with units moving at right angles to one another, he extracted the remnants of the Fifth and Sixth Panzer Armies.

PHASE II: THEORETICAL ANALYSIS

The second phase of the Battle of the Bulge provides further examples of the Twentieth Century applicability of the Jominian concepts of decisive points and lines of operation. With the Americans on the offensive once again, the issue of the appropriate line of operation for the counterattack to close the salient played a major role in Allied planning.

During the course of the planning for the counterattack, the Allies examined five potential lines of operation. The first two involved an application of the doctrinal solution of attacks at the base of a salient in order to cut off as many of the enemy as possible. The next planning option was to drive on Bastogne from the south to relieve the defenders then continue north to meet a second attack also trying to cut the salient at the waist. Montgomery also considered attacking east at the tip of the penetration to push the Germans back across the Our River. Allied commanders rejected the first option as

infeasible because of an inadequate north-south road net to support such large scale operations. Almost by default, they executed a combination of the cut at the waist and push at the tip. (Map 15, page 45)

With the encirclement of the American defenders at Bastogne, it became necessary to mount a relief operation. Patton conducted this by executing his famous ninety degree turn and launching the III Corps north toward Bastogne. With the success of this operation on 26 December, the Americans had a major force at the decisive point of Bastogne. To then have cut the salient at the base would have required a major new concentration of forces fifteen miles to the east. Rather than shift these forces to a new line of operation, Patton continued his push north at the waist of the salient.

On the northern shoulder Montgomery, with Collins concurrence rejected a counterattack at the base for the reasons stated. Rather, Montgomery wanted to mount the attack from the tip to push the Germans out of the salient. Collins wanted to attack along a line to link up with Patton. As a result the British XXX Corps attacked along an east-west line of operation against the nose while the U.S. VII Corps attacked along a north-south line of operation against the waist. Collins' attack from the north eventually met Patton's from the south at Houffalize. Once linkup occurred, the Americans reoriented

their attack to again advance east across the entire Ardennes.

In this operation, Houffalize was both a decisive and objective point. Possession by the Germans allowed both east-west resupply and evacuation as well as north-south shifting of forces for defense. Possession by the Americans cut any retreat for Germans still in the salient to the west. Consequently, both sides committed major forces to either cut or hold open that decisive road intersection.

German planning for the defensive phase of the operation once again incorporated the concepts of lines of operation and decisive points. Once von Manteuffel realized he could not cross the Meuse without possession of Bastogne, he planned to first capture that decisive point. To do this he committed his reserve divisions as well as units moved south from the failed attacks on the northern shoulder. When this massive commitment to capture the town still failed, he then concentrated on keeping his east-west line of operation through Houffalize open.

During both the attack and defense of these two decisive points, the Germans operated on two lines of operation which eventually crossed each other at a ninety degree angle. First, to attack in the south, von Manteuffel shifted forces to that area from the quiet northern shoulder as well as bringing new forces into the

salient from the east. When the Americans launched a second attack from the north, he shifted forces from his Bastogne concentration to the northern shoulder to protect the decisive point of Houffalize. While these combat forces moved in a north-south direction, the remnants of the destroyed spearheads, resupply operations and eventually escaping formations moved in an east-west direction. This crossing of lines of operation in such a constricted space exacerbated the major traffic congestion which occurred among the German forces throughout the operation.

III. CONCLUSIONS

The preceding analysis of the Ardennes operations appears to support Michael Howard's contention that Jominian concepts still have applicability to the modern battlefield. This is certainly true with the concepts of decisive points and lines of operation. When these ideas are applied in a conceptual rather than a literal sense, they are particularly valuable to the military planner. During the Ardennes operation, both German and American commanders used these two concepts when planning and executing both offensive and defensive operations.

However, it is important to qualify any assertions of universal applicability. The operations examined occurred in a very specific region of terrain which had a major

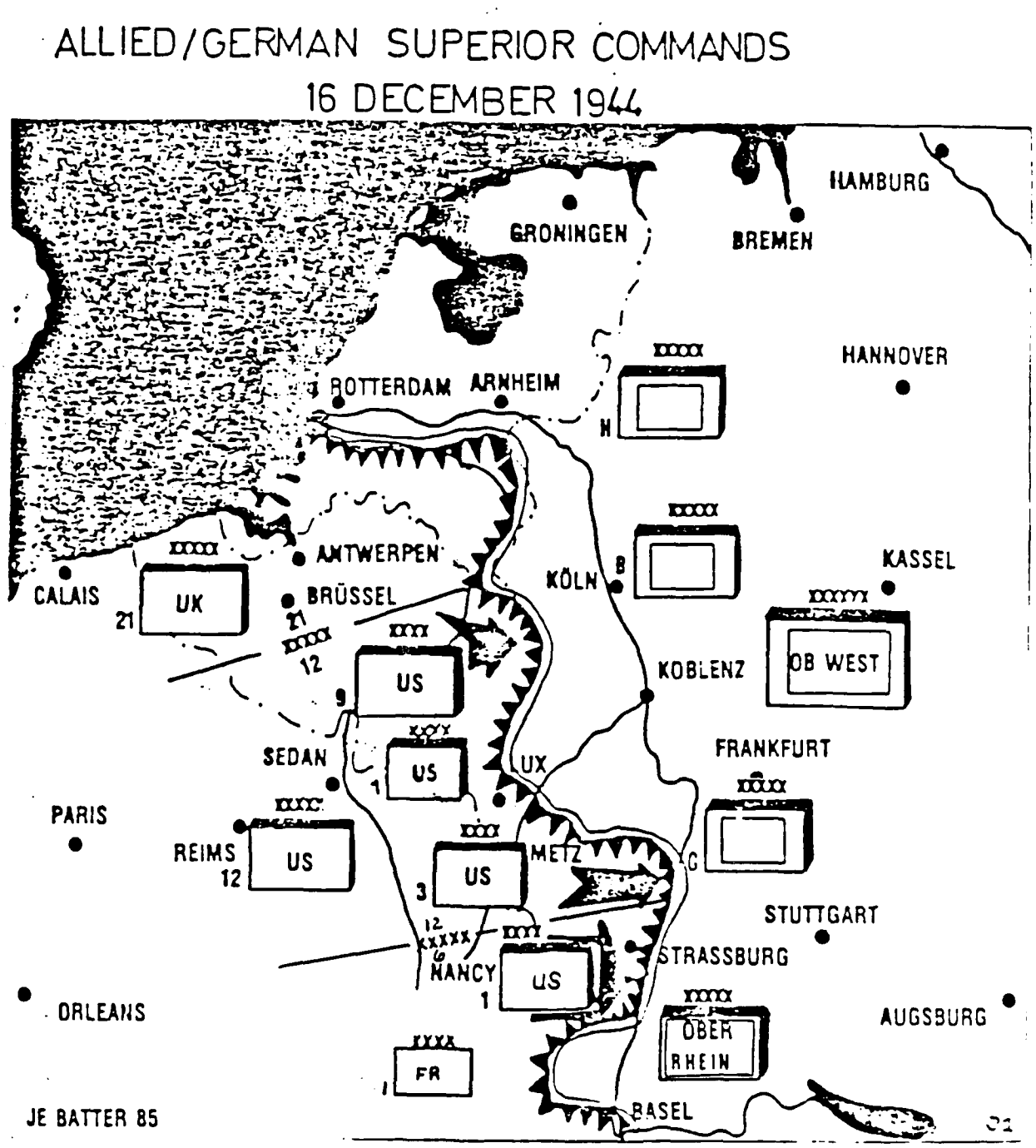
impact on the shape of the operation. As the two concepts are largely applicable in relationship to terrain, any use must first be tempered with an understanding of the theater in which the operation might be conducted. Given that caveat, decisive points and lines of operation still have a general application.

The idea of decisive points helped to shape the manner in which both opposing forces conducted their operations. In the offensive, German commanders generally recognized four decisive points along their line of operation -- the penetration, the key road junctions, the Meuse crossings, and the objective, Antwerp. In defending the same terrain, American commanders also identified the penetrations or shoulders as maneuver decisive points as well as key road junctions and Meuse crossings as geographic decisive points. The ebb and flow of this operation can be traced by following the opposing sides possession of these decisive points. To the extent that the Germans succeeded in penetrating and capturing key road junctions, their offensive advanced. To the extent that the Americans held the shoulders and denied access to the key road junctions their defense succeeded.

The choice of the appropriate line of operation also had a profound impact on the relative success of the opposing operations. The Germans, by choosing two parallel lines of operation in extremely restricted terrain, limited their opportunities for maneuver. The Allies, by choosing

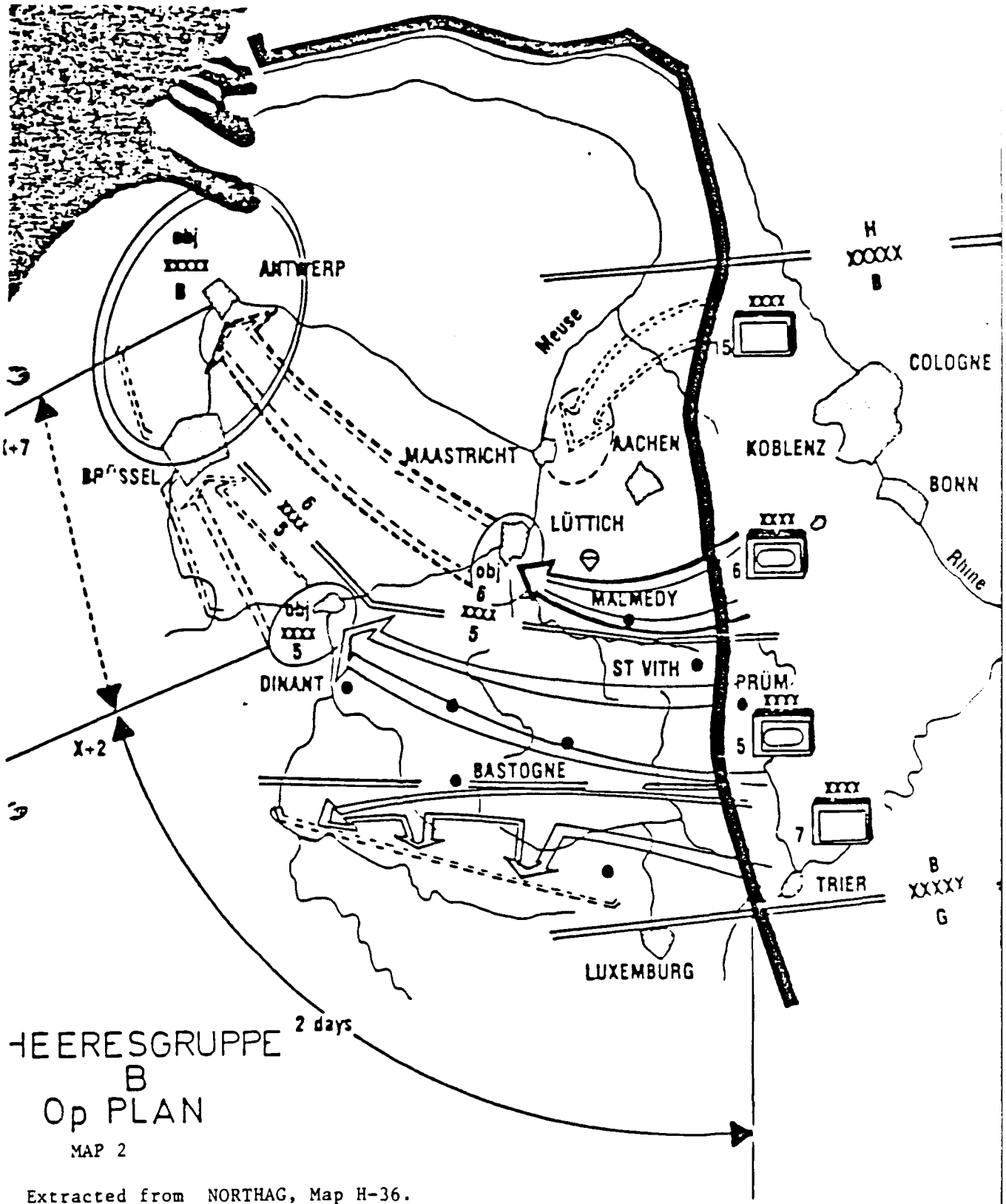
to cut the salient at the waist, reduced their opportunity to decisively defeat the German forces. This operation illustrates that the line of operation which the commander chooses can have a major impact on the success of his operation.

This study of the Ardennes campaign validates the applicability of two of Jomini's concepts. Clearly, the possession of decisive points provided the respective combatant with a significant advantage over his opponent. Furthermore, the choice of the line of operation played a major role in determining the extent of victory or led to failure. Given these results, the concepts of decisive points and lines of operations may be of significant value to the modern commander in designing and fighting future operations.



MAP 1

Extracted from: Headquarters, Northern Army Group, "Battlefield Tour: Offensive in the Ardennes: December 1944-January 1945," Staff Paper #2050.2/ NAPAAS/85, NATO Unclassified, Map H-32. Hereafter cited as NORTHAG.

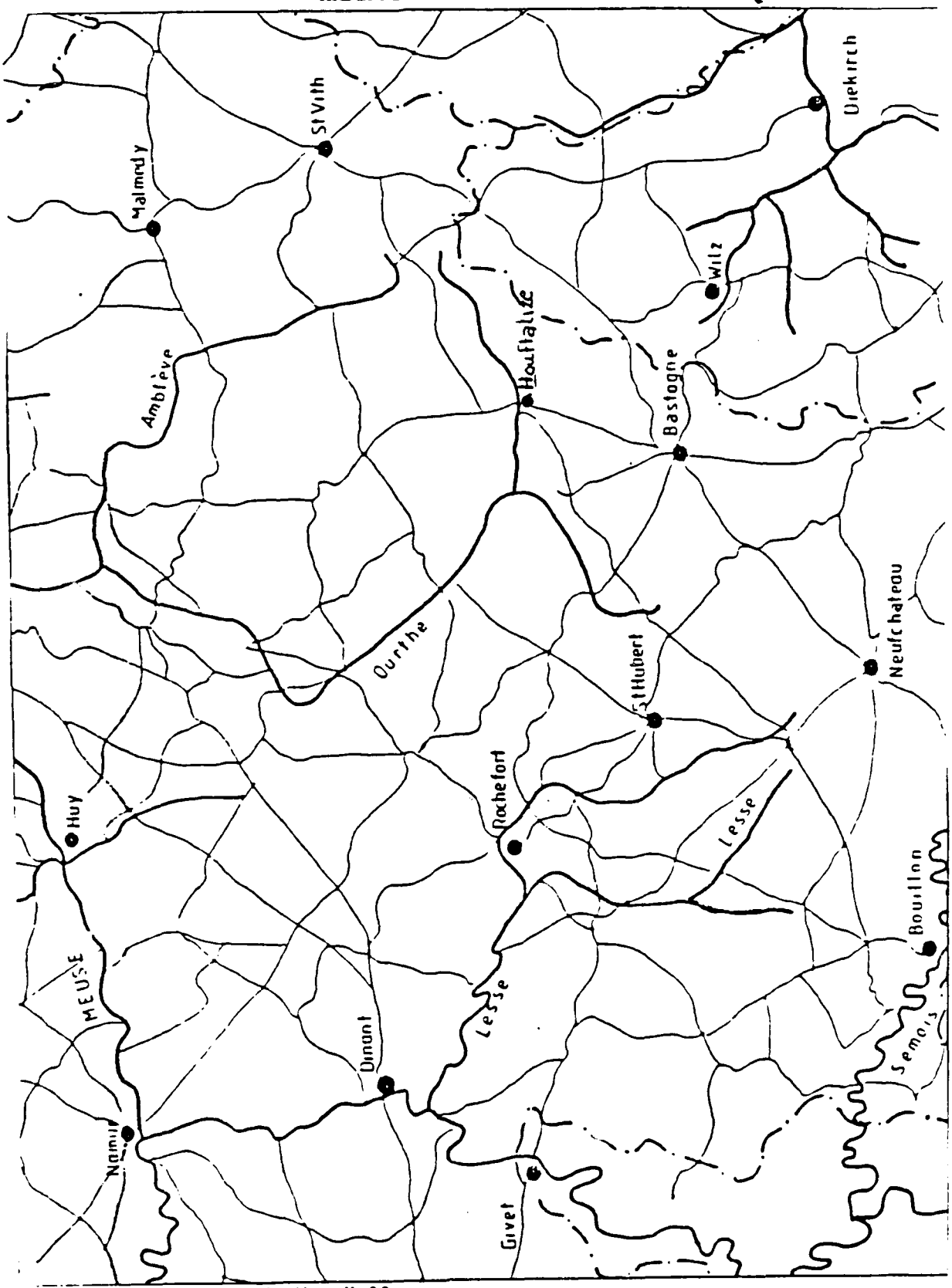


HEERESGRUPPE
B
Op PLAN

MAP 2

Extracted from NORTHAG, Map H-36.

ARDENNES TERRAIN MAP 3



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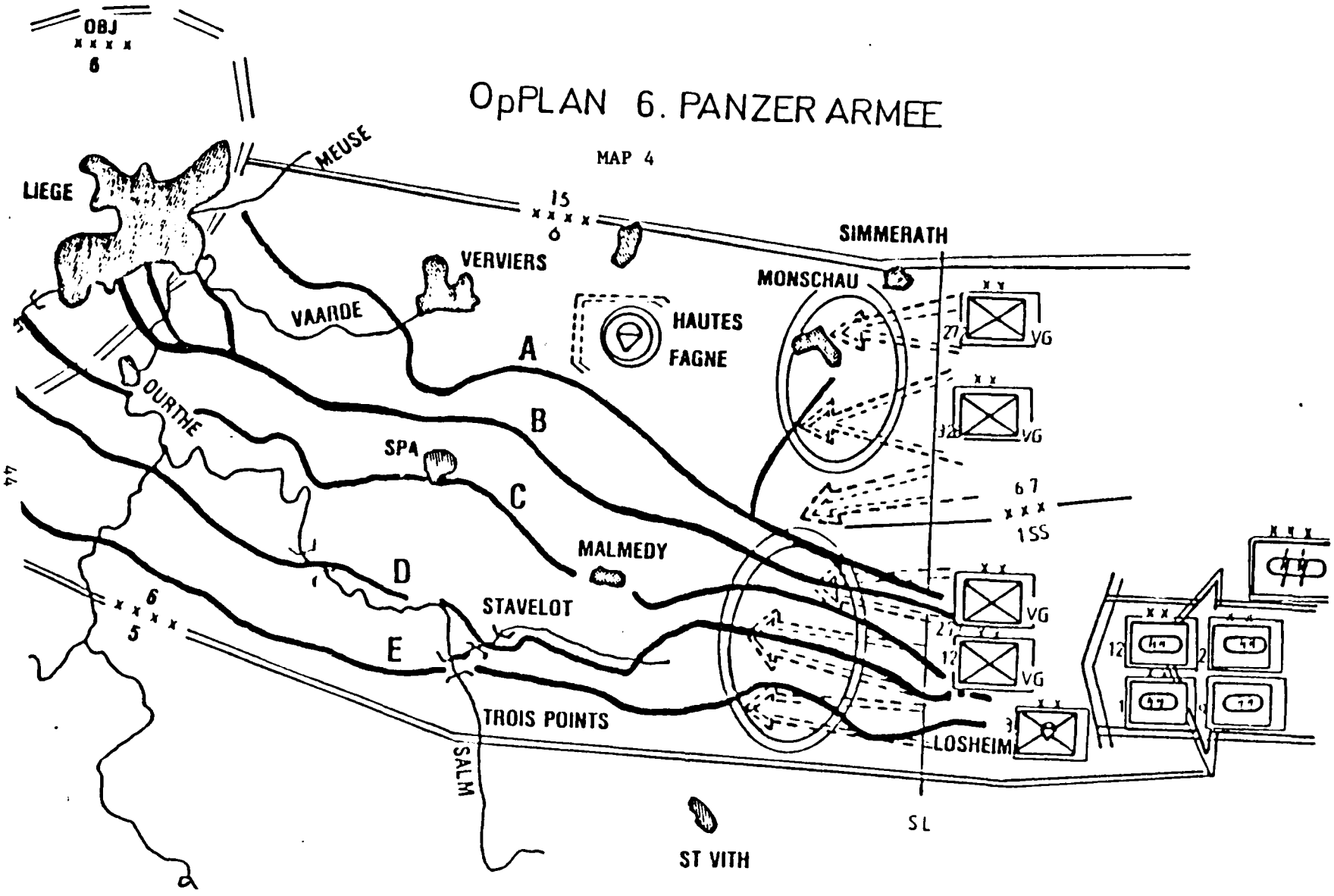
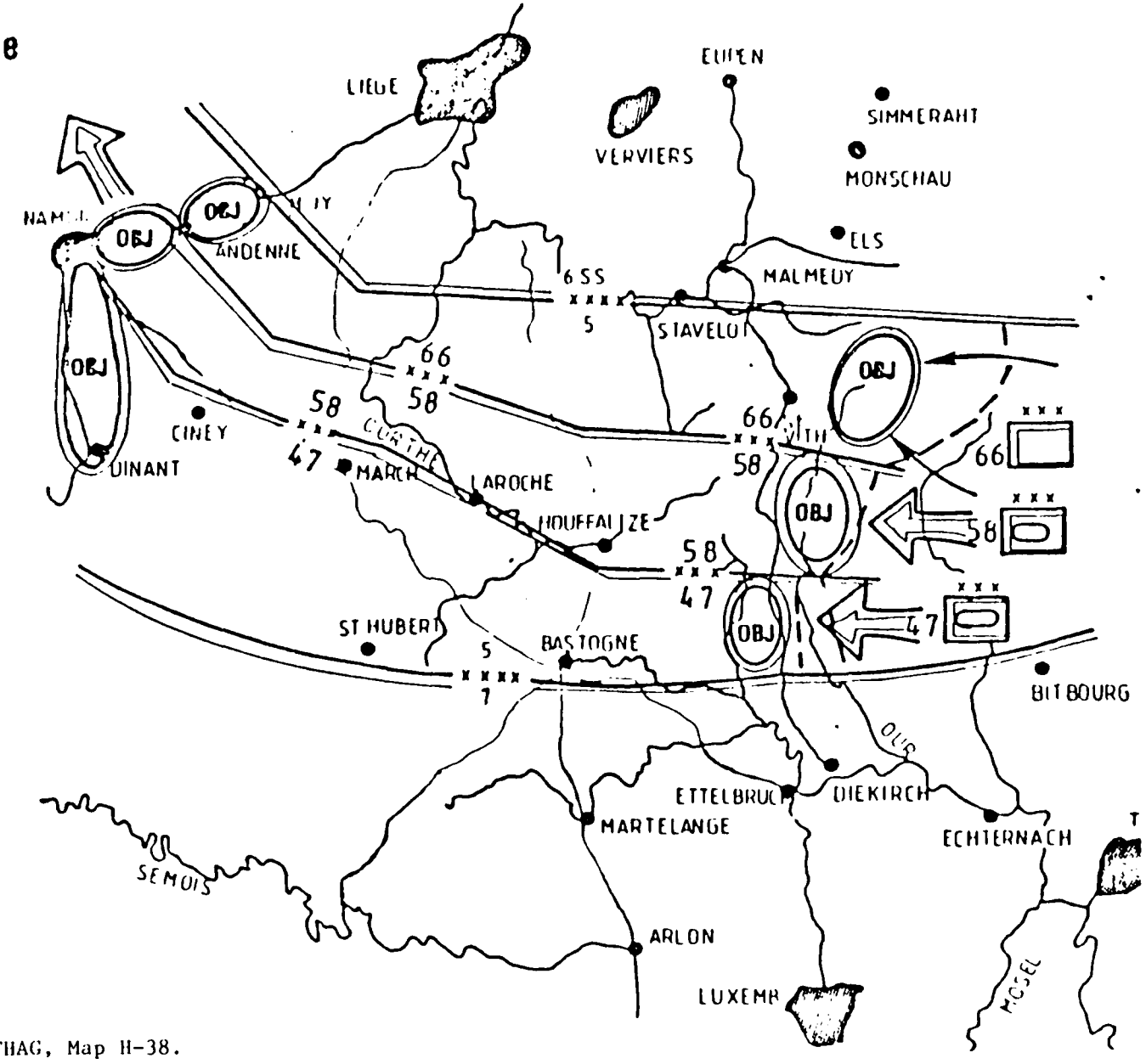


Extracted from NORTHAG, Map H-37.

5 Pz Armee
OP PLAN

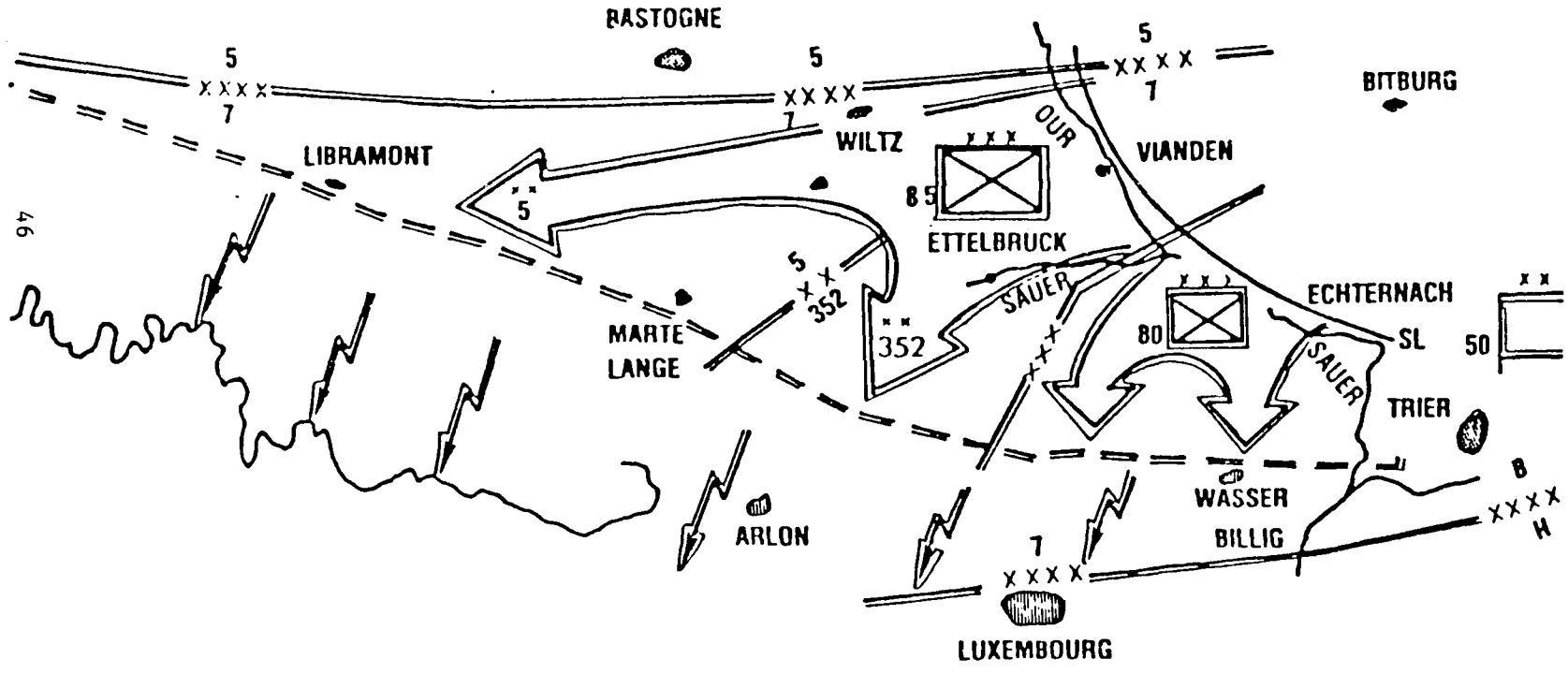
MAP 5



Extracted from NORTHAG, Map H-38.

OPLAN 7 XXXX

MAP 6



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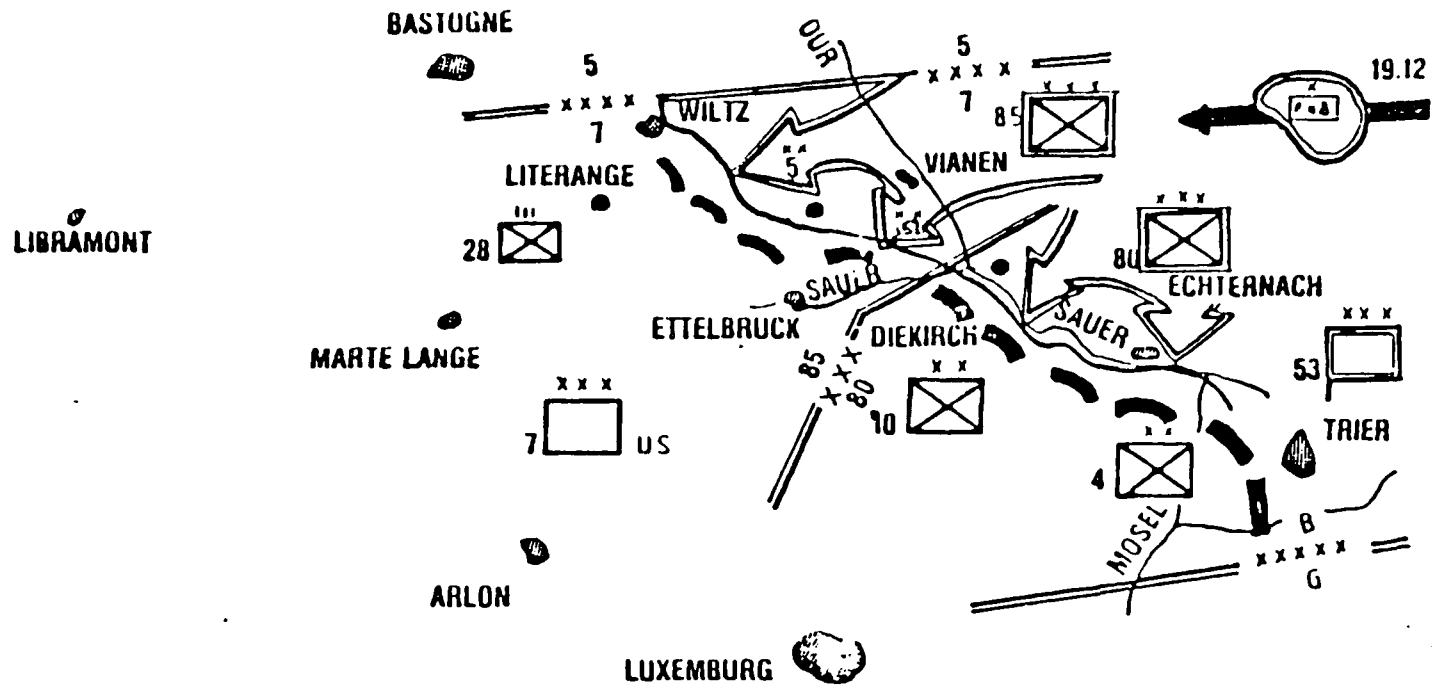
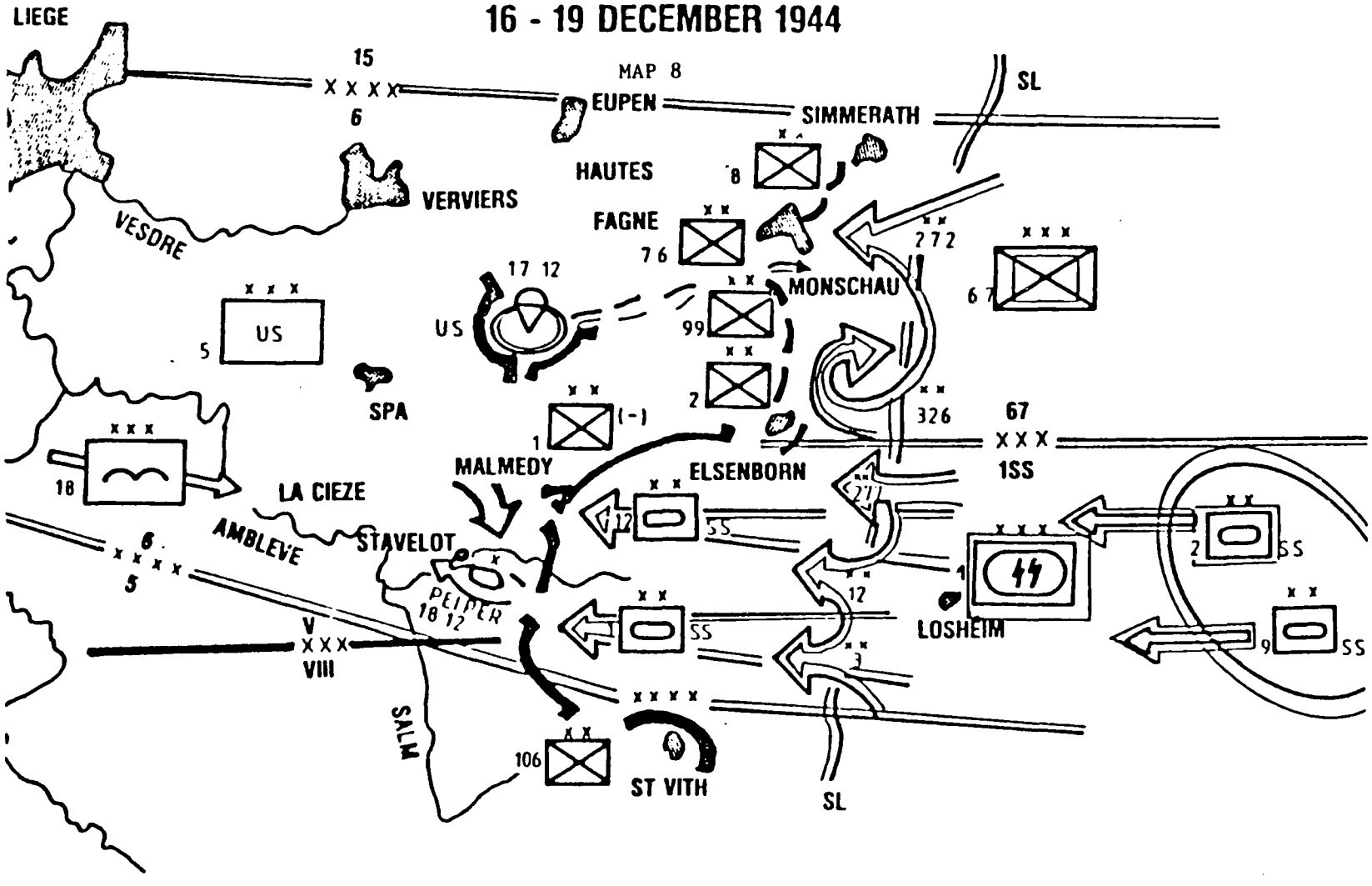


DEVELOPMENT IN 7 XXXX SECTOR
16 - 19 DECEMBER 1944
MAP 7

Extracted from NORTHAG, Map H-42.

DEVELOPMENT 6. PANZERARMEE

16 - 19 DECEMBER 1944



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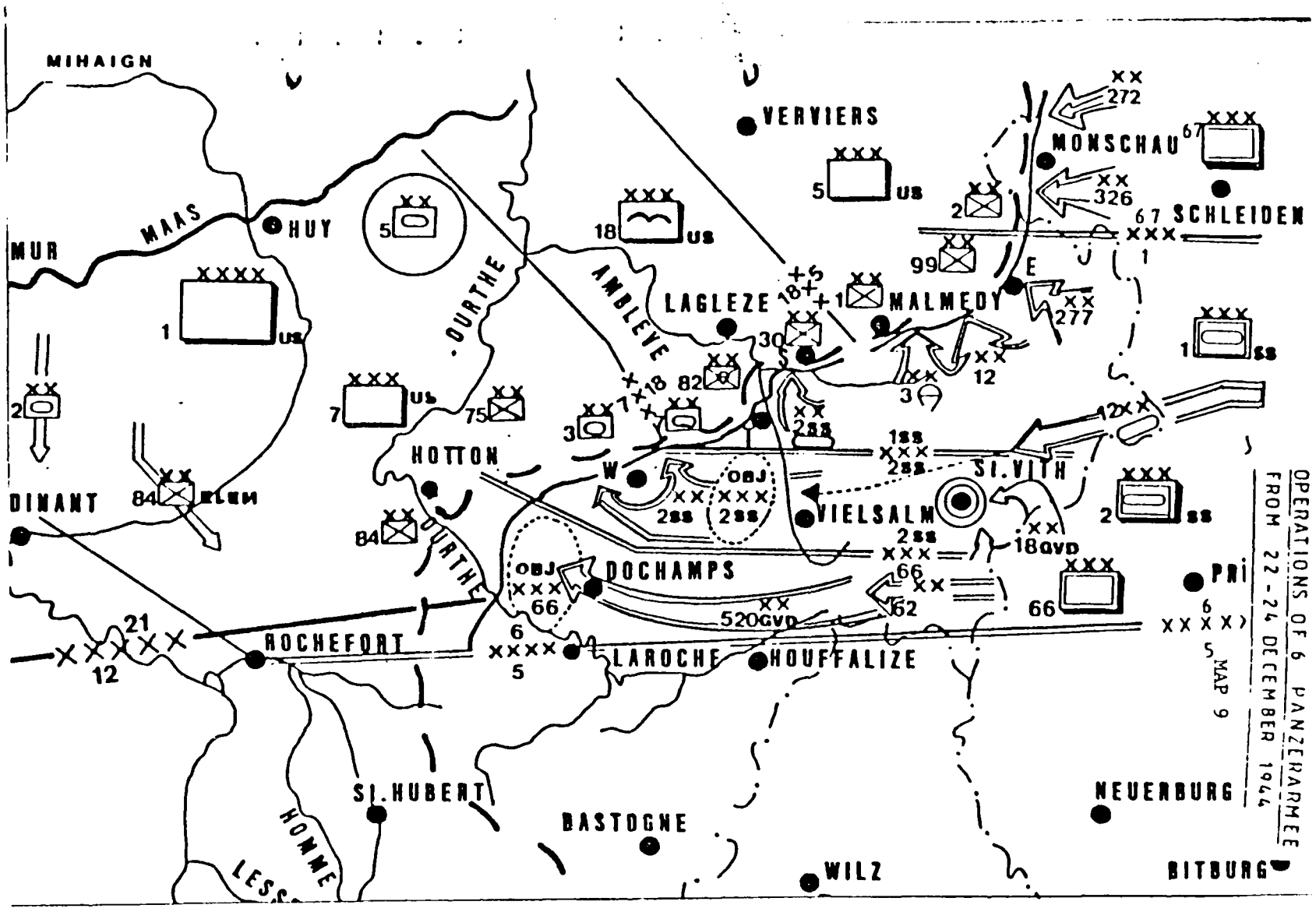

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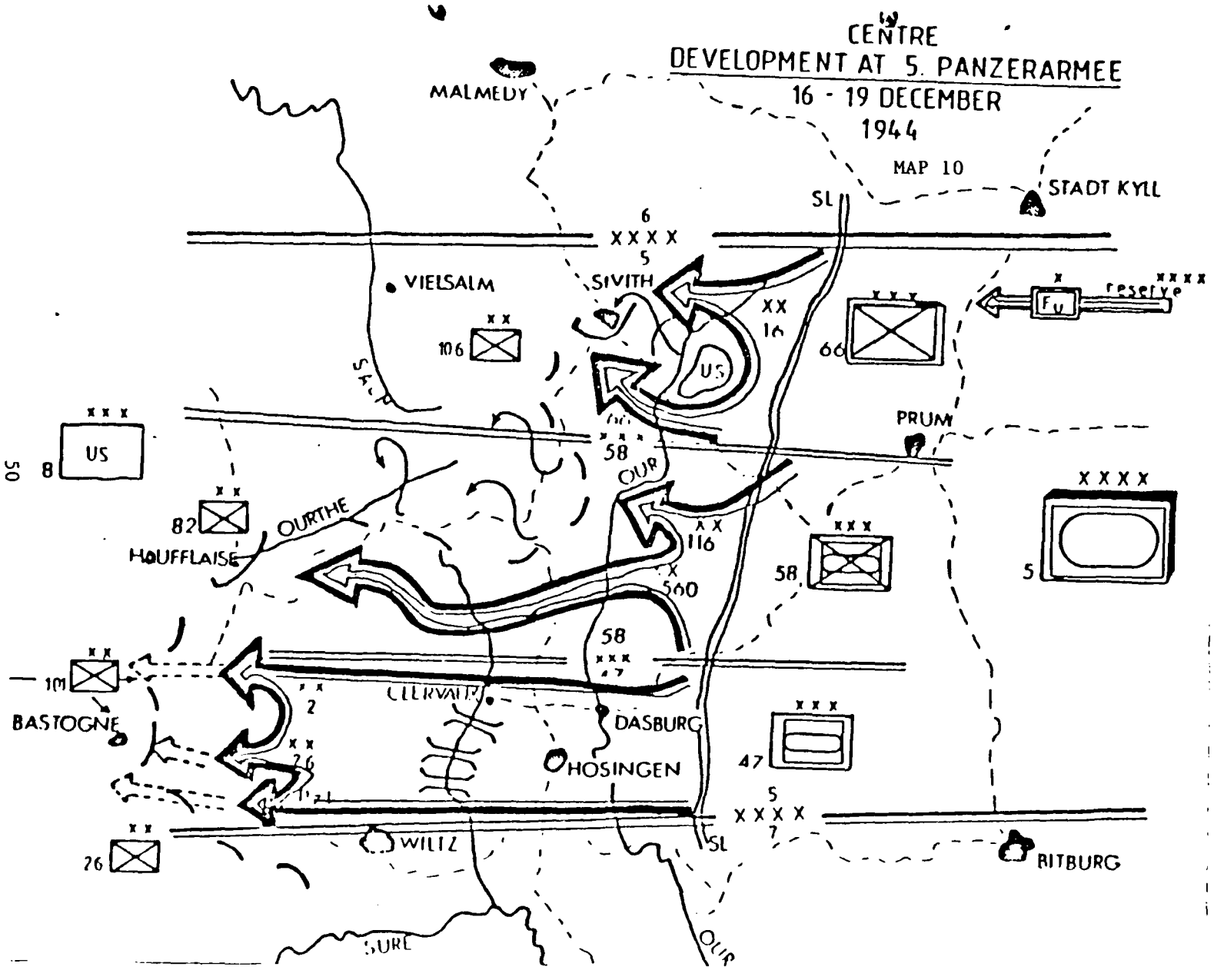

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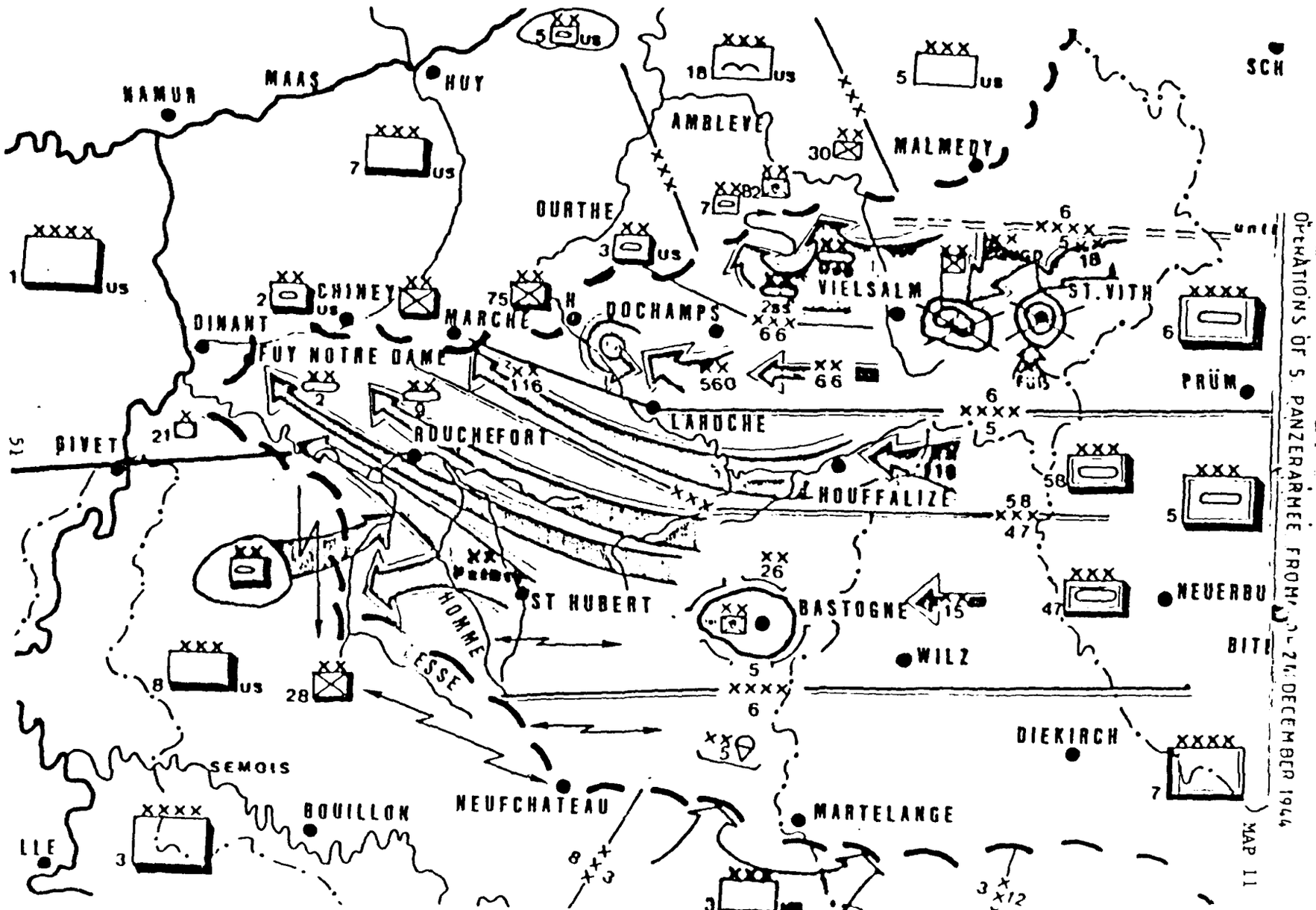
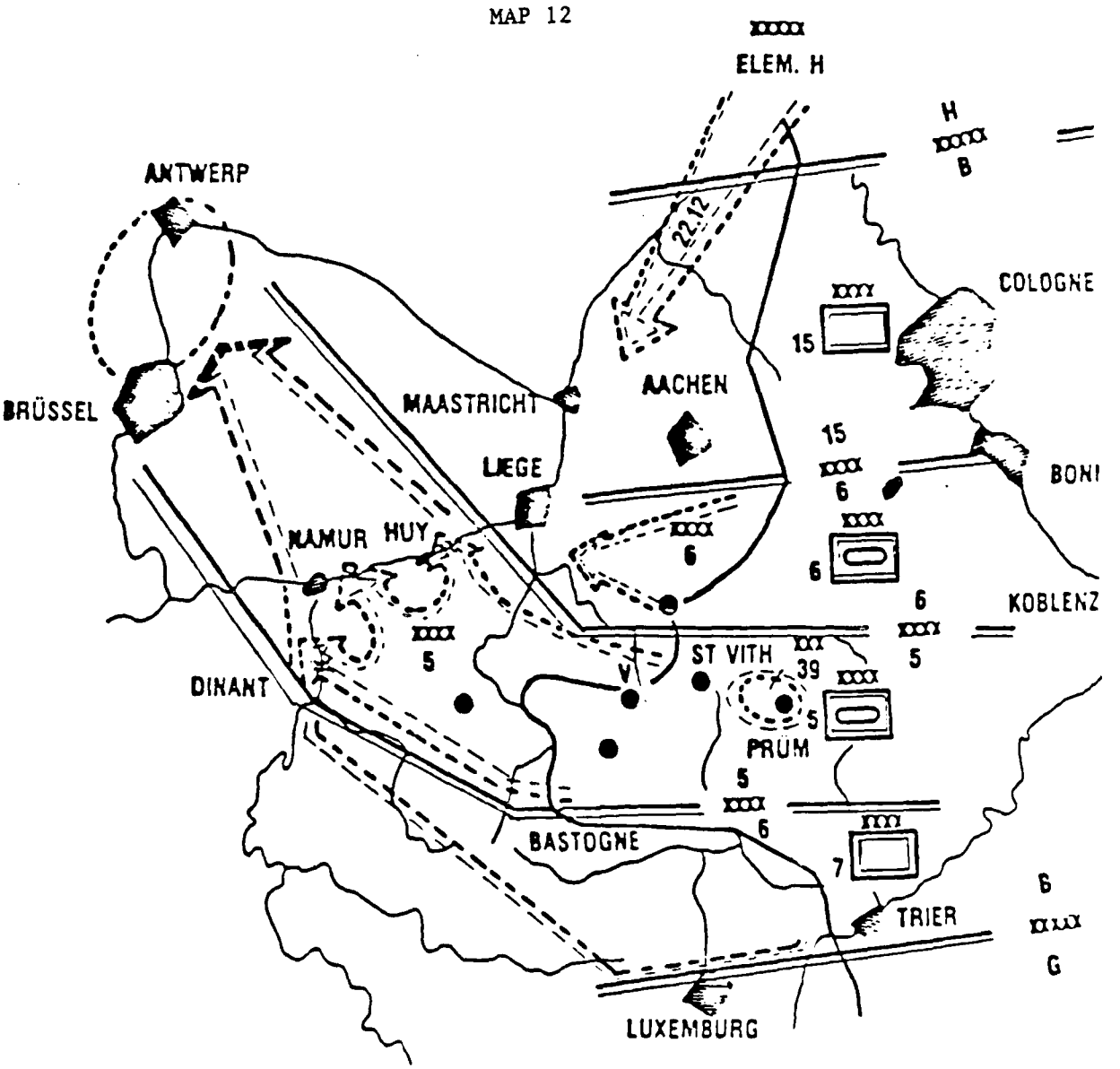


Extracted from NORTHAG, Map H-51.

OB WEST DECISION 20 DECEMBER

MAP 12



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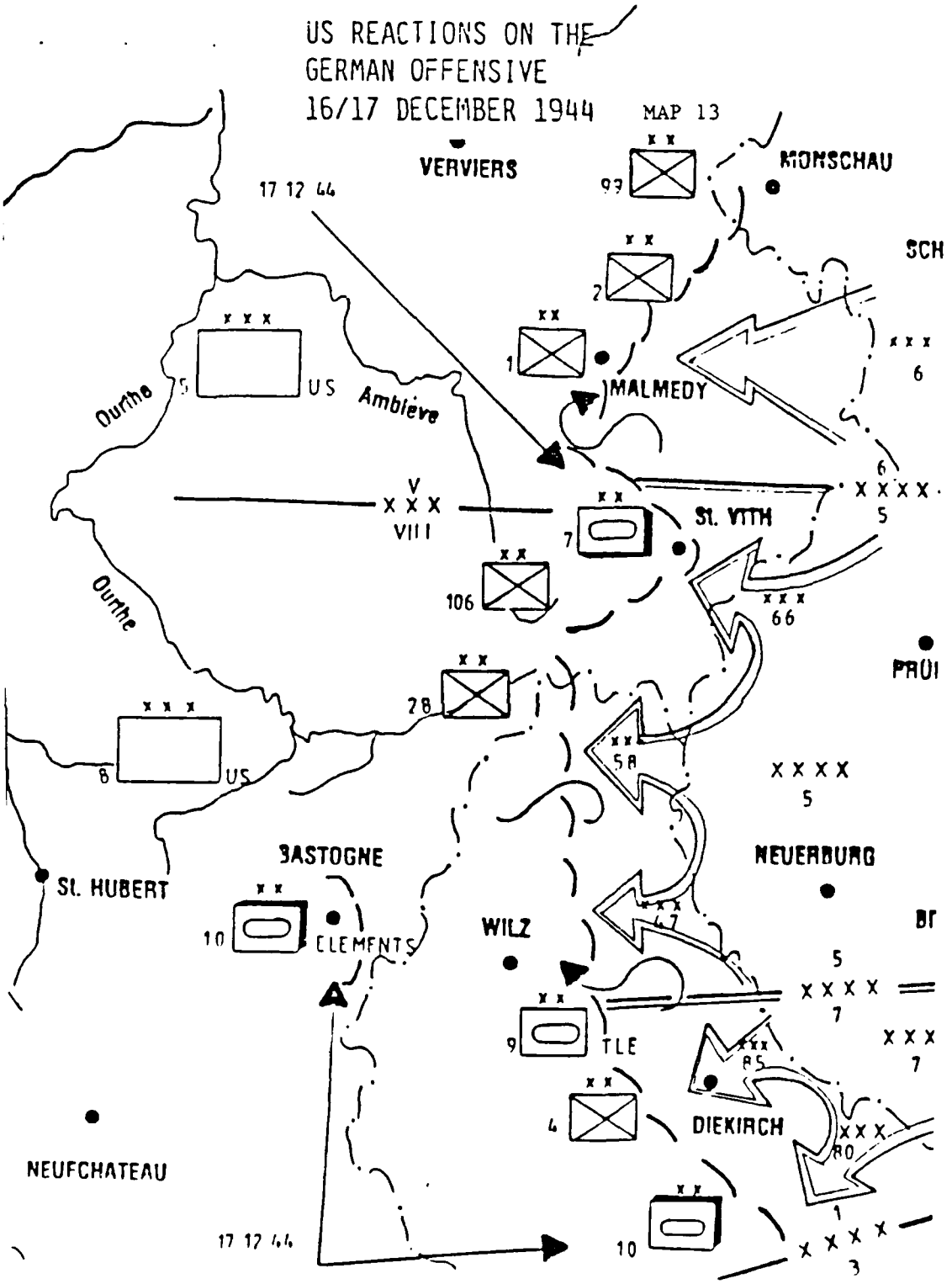
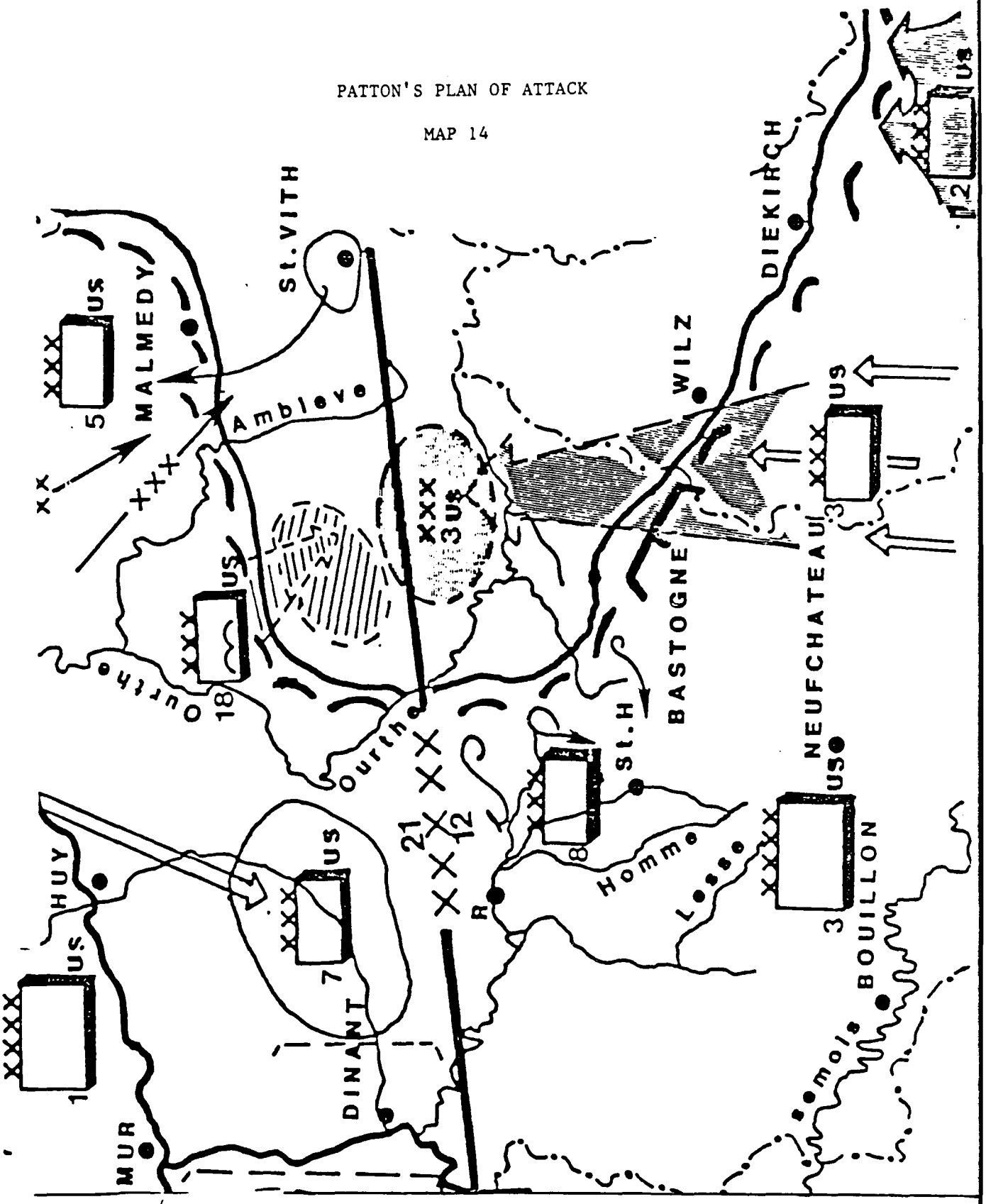


Extracted from NORTHAG, Map H-44.

PATTON'S PLAN OF ATTACK

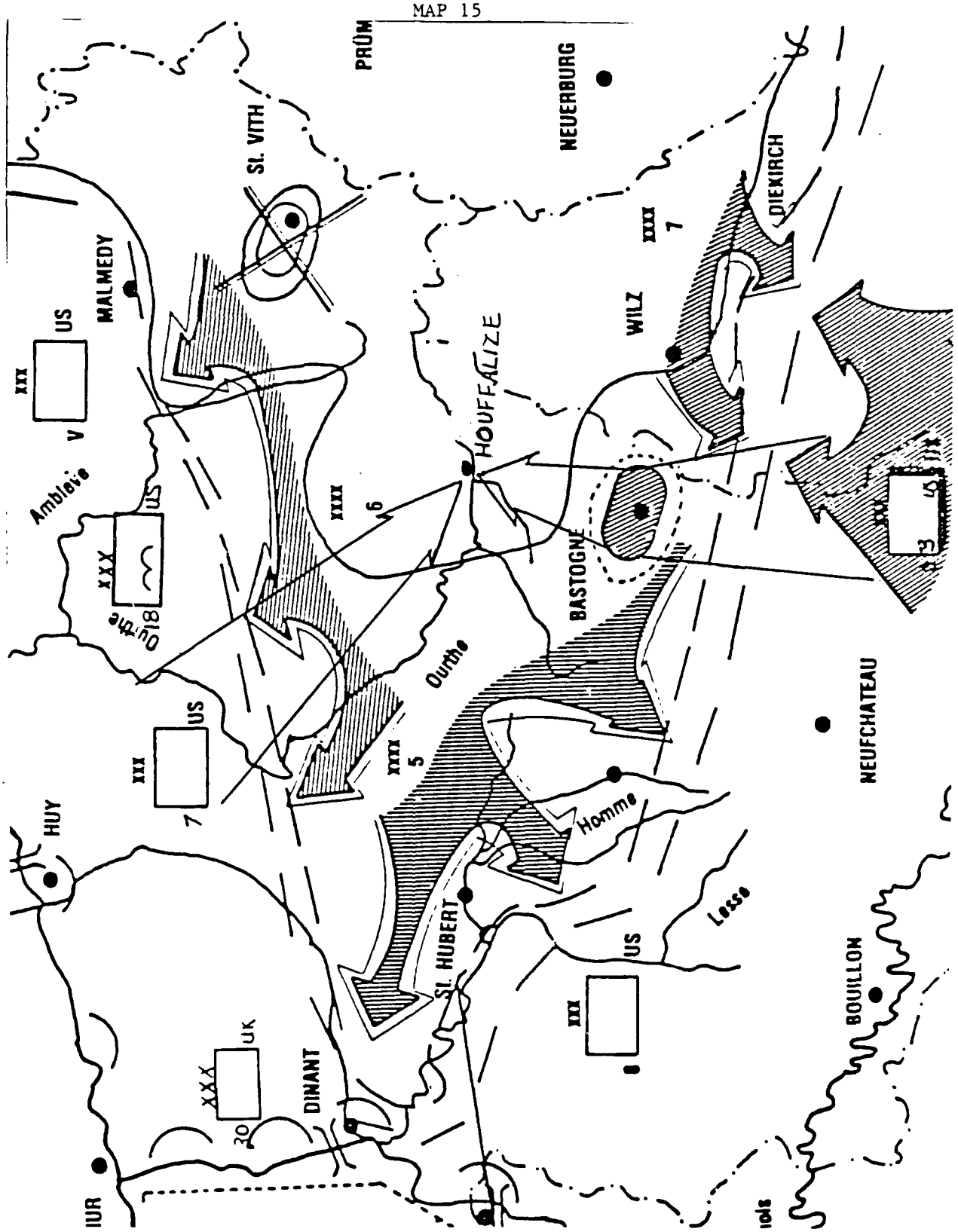
MAP 14



Extracted from NORTHAG, Map H-47.

CONVERGING COUNTERATTACKS

MAP 15



Extracted from NORTHAG, Map II-33.

ENDNOTES

[1]Field Manual 100-5, Operations, (Washington, D.C.: U.S. Government Printing Office, 5 May 1986), p. 179. Hereafter cited as FM 100-5.

[2]FM 100-5, p. 180.

[3]Crane Brinton, Gordon A. Craig, and Felix Gilbert, "Jomini," in Makers of Modern Strategy, ed. Edward M. Earle (Princeton: Princeton University Press, 1943), pp. 77-92.

[4]John Shy, "Jomini," in Makers of Modern Strategy, ed. Peter Paret (Princeton: Princeton University Press, 1986), p. 165.

[5]Hew Strachan, European Armies and the Conduct of War, (London: George Allen & Unwin, 1983), p. 68.

[6]Michael Howard, "Jomini and the Classical Tradition in Military Thought," in The Theory and Practice of War, ed. Michael Howard (New York: Frederick A. Praeger, Inc., 1965; reprint ed., Bloomington: Indiana University Press, 1975), p. 17.

[7]Howard, p. 17.

[8]Baron Antoine Henri Jomini, The Art of War, trans. G.H. Mendell and W.P. Craighill (Philadelphia: J.B. Lippincott & Co., 1862; reprint ed., Westport, Conn.: Greenwood Press, 1977), p. 70.

[9]Jomini, p. 114.

[10]Jomini, pp. 74-76.

[11]Jomini, pp. 88-90.

[12]Jomini, pp. 85-88.

[13]Jomini, p. 100-101.

[14]Jomini, pp. 100-103.

[15]Jomini, p. 111.

[16]Jomini, p. 125.

[17]BG Vincent J. Esposito, ed., The West Point Atlas of American Wars, vol. II: 1900-1953 (New York: Frederick A. Praeger, Inc., 1959), Section 2, World War II, maps 58-60; Russell F. Weigley, Eisenhower's Lieutenants:

The Campaign of France and Germany, 1944-1945 (Bloomington: Indiana University Press, 1981), pp. 370-371.

[18]Charles B. MacDonald, A Time for Trumpets: The Untold Story of the Bulge (New York: William Morrow and Company, Inc., 1985), pp. 49-51.

[19]MacDonald, pp 49-51; Weigley, p. 43.

[20]MacDonald, p. 19.

[21]Hugh M. Cole, United States Army in World War II: European Theater of Operations: The Ardennes: Battle of the Bulge (Washington, D.C.: Office of the Chief of Military History, 1965), p. 17.

[22]Weigley, p. 572.

[23]Cole, p. 20; MacDonald, p. 29.

[24]Cole, p. 29; MacDonald, pp. 20-25.

[25]Cole, p. 46.

[26]MacDonald, p. 24.

[27]Cole, p. 77; John S.D. Eisenhower, The Bitter Woods (New York: G.P. Putnam's Sons, 1969), pp. 157-158.

[28]Cole, pp. 174-175; Eisenhower, pp. 158-159.

[29]Weigley, pp. 448-449.

[30]The are several extremely detailed sources for the events that occurred during the Ardennes Offensive. These include the previously cited works of Cole, MacDonald and Eisenhower. For the second phase of the operation, Charles B. MacDonald, United States Army in World War II: European Theater of Operations: The Last Offensive (Washington, D.C.: Office of the Chief of Military History, 1973) is the official history. Additionally, Weigley presents a more condensed version in his work from page 445-574.

[31]Cole, p. 50.

[32]Cole, p. 511.

[33]Cole, p. 334.

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