

Plans That Survive First Contact

**A MONOGRAPH
BY
Major John Garrett
United States Army**



**SCHOOL OF ADVANCED MILITARY STUDIES
UNITED STATES ARMY COMMAND AND GENERAL STAFF COLLEGE
FORT LEAVENWORTH, KANSAS**

Academic Year 1999-2000

Approved for Public Release Distribution is Unlimited

ABSTRACT

PLANS THAT SURVIVE CONTACT, by Major John Garrett, USA, 59
pages

This monograph explores the truism that "No plan survives first contact with the enemy". Why do commanders and staff officers continue to plan in great detail when the results of the Combat Training Centers and other events continue to reinforce this message? The answer lies in the examination of what experienced combat commanders did with plans in the heat of combat. What did these commanders come to expect from plans and what was in them?

The United States Army gained valuable experience in the development of combat planning during the Second World War. This monograph examines the type of plan that one such experienced division and its commander used. The 9th Infantry Division commander and staff had learned what they could reasonably expect from plans soon after Normandy and subsequently never deviated from that methodology. This monograph selected one operation, the crossing of the Meuse River in Belgium in 1944 to illustrate what this experienced combat commander had come to expect from plans in combat.

The plans of the 9th Infantry Division were not unique and many of the units in the European Theater came to the same realization about plans. When commanders were exposed to combat over a length of time their plans tend to conform to the same simple methodologies. The plans they developed no longer tried to be predictive about the future, detailed concepts and schemes of maneuver disappeared. What was left was long periods of detailed situational analysis and plans that only stated the aim, resourced subordinates, and did not attempt to dictate the method.

This study concludes that plans that survive first contact are those that do not try to predict the future. Plans that survive first contact focus on the objectives and the interrelationships of subordinates to the aim. This type of plan, used by combat experienced commanders and staffs, survives as long as the objective retains its value in relationship to the overall goal.

SCHOOL OF ADVANCED MILITARY STUDIES


MONOGRAPH APPROVAL

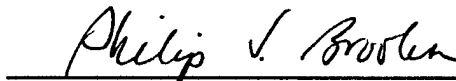
Major John Garrett

Title of Monograph: Plans That Survive First Contact

Approved by:

 Monograph Director
Robert M. Epstein, Ph.D.

 Professor and Director Academic
Robert H. Berlin, Ph.D. Affairs, School of Advanced
Military Studies

 Director, Graduate Degree
Philip J. Brookes, Ph.D. Program

Accepted this 15th day of May 2000

ABSTRACT

PLANS THAT SURVIVE CONTACT, by Major John Garrett, USA, 59 pages

This monograph explores the truism that "No plan survives first contact with the enemy". Why do commanders and staff officers continue to plan in great detail when the results of the Combat Training Centers and other events continue to reinforce this message? The answer lies in the examination of what experienced combat commanders did with plans in the heat of combat. What did these commanders come to expect from plans and what was in them?

The United States Army gained valuable experience in the development of combat planning during the Second World War. This monograph examines the type of plan that one such experienced division and its commander used. The 9th Infantry Division commander and staff had learned what they could reasonably expect from plans soon after Normandy and subsequently never deviated from that methodology. This monograph selected one operation, the crossing of the Meuse River in Belgium in 1944 to illustrate what this experienced combat commander had come to expect from plans in combat.

The plans of the 9th Infantry Division were not unique and many of the units in the European Theater came to the same realization about plans. When commanders were exposed to combat over a length of time their plans tend to conform to the same simple methodologies. The plans they developed no longer tried to be predictive about the future, detailed concepts and schemes of maneuver disappeared. What was left was long periods of detailed situational analysis and plans that only stated the aim, resourced subordinates, and did not attempt to dictate the method.

This study concludes that plans that survive first contact are those that do not try to predict the future. Plans that survive first contact focus on the objectives and the interrelationships of subordinates to the aim. This type of plan, used by combat experienced commanders and staffs, survives as long as the objective retains its value in relationship to the overall goal.

Table of Contents

I.	Introduction-----	1
II.	Plans that survive first contact-----	5
III.	The 9 th Inf Div Crossing of the Meuse River, 1944 -----	11
IV.	Analysis-----	30
V.	Conclusion-----	39

List of Figures

Figure #1 (AO in Europe)-----	12
Figure #2 (9 th Order of battle)-----	13
Figure #3 (Perceived Enemy Situation Vs Actual)-----	16
Figure #4 (What was Planned for)-----	21
Figure #5 (What Actually Happened)-----	25
Appendix A-----	40
Appendix B-----	44
ENDNOTES-----	49
BIBLIOGRAPHY -----	54

INTRODUCTION

Plans that Survive First Contact

The cliché that “No plan survives first contact with the enemy” has been credited by some to Moltke the Elder. Moltke the Elder actually said “Therefore no plan of operations goes with any degree of certainty beyond the first contact with the hostile main force.”¹ This conveys a degree of probability after the first contact, versus the simple negative thought that no plan survives first contact. Moltke continued to make and execute plans throughout his career, while achieving victories: what did he believe plans could achieve?

There is a long history of plans that have not survived first contact with the enemy. Plans did not survive in the Peloponnesian war to any greater degree than they appear to survive in the year 2000. The writings of military leaders from Thucydides to Moltke should dissuade commanders from planning beyond first contact, yet plan we must. How can a plan survive first contact and what must be done to make such a plan? The answer lies in examining what we can realistically expect from plans and maximizing that benefit and eliminating from a plan those elements that do not benefit it. The central argument offered in this paper is to determine what plans can do and what they cannot do for the commander.

The fact remains that many plans fail at first contact with the enemy. This failure of the plan is too often explained away by dismissing them with the cliché, “that it was really the process that was important.”² The National Training Center (NTC) reinforces this view when less than 31% of companies

accomplished their assigned mission and 37% even fail to adequately execute their plans.³ It appears that both history and current experience reinforces the original concept that no plans can survive first contact.

Orders and plans are the best evidence of a commander's ability to use the cognitive aspect of military art to leverage the battlefield factors to achieve success. This examination of plans will analyze specific areas, what were the major theories of what was required of plans to achieve victory? How armies evolve planning doctrine after each war, and what happens to plans in combat? An analysis of commanders and their plans that survived first contact will demonstrate the evidence that plans, when developed properly, to realistic expectations, can and do survive.

The attempts to find the correct theory of war, the correct principles or doctrine, has played an integral role in plans. Plans have been created that have attempted to use theories or checklists that would provide the margin of victory. An examination of these and other theories, principles and doctrines reveals that the components of a valid plan are independent of them even if they molded the organization itself. A good plan is independent of any theory of war.

What happens over time to peacetime planning doctrine as an army gains combat experience? FM 101-5 (Staff Organization and Operation) is the basis for the United States Army doctrine and techniques for orders and plans. This manual incorporates the combined knowledge, acquired over decades, of those who had created plans in combat. It has existed in the United States in various

forms and with different titles since 1888 and has been updated after each war with the lessons gleaned from that experience.

What remained consistent over the past one hundred years was that these manuals focused on cognitive aspect⁴ of orders, not with the format or a systematic process of their development. The focus of all these manuals was methods of conveying the commander's vision for upcoming battle. The examination of the lessons incorporated into these manuals presents us with a history of what combat commanders thought the next generation should know about plans.

An examination of orders and plans over the last one hundred years shows that they all exhibit certain trends. Orders all start out long, complicated, prescriptive of minor details of leadership and discipline, and normally include a generous amount of the commander's personal idiosyncrasies. Once in combat, orders tend to conform to a similar pattern.⁵ They become shorter and they appear simpler on the surface, but they also portray a deep level of analysis. The entire order is expected to be read by everyone, no staff specific information is included. They do not expect the enemy to behave in specific way, but they do expect that all friendly forces behave in a specific manner in relationship to each other. These orders are a blend of mission type orders and prescriptive instructions. As units in combat produce orders they continue to plan beyond first contact with the enemy.⁶

The examination of what the commander planned contrasted with what did happen is the best way to examine the effectiveness his plan and the

problem facing him. A thousand battles studied that were won out of energy, expedients and chance offers less to the student of military art than does one that was won by a commander who correctly foresaw the problems ahead and had the freedom to adapt to them.

A historical approach was used to answer the research question of how plans can survive first contact. The examination of theories, past and present, that were believed to be the panaceas have failed to give planners any concrete tools to predict the future success of a plan. The role of doctrine and the institutionalization of the lessons learned from planning in combat give the first tangible clues of what components belong in plans. The impact combat experience has on plans over time is an excellent method to analyze what has happened to planning in the real world of combat. Finally, the case examined demonstrates what components of the plan survived to the end. This paper does not provide the answer concerning what makes a perfect plan. It does present an answer about what experienced combat leaders have felt belonged in a plan for it to remain valuable throughout an operation.

Section 1

Plans that Survive First Contact

How did these experienced combat commanders develop plans in 1944?

Commanders in combat have determined what they could realistically expect from plans. During the Second World War, commanders of successful units, both Axis and Allied, came to produce plans that were routinely successful in achieving their stated aims. These successful commanders all tended to produce plans that communicated similar information in a comparable manner. They maximized those aspects that contributed, and eliminated or reduced those aspects that did not benefit them.

By 1944 the American Army was very experienced and had matured in its expectation of plans. Some units had left the long, detailed and predictive plans in Normandy or North Africa. These units from varied backgrounds came to develop plans that relied on sophisticated analysis that focused on the objectives not the means. Some of the units that suffered turnover in excess of their base strength often relied on detailed prescriptive plans.⁷

This section will extract the criteria that was used by combat experienced commanders in determining what went into their plans, what did not and why. The resulting criteria will help evaluate what plans can actually be expected to do and what they cannot do for the commander.

Orders from VII Corps in North West Europe in 1944-1945 and its subordinate divisions were used as examples in all revisions of FM 101-5 (Staff

Officers Field Manual) until 1960.⁸ Planning doctrine of 1944 did not include terms such as a center of gravity, decisive points or culmination. The lack of use of theoretical terms could lead some to believe that these plans are simplistic and of limited value to the modern military student. Evidence here will dispel that fiction. The current FM 101-5, (Staff Organization and Operation) published in 1997 is the first manual since 1960 to use an actual combat order as an example, it presents Field order #18, 23 March 1945.⁹ These actual combat orders, often issued hours before execution, were built upon a sophisticated level of analysis and a deep understanding of what a plan could effectively accomplish. By examining such combat orders of the Second World War, it is possible to see how orders evolved to this of maturity.

The VII Corps and 9th Infantry Division plans shown in Appendixes A and B were produced by combat experienced commanders during World War II - Major General Joe Collins (Lighting Joe) VII Corps and Brigadier General Manton S. Eddy and subsequently Major General Louis A. Craig, commander of the 9th Infantry Division. The orders themselves and then the ability of these same orders to survive in combat will be considered in detail to determine their actual viability.

The VII Corps and 9th Infantry Division plans were selected because they meet the following criteria. The commander and/or the G3s of the unit remained in their position for the duration war. The original plans and the results are available. Only primary sources are used to avoid the apologies and twist of memoirs and the fading capability of memory. The commanders had a

history of routine success based upon well-developed plans. Northwest Europe was selected because the enemy was competent, and the plans reflect current issues of the integration of air power, and undeveloped and long logistical lines, and a chaotic and shifting enemy situation.

How did Plans evolve in continuous combat in 1944?

The Plans of VII Corps and the 9th Infantry Division are great examples of plans that evolved in combat. The Plans of VII Corps and its subordinates in World War II generally started by following the doctrine of the time.¹⁰ Field Manual 101-5, 1940 stated that combat orders should be:

"Concise, those giving missions for subordinates units should prescribe only such details or methods of execution as are necessary to insure that the actions of the subordinates unit concerned will conform to the plan of operations.... brevity is governed by the state of training of the troops involved"¹¹

This doctrine was both a start point and a goal. All the initial orders for the invasion of Normandy, Operation Neptune, followed the identical doctrinal format, but fell short in being concise and failed to insure that subordinates conformed to the plan of operations.¹² With some notable exceptions orders in the Second World War matured in combat, coming closer to this doctrine rather than growing apart from it.¹³ This evolution, from the earliest plans compared to the later plans, shows how these commanders and their plans adapted to the ambiguity of combat.

The plans investigated in this paper were written in Sept 1944, after the units involved had been in continuous combat since their landing in Normandy,

June 1944. MG Collins and BG Craig were the commanders by Sept 1944. As both commanders gained experience their written orders changed significantly.

VII Corps initial order, Field Order #1, issued 28 May 1944 (Operation Neptune, The Invasion of Normandy), was long, prescriptive, contained many details of execution and did not work.¹⁴ VII Corps never repeated this mistake. Three months later on, 3 Sept 1944, VII Corps issued FO #10 (The Crossing of the Meuse River): it was two pages long, had two annexes, one overlay and eighty copies were made. (See Appendix A, VII Orders.) It was executed astonishingly fast and was very successful, catching numerous German units unprepared.

The 9th Infantry Division's first tactical order was FO #2 (An attack within the Normandy Perimeter), issued 09 July 1944. It did not work, and in an attempt to gain control of the situation the 9th Infantry Division then issued four more orders in the next three days, and still failed to redeem the situation. This type of predictive order was never issued again. FO #30 (Crossing of the Meuse River, IAW with VII Corps FO #10) issued three months later was issued four hours before execution, it contained one page and one overlay and it worked. (See Appendix B, 9th Infantry Division Orders)

The plans becoming shorter and faster, but shorter and faster do not necessarily translate into better. Many fast, short and unsound plans exist. The real significance of this change was that the orders had fundamentally changed in content and process. They were no longer orders to be read and analyzed; another tool had been developed for the tough thinking. This has been overlooked and it is the reason why a division could attack along a new axis

with four hours notice, and why Patton's Third Army could change direction ninety degrees into the Ardennes so quickly.

How where these plans developed so quickly?

When VII Corps issued FO #10 directing the 9th Infantry Division to cross the Meuse River in Belgium, 9th Infantry Division was able in turn to issue FO #30 four hours before the operation, there was no time for analysis. This could be accomplished because for five days both VII Corps and 9th Infantry Division had been issuing detailed analyses of the situation in G-2 periodic updates. When 9th Infantry Division FO #30 was issued it was supported by the forty-ninth G-2 Periodic report. Mission analysis and the development of orders had developed into separate procedures. The G-2 periodic report has no modern counterpart. These reports are issued independently of the field orders; they rarely contained the enemy likely or most dangerous courses of action. They provide the enemy's capabilities, the range of options open to him, but not a prediction. The G-2 did not select a most likely or most dangerous enemy course of action, as modern staff procedures requires the S-2/G-2 to do.¹⁵

At that time, experience had taught them that the attempt to predict an enemy course of action was fraught with danger. An attempt to do this in earlier battles them to expect an enemy reaction, and when it failed to develop as predicted they were left unprepared to face the truth. This led the units to simply analyze the enemy capabilities and resource subordinates to meet those

capabilities. When intelligence was available to indicate which enemy action was likely, it was included, but only when positively supported. They mitigated risk not by predicting enemy actions, but by accepting the fact that they could not predict them. An order would spend the bulk of its message defining the relationships of subordinates through control measures, and the assignment of tasks and purposes to achieve the higher assigned aim.

The VII Corps FO #10 was able to order task 9th Infantry Division to turn in a few hours, ninety degrees to an axis running due east, because both the VII Corps and 9th Infantry Division Headquarters had already had a common understanding of the environment. The shared vision of the battlefield was developed through the very detailed and routine G-2 periodic situation reports.¹⁶ Both headquarters (VII Corps and 9th Infantry Division) could see a changing situation and the developing opportunities at nearly the same time. Orders focused on which opportunities were to be the main effort. The result was that the analysis was nearly continuous while order development was short and focused. The only thing a unit required from the order was the relationship to higher and adjacent units, in the form of task-purpose mission statements and control measures. The orders were short not because they were simple, but because they had learned to separate analysis from orders. Additionally the fact that these units had been in continuous combat three months allowed them to develop standard operating procedures and plays that made execution easier than within newly arrived inexperienced units.

What did the commanders expect from orders in 1944?

The experienced combat commanders expected a continuous analysis of the situation without the bias of a selected enemy or friendly course of action. They counted upon a brief order, issued in sections, when ready. The intelligence annex or update, the logistic annex, and artillery annex (Fires) were issued separately, usually before the main order. An order was not predictive or dependent upon specified enemy actions, but instead addressed capabilities. Orders did not focus on a list of tasks, but on a set of interrelationships of subordinates and functions to purpose. They expected subordinates to fight the enemy and not the plan; they also expected subordinates to fight to achieve the purpose (aim) without asking how. Plans survived first contact by not trying to predict future events, but instead accepted the chaos of the battlefield as inevitable.

Section 2

The 9th Infantry Division Crossing of the Meuse River, Sept. 3-5 Sept. 1944

This was not a significant battle when compared to thousands that went on in Europe and Asia, in fact this is one of many that has neither a name nor monument. For that reason it is an example of the majority of battles that were fought during the Second World War. It was fought quickly, with little preparation, with the material and men at hand. There was no time for anything that was not an essential contribution to the battle. Yet, the written plan was

considered critical by these commanders in the midst of combat, this is why this case is important and useful.

This battle was not selected because it followed the plan exactly, it did

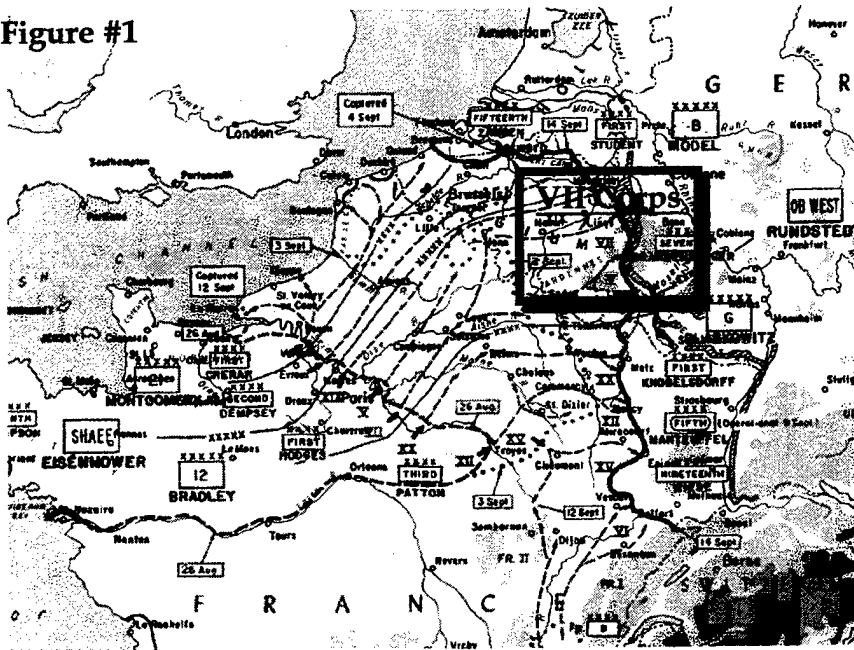
not, and the enemy was competent. It was chosen because it was a typical order, in a typical operation, with very experienced commanders. The Corps and Division had a history of successful battles and had avoided

the reckless attritional battles fought by some units. All the original orders and supporting documents are available from both before and after the battle. ¹⁷

Background Situation to the Meuse River Crossing

In Sept. 1944 the Allied armies had completed Operation Cobra, which lead to the allied breakout of Normandy. The battles of Falaise Gap were over and the German Army was delaying back to the German Frontier. The Allies still optimistically wished to continue the speed of their advance, but supply

Figure #1

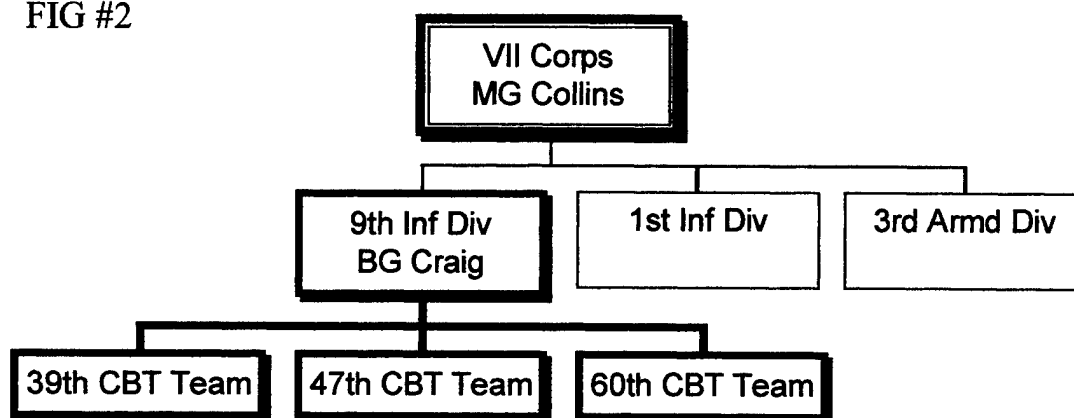


constraints, due to this unexpectedly fast advance, were starting to make themselves felt. This was the time of the Red Ball Express.¹⁸

The Germans had lost most of their equipment in the Battle for Normandy, either through attrition or the inability to move it back to Germany because of Allied air power. The German overall plan was to delay the Allied forces until the Siegfried Line can be reinforced, and to use the large rivers in Europe to buy time. The Allies adopted a broad front strategy to maintain contact along the entire front and to push across Northern Europe to the Rhine River Valley as quickly as feasible. (Figure #1)

The time frame of the VII Corps Meuse river crossing was 3-5 Sept. 1944. In the north Operation Market Garden was still 12 days away, in the south 3rd Army was about to enter the Lorraine campaign with its bloody battles around Nancy. VII Corps, with different assigned divisions, had been in nearly continuous contact with the enemy since Normandy. Corps in the Second World War switched subordinate divisions routinely. At this time (3-5 Sept 44) VII

FIG #2



Corps had been assigned the 3rd Armd Div, the 1st Inf Div and the 9th Inf Div for a few weeks. The 9th Inf Div was the focus of this operation and hence this case study. (See Organization Figure #2)

The Perceived and the Actual Enemy Situation

The enemy situation along the Meuse River was confused for VII Corp. VII Corps believed, but could not confirm that it faced a multiple of assorted units including the 985th Regiment, 275th Division, 503rd and 504th Schenelle Battalions; 25th and 26 Motorized Regiment, 12th SS 'Hitler Jugend', 60th Peoples Grenadier Regiment, 116th Panzer Division and some assorted Railway, Luftwaffe and Home Guard Units. The combined strength was believed to be 94,400 personnel, but their current locations were unknown. In this regard VII Corps had a tenuous grasp of the enemy situation at best. While VII Corps could tell the 9th Infantry Division what maybe in front it did not say what they would do.¹⁹

VII Corps believed that enemy three options:²⁰

1. To fight a delaying action East of the MEUSE River.
2. To withdraw to the West Wall.
3. To collapse or surrender.

VII Corps believed that there were no natural defensive features in the region that could be used by the German forces.²¹ Given this, VII Corps believed that the only area that held any promise for a defensive line was the East bank of the Meuse River. However, the high state of confusion in the German forces and

the speed at which they had been withdrawing made the possibility of a determined delaying action remote.

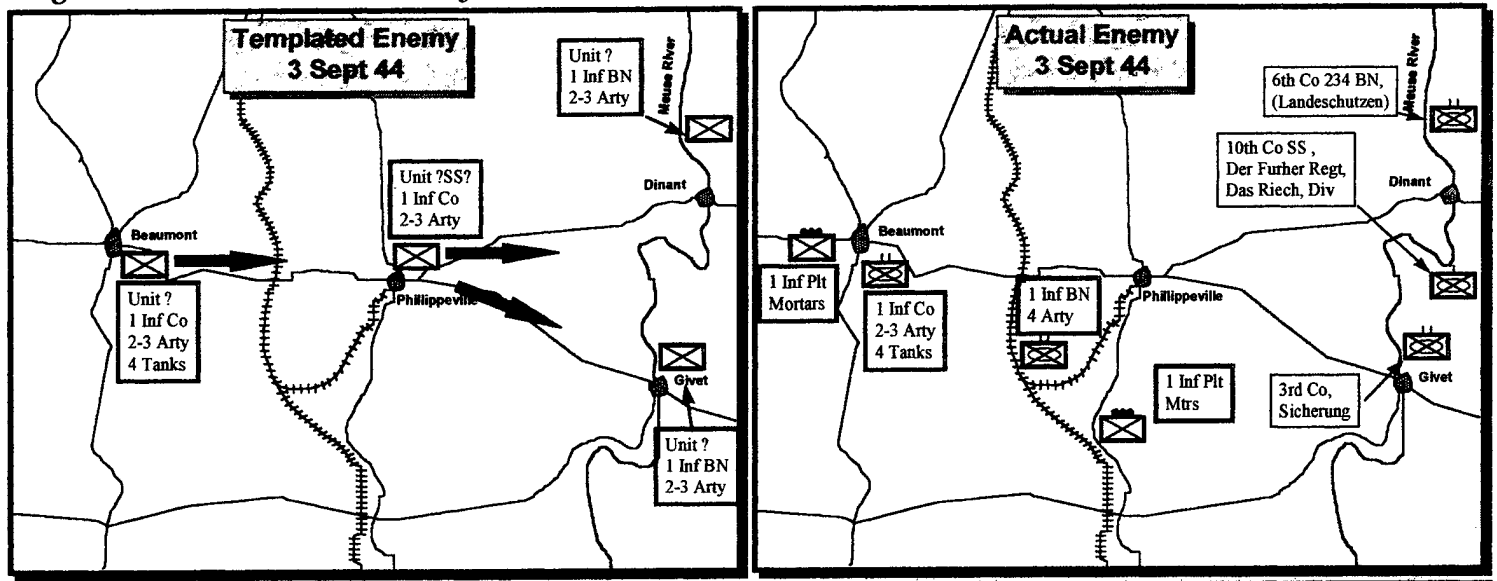
9th Infantry Division analysis was that there was no advantage to be gained by the enemy in holding territories to the west of the Meuse River.²² They reasoned that all key routes into Germany were denied to the enemy except those over the Meuse River. They believed that a determined defense of the East bank of the Meuse river would accomplish the enemy's mission of buying time in order to facilitate a withdrawal to the Siegfried Line.

The 9th Infantry Division also understood that the German main effort was to prevent the 9th Infantry Division continued northern-eastern (see Figure #1) movement and that the eastern routes were thus susceptible to a sudden attack. This was the genesis for the idea of a sudden shift to the east in the subsequent Field Orders in order to take the crossing sites across the MEUSE River. This idea explains why the division could shift its attack ninety degrees in just four hours with sufficient parallel planning. 9th Infantry Division and VII Corps did other extraordinary changes of direction and mission, which on the surface look remarkable, when in reality were the product of routinely excellent staff work. The 9th Infantry Division's analysis had allowed it to prepare for this option, because it had not also been considering a specific, directed friendly course of action or a likely or most dangerous enemy course of action.

The German's mission was to try to break contact with the Americans as fast as possible, delay as required, and get across the still intact bridges over the

Meuse River, then destroy the bridges and control the east bank of the Meuse River to buy time to build the Siegfried line.²³

Figure #3 (The Perceived Enemy Situation Versus the Actual Situation)



The Corps and Division analysis of the enemy's intentions were generally accurate. The Germans at this time, in truth, did not intend to defend west of the Siegfried line and they also believed that the Meuse River was the only place to try to delay the Americans. The part that VII Corps and 9th Infantry Division got wrong was the effect that their change in plan would have on the Germans mission.

It was initially true that the Germans did not intend to defend, but that was only true because the VII Corps was not threatening its Northeastern retreat routes by its Northeasterly advance. When the VII Corps turned east and threatened those routes, it would have caused a catastrophic defeat for those German forces cut off. The VII Corps change in direction changed the German

situation and hence the German plan. This second order effects were not foreseen by the U.S. commanders or the unit staffs involved.²⁴ This different enemy course of action did effect how the battle unfolded but did not alter the objectives of the plan.

The Germans at this time hoped to withdraw for the purpose of gaining strength for a subsequent large defensive battle along the Siegfried Line. The Germans needed the Meuse river crossings to consolidate forces for that battle. The Germans had hoped to delay with minimal forces to allow this withdrawal to be conducted effectively. They were determined not to expend any more forces than absolutely necessary to do this. Given the earlier American northeasterly advance these forces had been small. When the advance moved east the Germans were required to commit significantly larger force to accomplish the same mission. It was in this aspect that the VII Corps and 9th Infantry Division got the enemy situation very wrong.

The belief that the German did not intend to defend vigorously had been determined when VII Corps and 9th Infantry Division were moving Northeast towards Brussels. While the Corps was moving North-East the Germans had sufficient time to move their forces in parallel to the Allied advance (northeast), then across the still intact Meuse Rivers bridges. Once the Corps and Division suddenly changed direction and started attacking due east, the Germans found themselves without sufficient time to move all their forces across the River. To provide sufficient time, some German forces were ordered to defend key areas to buy time for other forces to cross the Meuse River. Figure #2 shows that had the

VII Corps continued Northeast, instead of due east directly toward the Meuse River, their view of the enemy's action would have been generally accurate. What VII Corps and 9th Infantry Division failed to foresee was the effect that the change of direction would have on the enemy's intentions, and on their ability to accomplish their mission, that was oriented on force protection.

The Missions Assigned

On 2 Sept. 1944, MG Collins, believing he had an opportunity to seize crossing sights across the Meuse, informed his subordinates he had decided to change the direction of the advance from northeast to due east and attempt to seize the crossing sites across the Meuse River. VII Corps issued FO #10 on 3 Sept. 44 that simply confirmed the oral orders issued the day before. The VII Corps mission was:

"Attack early 3 Sept. to seize crossings of the Meuse River between NAMUR and GIVET inclusively."

VII Corps, in its order, assigned the 9th Infantry Division the mission to:

"Attack to the East early 3 Sept. to seize initially the crossings of the Meuse River from NAMUR (Exclusive) to Givet (Inclusive) as per Operations overlay."

The 9th Infantry Division in turn issued FO #30, 3 Sept. at 0230 restating it mission as:

"Attack at or before 030630 Sept. 1994 to seize by surprise or to force crossing and seize, night 3-4 Sept., bridgeheads in zones on overlay."

The subordinates of the 9th Infantry Division, the 47th, 39th and 60th Combat teams, were told to:

39th: Move rapidly in zone with leading Bn of Inf motorized and heavily reinforced with tks and TD's, with one light Bn FA attached, will seize bridges in zone with particular attention to GIVET (9274).

47th: Move rapidly in zone with leading Bn of Inf motorized and heavily reinforced with tks and TD's, with one light Bn FA attached, will seize bridges in zone with particular attention to DIVANT (9888).

60th: Move, by route indicated, to Div Res assembly area, indicated on overlay, to await orders. Will be prepared, before or after arrival of advanced elements, to move on short notice in support of the action or to seize bridgeheads South East of GIVET (9274) exclusive.

When compared to current doctrinal orders these Field Orders are different in content and the method by which they deliver information in several aspects. There was no concept of operations given, nor a scheme of maneuver other than the operation overlay.²⁵(See Figure #3) The commander provided no "commander's intent" paragraph. No end-state is specified other than the tactical objectives. In accordance with the doctrine of the time, no main attack or secondary attacks were designated.²⁶ Divisions did not generally create named phase lines to monitor progress. Phase lines were only used when it was necessary to harmonize two or more units. In this case 9th Infantry Division gave no phase line since it was not critical to the plan that any particular unit reach the Meuse River first.

Objectives had a slightly different meaning, similar to the term 'defeat mechanism'²⁷ when compared to the modern definition. In 1997 'objective' is: "The physical object of the action taken,...a definite tactical feature, the seizure and/or holding of which is essential to the commander's plan."²⁸ Objective as

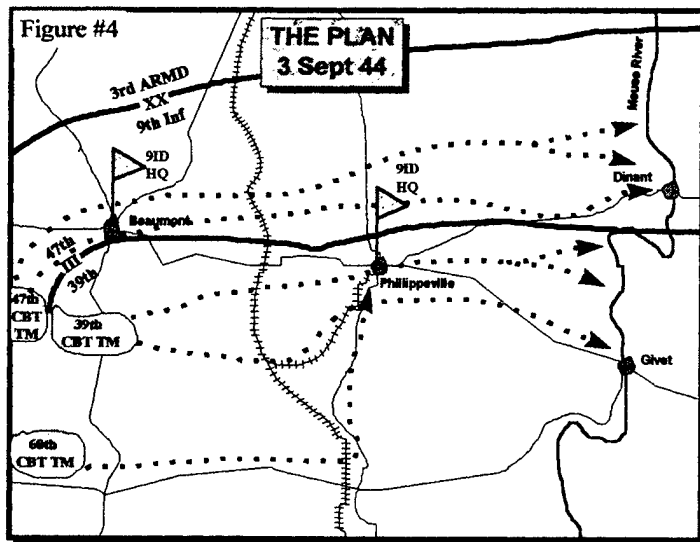
used in 1944 was "The capture of which will insure the defeat of a hostile force, or from which the operation can be continued, or the success exploited."²⁹ In 1944, the objectives assigned to the subordinates of the 9th Infantry Division were understood to be critical to success, but not necessarily success itself, current doctrine does not provide that flexibility.

This was what the 9th Infantry Division had to work with. Once they received the mission, they conducted no mission analysis, no course of action development, no course of action comparison, no wargame and no briefings. The intelligence situation was murky, the units were tired, and they faced an unexpectedly strong opponent. These were the ideal conditions for a plan to fall apart at first contact, but it did not. The next section will compare what the 9th Infantry Division planned and thought, versus what actually happened. The examination of the plan-versus-execution gap will help explain what specifically in a plan can survive 'first contact.'

The Plan

The 9th Infantry Division's plan called for a rapid advance by two combat teams to seize the still intact bridge over the Meuse River. A highway ran due east from Beaumont-Phillippeville-Dinant to the Meuse River. Highways and routes were named for key locations along the route, not by the naming conventions familiar to planners today. This highway separated the two lead

combat teams along their respective routes. The 39th Combat team, heavily reinforced with tanks, tank destroyers and one light Field Artillery Battalion



attached, were to attack in zone.

It was to move rapidly, from its current positions, keeping the infantry mounted and seize bridges in zone with particular attention to the Givet (the southern most bridge). The 47th Combat Team was also told to

move rapidly, from its current positions, keeping the infantry mounted and seize bridges in zone with particular attention to the Dinant (the northern bridge).

Both combat teams were to advance on two separate axes within their zone as designated by the Division Overlay.³⁰ The 60th Combat Team, reinforced with one tank battalion was to follow a route along the southern division boundary to Phillippeville, and then await orders as the Division reserve. It was to be prepared, quickly, to support on going operations or to seize a bridgehead southeast of Givet. No estimated time was given for this operation, but it was envisioned that both the lead combat teams would be at the Meuse River well before dark.³¹ The order also contained some other components different than current order doctrine.

In accordance with 1940 FM 101-5 (Staff Officers Field Manual) doctrine, coordinating instructions were written in line "X" of the subordinate unit

instructions. Current doctrine calls for a separate paragraph called Coordinating Instructions. For the 9th Infantry Division these instructions were that, in the event that the bridges were not available in zone, reconnoiter during daylight for other suitable crossing sites. There were no branches or sequels built into the plan. Plans during the Second World War did not require that branches be developed for decision points, as does modern doctrine.³² In modern terminology World War Two Commanders relied on the art of 'battle command' to visualize the current events and then formulate a future concept of operations.³³

There were no mortar or artillery pre-planned targets, just an assigned relationship with artillery units. The order does not contain a series of contingencies for dealing with the options of a daylight or night river crossing, failure to capture the bridges intact, unexpected enemy contact, or building bridges to cross the river. The situation was expected to be ambiguous and chaotic, they did not plan for that uncertainty, they accepted it.

The operations overlay with its scheme of maneuver is shown in Figure #3.³⁴ The text of the order gave the start time and task organization of each combat team, while all other required information was presented graphically in the overlay. The triangle flags indicate the 1944 doctrinal symbol for the divisional command post. The only control measures given are the divisional boundary with the 3rd Armd Division in the North and the combat team boundary between the 47th Combat Team and the 39th Combat Team. This is the plan, and what the division expected to accomplish 3 Sept 1944.

What Actually Happened 3 Sept 1944

Even though the division order to attack was issued 4 hours before execution, all units did attack on time.³⁵ The 39th and 47th combat teams attacked along the routes assigned. They faced unexpected and sporadic delaying actions of a force that consisted of about 400 infantry, 3 artillery pieces and 2 antitank guns. The most determined resistance was encountered in the towns of Cerfontaine and Phillippeville around midday.

The 47th combat team advanced in two columns on their assigned routes. It encountered small arms and machine gun fire just south of Beaumont, which was the next location planned for the division command post. Beaumont was about seven kilometers from the 47th Combat Team's line of departure at 0630 hours. Heavier resistance was encountered west of Beaumont along the other route. This consisted of small arms, nebelwerfer³⁶, and tank fire. The 47th stopped at Beaumont and did not continue its advance. The 39th encountered similar resistance, but by-passed the areas south of Beaumont and was able to reach Phillippeville and hold the high ground west of that city.

The 60th combat team, the Division's reserve, was told to start its movement to Phillippeville. No resistance was met until the 60th combat team reached the bridge between Frasnes and Nariemburg, due south of Phillippeville. The Germans destroyed the bridge and delivered small arms, anti-tank and artillery fires. The 60th combat team prevailed by an out flanking movement to the west of the road using an improvised bridge and the advance

continued. Once across the improvised bridge, enemy resistance was encountered south of Neville, a town just south of Phillippeville, which was overcome by a double envelopment by the 60th combat team. The 60th combat team advanced to the high ground just south of Phillippeville and held on for the night.

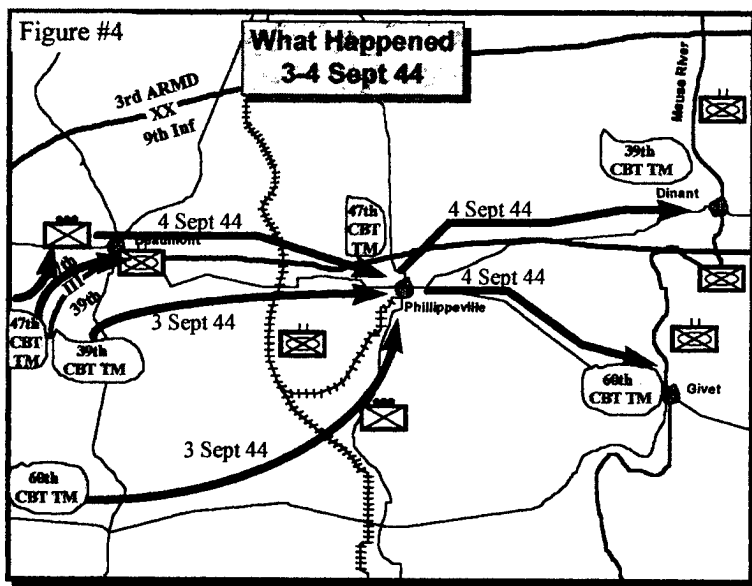
The plan had called for these units to seize bridges over the Meuse, instead one unit was back at Beaumont guarding the division command post location, and the other two units had stopped halfway from their objective at Phillippeville. The division reserve was now in the lead, and the 47th Combat team, one of the main efforts, was guarding the Division command post. At first glance this plan not only failed, it did not even survive first contact with the enemy, but a closer examination finds that there were components that did survive to the conclusion of the operation.³⁷

The factor of an unexpectedly strong German defense caused the 9th Infantry Division to reshuffle units, but the objective had not changed.³⁸ They did not consider a scheme for maneuver of particular units in a specific manner as integral part of the plan. They expected the plan to set the stage and the elements of Battle Command to win it. To the commanders of the 9th Inf Division and the subordinate combat teams the plan was still valid, because the plan was the dissemination of the objectives not the means. At 2330 hours on the night of 3 Sept 44 the Division issued Field Order #31, a continuation of the attack the next morning.

What Happened Next, 4 Sept 1944

The plan had called for the units to be on the Meuse River by the night of 3 Sept 44, instead they had made it only half way. Field Order #31 was issued at 2330 hours that night, with no annexes or operations overlay. The overlay, tasks and objectives of FO #31 were identical to FO #30, except that one unit's mission was swapped with another.

The 60th combat team was given the mission previously assigned to the 47th combat team. In effect they just exchanged missions. The attack time was given as 0800 hours. Both battalions attacked and reached the Meuse River. The bridges had been destroyed and the enemy had hastily prepared a defense of the far side of the river (east bank). Both units sent reconnaissance units along the



riverbank to locate and confirm crossing sites. These units confirmed the crossing site locations and reported that the enemy was now defending the east bank of the Meuse River with small arms, machine guns, mortars and artillery fires.

The decision was made to wait until the cover of darkness to attempt a crossing. Midnight was the assigned crossing time. By this time the Germans

had decided to reinforce the east bank to prevent a river crossing by the 9th Infantry Division. Six battalions of Artillery were brought forward to support the German defenses. Approximately 2,000 Germans soldiers of various units defended the east bank of the river in the 9th Infantry Division sector.³⁹ The reinforcement of the crossing sights was understood to be possible if the bridges could not be taken by surprise. To mitigate this combat teams attempted a crossing as soon as possible, before German strength forced this into a protracted battle.

On the night of 4 Sept, the 9th Infantry Division Headquarters reissued FO #31.⁴⁰ This order contained no new mission other than a deception mission for the 47th combat team. It was to demonstrate near Dinant. There is no evidence available that indicates the demonstration was effectual.

The assault river crossing was conducted at 5 Sept 44 at 0001 hours. The 39th crossed the river in the vicinity of Dinant. It met considerable opposition and in one case B Co lost all but three of its boats in the water from enemy machine gun fire. The speed of the advance gave this part of the operation an ad hoc nature. Inadequate reconnaissance and preparation made this night crossing very convoluted. Many boats were never delivered to the river crossing units due to inadequate reconnaissance. In A Co only the commanding officer and twenty men made it to the east bank where contact was lost. Eventually large portions of 2nd and 3rd battalion of the 39th combat team made it across the river and held a line on the east bank. Company A of the 15th Engineer company

attempted to erect an infantry support bridge but was quickly halted when enemy mortar and machine fire interdicted their efforts.

The 60th Combat team crossed the Meuse south of Dinant at two points shortly after midnight with two battalions. However, this initial advantage was lost when the unit already across became disoriented and advanced in a multiple of different directions. One company of the 2nd Battalion, 60th Combat team advanced, north while the other went east. The bridgehead had become scattered from unit disorientation and from strong enemy defending forces equipped with tanks. The division headquarters ordered the unit to reorganize and to continue the attack to the northeast, but the 3rd Battalion met similar opposition and both units suffered heavy casualties. At this crossing site the heavy Class 40 treadway bridge was to be erected, to accommodate tanks and other armored vehicles.

The attack continued into the night of 5 Sept and into the morning of 6th September. Both bridgeheads expanded seizing the towns and high ground in their areas. The Class 40 treadway bridge was completed by 5 Sept 1730. Two platoons of tanks from the 746th Tank battalion and elements of the 899th Tank Destroyer Battalion crossed over the bridge to support the infantry.

This phase of the operation was marked by inadequate reconnaissance, poor staff coordination of the engineers and poor communications. The limits of this plan are clearly shown by the hasty conditions under which the units crossed the river. None of the problems encountered were a surprise; the staff had seen all these eventualities during the planning process and had discussed

them in the G-2 periodic updates. The Division staff failed to provide the means to support the ends assigned to the subordinate's.

The Division had exercised great skill in selection of objectives and linking each subordinate's objectives to the division's purpose. The division's analysis of the terrain and the enemy capability was also excellent. However, the plan never addressed the division's role in the battle. This lead the staff to believe that they needed only to monitor subordinates to keep them on track. The division's role in the fight was to resource and coordinate the combat teams, it was this capacity that the division failed, not the subordinates. The plan did not address all units involved in the fight, since it neglected the role of the division headquarters.

Afterward

The German forces withdrew once the best defensive terrain had been seized by elements of the 9th Infantry Division. Prisoners captured by the division troops confirmed that a general withdrawal had taken place, with only sufficient forces left in contact to delay the allies. By the 7th of September only one treadway bridge was being used, the second bridge was finally completed but it had been delayed by bad weather and engineering complications.⁴¹ By 8 September the lead elements of the 9th Infantry Division had penetrated 25 kilometers past the Meuse River. The final order issued for this operation was Field Order #32; it was an order for the combat elements to continue their

advance and a march table for the remainder of the division to cross the bridges in its sector.

This plan succeeded and survived many changes in the enemy's dispositions and some friendly failures because it never addressed means. By 1944 these experienced commanders no longer expected to be able to predict enemy action in the future. They found that if they could determine what was required for success, they had enough for a plan.

This operation required many hasty decisions and changes. These failures included the switching of unit missions, a slow advance, and poor coordination at the crossing sites. The 9th Infantry Division had come to believe that these were just the natural uncertainty of war and had stopped planning for them. The failures in execution should not overshadow the successes of the plan. The plan had determined the best routes into the area, the river crossing sites were selected with great skill and the subordinate task organization was well built to accomplish all the missions assigned. The objectives assigned when realized would accomplish everything the division was required to do. This type of plan that spoke only to objectives, not means, did have limitations. However the benefits of speed, depth of analysis were enough for this style to remain consistent throughout the rest of the war. The 9th Infantry Division had come to believe that the path between the current situation and the objectives in the future was dealt with tactical excellence, combined arms doctrine, battle command and leadership, not the plan.

Analysis

How have plans developed since 1944

It has been 50 years since the United States Army crossed the Meuse River. Today our doctrine calls for orders and plans to be significantly different than those used in this operation. Today plans are a means to communicate subjects that in the past were either not communicated in plans or were included in other products.⁴² A current doctrinally correct plan explains the enemy situation and likely enemy courses of action, something not done at all in the examined 1944 plans. When the enemy was discussed, it was in the periodic updates or separately issued annexes, not in the plan.

More has been added to plans than just the enemy situation. The commander's intent has been added as an unnumbered paragraph. This was done so that it would not be necessary to renumber the other paragraphs already in the doctrinal publications. To further communicate the commander's vision, the Concept of Operations and the Scheme of Maneuver has been included. There is therefore more clarification in current doctrinal plans than there was a plan in 1944.

The plans doctrine of the Second World War is explicit in the description of what is required by subordinates. It stated that only the amount of information that was absolutely necessary was provided.⁴³ It further stated that details as the line of departure, time lines, zones of action etc., would be required to coordinate subordinates. Nowhere did it state that a commander's

intent or concept were required. It also did not require that a scheme of maneuver be issued. The plan in 1944 stated only enough information to coordinate the subordinate elements of the unit to achieve its aim, and nothing else. A doctrinally correct plan today requires the above as well as a intent, concept of operations and a scheme of maneuver to explain how the objective is to be achieved.⁴⁴

In 1980, German World War II Generals Balck and Von Mellenthin,⁴⁵ were asked about these issues by General DePuy, General Otis, and LTG Gorman. General Gorman asked General Mellenthin about the necessity of a detailed concept of operations in a defensive order.⁴⁶ General Mellenthin replied "if he (the subordinate) was a stupid fellow you had to go into much detail...if he was intelligent a word was sufficient."⁴⁷ Then General Balck and General Gorman were given the same tactical situation, a defense by the 3rd Armored division against a Soviet Tank Army. General Gorman with his staff developed a very detailed plan that forecasted a probable enemy course of action and the likely counter-counter actions and developed a friendly course of action to defeat them. The plan was complicated, linear and did not accept risk in anyone one place.

Then General Balck and Mellenthin examined the situation by themselves, and after a few minutes they presented their plan. They produced a plan similar in design to that produced by the 9th Infantry Division in 1944. They did not develop an enemy course of action to plan against, but instead developed a friendly array that accepted risk in some sectors and provided for a force that

could deal with the range of enemy capabilities. The plan was simple, unique and bold.⁴⁸

The conclusion drawn by the Americans was that the approach used by the German Generals was valid, but in the hands of an average commander it would be a disaster.⁴⁹ The American Generals in the Second World War were average men who had found this method sound and simple. Yet, the failure to have answers for every contingency was considered a weakness by the Americans, a deficiency that only the very experienced German commanders could overcome.

Doctrine today calls for a detail friendly course of action to counter every enemy likely course of action and then one is to be selected for the plan. Doctrine had evolved to believe that a plan could survive first contact because every contingency had been considered.⁵⁰ The United States has adopted a methodology of plans that tries to accommodate unrealistic expectations and makes failure almost inevitable.

Which Plans Can Survive and Which Cannot?

Is there an answer to the question whether a plan can survive first contact? If the question implies that a plan can accurately predict future events between two interacting opponents then answer is a resounding no. If the plan limits itself to objectives and capabilities then answer is yes. Modern planning theory provides some tools to understand what we saw in the attack to seize the

crossing sites of the Meuse River. Planning theory, as presented by Russell Ackoff,⁵¹ sees four types of plans that are very dependent upon the culture, personality and experience of the commander and/or the organization. The four types of plans are Reactive, Inactive, Pre-active and Interactive.⁵² In modern terms the crossing of the Meuse River is an example of an interactive plan.

Reactive plans seek to restore a status quo, by returning things to a previous state. Reactive planning deals with controllable pieces of a system and its environment not with a problem systematically.⁵³ Inactive plans are those that prefer things as they are, and try to keep things as they are. Inactive plans are indicated by a continuous desire to gather facts, study details and gain bureaucratic consensus, this agreement is based upon the lowest common denominator. This type of plan works where survival is independent of performance, government planning and organizations are conversant with this type of plan.

Pre-active plans are the most popular in the American corporate culture and military environments, they attempt to predict the future and then prepare for it. Pre-active plans try to optimize, hence they value prediction over preparation, since good preparation for an inaccurate prediction is futile. This is the type of planning that is present in current doctrine, although the term Pre-active is not used.⁵⁴

Interactive plans are based upon the belief the future depends on what decisions we make. Interactive plans start with a desired condition and then works to achieve it in small steps. The 9th Infantry Division planned only as far

as the situation allowed them to see the next objective.⁵⁵ Interactive plans are very goal/objective oriented and tend to have be less prescriptive in their instructions.⁵⁶ Interactive plans do not expect plans to survive first contact because they do not plan for first contact, they plan for the objective, not on the exact path to get there. This difference is why a plan can be successful even if it does not predict the enemy.

Planning theory with its terminology is relatively new, yet its methodology is not. Modern planning theory was tested, and used by the 9th Infantry Division's commander in the Second World War. Moltke the Elder the leader of German General Staff advocated this style in his writing and used it during the Austrian War in 1866 and France in 1871. Interactive planning is not a theory based upon pure academic ideas, but upon a study of successful plans.

Interactive plans, as BG Craig used them, sought a middle ground in-between what was known and unknown or possibly unknowable in 1944. When the 9th Infantry Division prepared Field Order #30 it contained information that was known, such as the current friendly strength and capabilities, and past enemy strength and capabilities. They also knew what they needed to do and where it needed to be done and what objectives were needed. BG Craig understood that as he moved into this operation he would gain a better understanding of the enemy and conditions. The plan that he produced was then a compromise between the known and unknown. The plan only addressed what they knew, which was the objectives to be accomplished, the forces to do it with and an adequate path to get there. What was unknown, the enemy scheme

of action, detailed enemy locations and what the friendly forces were to do about them was omitted. The subordinates were required to employ battle drills and plays to deal with the unexpected. The time, location, frequency and intensity of these battle drills did not invalidate a plan that never addressed them.

Current doctrine calls for a detailed scheme of maneuver against a hypothesized enemy scheme of maneuver regardless of the level of enemy information available.⁵⁷ This methodology would have not helped this operation succeed any better than it did. Had BG Craig and his staff used the best information they had available to them and had produced an enemy course of action to prepare a friendly scheme of maneuver it would have been wrong.⁵⁸ The Germans had adapted very quickly to the American advance and had presented a defense that was totally unexpected, by all levels of command from VII Corps down. The time spent developing this inadequate scheme of maneuver would have been less time coordinating the plan. The failure of the Division staff to adequately coordinate activities at the river crossing sights demonstrates that time was already inadequate for satisfactory staff coordination.

General Moltke the leader of the German General Staff during the victory over Austria and France in the 19th Century stated that deduction of enemy intentions is unreliable and cannot assure victory.⁵⁹ He believed, as BG Craig did that uncertainty was best dealt with by tactical excellence, not prediction. They understood that events developed unexpectedly and that new situations would develop that were unknowable prior to the action. So by maintaining a

focus on the objectives and the required outcome, not the means, the path to success would be clearer.

Moltke the Elder stated in his book War Lessons;

The tactical outcome of any engagement forms a guiding post for new decisions...The material and moral consequences of each and every larger engagement are so far-reaching, that in most cases an entirely new situation will be created by them, a new basis for new measures to be taken.⁶⁰

Russell Ackoff, a leader in planning theory, also agreed when he wrote in 1981;

The future depends on at least on how much we do and others do. Inter-activist plans focus on improving performance over time rather on how well they can do at particular time under particular circumstances... furthermore, the solution to any problem creates new and often more difficult problems.⁶¹

Plans are a series of objectives linked to conditions that are required to meet the stated aims. The road to these objectives is not an integral part of a plan. What is integral to the plan is the objectives and the ability to quickly provide tools to subordinates to accomplish those same objectives. Speed of decision was considered essential to this type of plan. An adequate answer now, was considered better than the best answer later. Moltke stated it best when he said;

The main point is...to perceive correctly the situation hidden in the fog of uncertainty, to perceive correctly what is known, to deduce what is not known, to arrive at a quick decision...and the general who...orders the most reasonable, if not the best thing, will always have a chance to reach his objective.⁶²

Current planning doctrine that compares a course of action against predetermined criteria strives for an optimal solution. BG Craig spent no time determining the ideal solution, he executed orders with a few minutes of making the decision with the rest of the time spend on coordination. The World War

Two commanders examined did not believe in an optimal solution was obtainable. They established their initial dispositions with great care and thorough analysis, they then assigned objectives that helped relate the missions of subordinates in time, space and purpose. Their immediate plans covered only a limited amount of time. The World War Two commanders examined, planned (assigned objectives) no further than the situation allowed them to see. These objectives were defined by the long-term goals of the unit. The long-term goal of the 9th Infantry Division was penetration of the Siegfried line in order to occupy the Ruhr River Valley. To BG Craig, plans were only a means to define the intermediate objective between his current situation and the goal. So his plans covered only a short amount of time, sometimes less than a day.

One of the governing factors determining a plan's feasibility was time. The amount of time available was determined by the developing situation. How far ahead the situation allowed the commander to foresee objectives (not the enemy situation) and the conditions around them governed how stable the plan was.⁶³

Realistic expectations of plans were well understood by Collins, and Craig and were written about by Moltke and Ackoff. There is a linkage and a common understanding of plans amongst some of the most combat experienced planners. To these commanders the process that developed the plan was separate and continuous. The plan was considered the arrangement for the correct things based on the new estimate, to cover the time that could be foreseen and execute it with full force.⁶⁴

The plan to cross the Meuse River was not developed using the predictive abilities of the intelligence officers. Instead it relied on their ability to determine friendly and enemy capabilities and then arrange forces to cover only that time that could be foreseen. This analysis without the prejudice of a selected friendly and enemy course of action allowed planning to be conducted with great creativity. This in turn allowed plans to be transmitted and executed without a great deal of analysis by subordinates, something not possible with current doctrine.⁶⁵ It allowed plans to survive past enemy contact, because the plan was the selection of objectives, not how to get there.

The bottom line is that the failure of plan to survive first contact is the result of false expectations. The experienced commanders examined found that a detailed scheme of maneuver to deal with predicted enemy situations was fruitless. Instead they found that it was the duty of the higher headquarters to resource the subordinates to deal with the enemy's capabilities, then to assign objectives according to the subordinate's ability. In this manner the plan routinely survived first contact because the plan succeeded as long as the objectives retained their value in relationship to the overall goal. The meandering path to the objectives was not a measurement of whether a plan was successful, only the objective mattered. The amount of detail in the plan was the result of the tension between the known and unknown. BG Craig handled this tension by relying on subordinates initiative and his ability to contain that initiative within the assigned objectives, not by detailed hypothesis of the future.

Modern attempts to create optimizing solutions by the use of the Military Decision Making Model have lead the army away from the type of plans developed by experienced commanders. When plans define objectives and goals and the relationships of subordinates to the same, then plans will survive first contact, because our expectations of the first contact will be realistic. With this expectation, the Army could learn to accept the ambiguity without a sense of failure.

Conclusion

The research question is “No Plan survives first contact with the enemy” is attributed to Moltke the Elder, is it correct? The answer is possibly, if we can discipline our doctrine to focus on objectives not methods. Yet attempts to rationalized the plan with firm end-states and a scheme of maneuver demonstrates that commanders will continue to be disappointed by plans that fail upon first contact.

SECRET

Auth: CG 9th Inf Div
Initials: *[Signature]*
Date: 3 Sept 1944

Hq 9th Inf Div, APO 9
030230 Sept 1944

UNCLASSIFIED

FO #30

MAPS: FRANCE 1/100,000; Sheets 11 & 12

1. a. Enemy forces, composed of hastily assembled units from the SW and SE, supported by tanks and AT guns, withdrew to the E and NE during the night of Sept 1 - 2, covering their retreat by tank and AT fire, and occasional road blocks with small arms. The pace of our adv, particularly to the NE, has allowed the enemy little time to organize a more permanent defense or to emplace whatever arty he may still possess. All indications point to a continuation of this action, taking advantage of terrain whenever possible particularly near the MEUSE RIVER, and of whatever reinforcements may be provided by converging units. There is a possibility that the enemy will suffer from a shortage of fuel and ammunition. Resistance activity is not apt to be widespread or important in SE BELGIUM. The enemy will probably seek to gain NAKER by the shortest route possible and there attempt a stand.
- b. VII Corps changes direction of atk to the E immediately. 3rd Armd Div conforms to Corps mission attacking on our left. 1st Div follows 3rd Armd Div initially. 4th Cav Grp (plus 1 Bn 60th Inf) protects the right flank of the Corps.
2. This Div (less 2 Bns)
Atchd: No change

Will atk at or before 030630 Sept 1944 to seize by surprise or to force crossings and seize, night 3-4 Sept 1944, bridgeheads in zones shown on overlay.
3. a. 39th CT
Atchd: Same plus 9th Recon Tr (less 2 plats) Co D 746th Tk Bn (less 2 plats) atchd.

Moving rapidly in zone with landing bn of inf mtd and heavily reinf with tks and TDs, with one lt bn FA atchd, will seize bridges in zone with particular attention to CHATEL (9274). ID - Present front lines.
- b. 47th CT (less 1 bn)
Atchd: Same plus 1 plat 9th Recon Tr with 1 plat Co D 746th Tk Bn atchd.

Moving rapidly in zone with landing bn of inf mtd and heavily reinf with tks and TDs, with one lt bn FA atchd, will seize bridges in zone with particular attention to DEWANT (9000). ID - Present front lines.
- c. 60th CT (less 1 bn)
Atchd: Same plus 1 plat 9th Recon Tr with 1 plat 746th Tk Bn atchd.

(1) Moves, by route indicated, to Div Rec assembly area, indicated on overlay, to await orders. Will be prepared, before or after arrival of advanced elements, to move on short notice in support of the action or to seize bridgeheads all of CHATEL (9274) exclusive.

(2) One Bn, 60th CT, will report to CG 4th Cav Recon Grp 0300 Sept 1944 for atchmt thereto at ARVILLERS (5746). ID - Present position.
- d. 15th Engr Bn - No change.

SECRET

f. 746th Tk Bn (less Cos A, B & C)

Co D atchd as shown in pars 3a, 3b, & 3c.

g. Div Arty - No change.

h. Div Res will protect Div Hq on its move and its defensive areas and be prepared to support the adv of the Div on its move.

x. (1) Maximum use will be made of shuttling.

(2) Careful attention will be given to the protection of foot troops in convoy.

(3) Prompt recon of all ferry and bridge sites is vital.

(4) In the event bridges are not available in zone, recon during daylight for proper sites for crossings is a matter of urgency.

(5) Ample bridging and assault boats will be available to seize sites, if necessary.

(6) THIRIMONT (5090) is point of origin.

4. See Adm O #22

(a) A reserve of gas has been dumped at 391650.

5. a. See current SOI.

b. Axis of Signal Communication: See overlay

c. CPs to be reported.


CRAIG
Comdg

OFFICIAL:

FEIL
FEIL
G-3

Annexes: Annex No. 1 - Operations Overlay

Appendix A (9th Infantry Division Field orders #30, #31, Attack on the Meuse River) dated 3-4 Sept 1944)

Auth: CG 9th Inf Div
Initials: 
Date: 3 Sept 1944

Hq 9th Inf Div, APO 9
032330 Sept 1944

FO #31

MAPS: FRANCE 1/100,000; Sh

UNCLASSIFIED

1. a. The enemy continued his withdrawal to the W and NE. Tk and AT gun fire in support of inf continued in a rear guard role, encountered particularly at towns and road centers. It is expected that attempted delay at key points will be continued with a noticeable increase in resistance as the MEUSE RIVER and the town of NAMUR are approached, with aggressive action to be expected in and around NAMUR and the main crossings of the river. Identifications of PWs for the past 24 hrs represent a miscellaneous grp, the primary identification being the HITLER JUGEND Div, and all of them possibly making up KAMPFGRUPPE SCHROTT, with the missions of holding open escape routes to NAMUR and LIège.

b. No change.

2. This Div (less 2 Bns)
Atchd: No change

Will atk 040800 Sept 1944 to seize bridgeheads in zone of action.

Bdry: 3d Arm Div - 9th Inf Div: No change.
39th CT - 60th CT: Same to PHILIPPEVILLE (7232) - Road PHILIPPEVILLE (7282) - ROSKE (8284) - LOUVILLE (8685) all inclusive to 60th CT - 873065 - 890861 - 901855 - 930852 - 975833 - 990837 - railroad

3. a. 39th CT
Atchd: No change

Moving rapidly will seize bridgeheads in zone indicated.

- b. 47th CT (less 3d Bn atchd 3d Arm Div)
Atchd: No change

Will move 040800 to PHILIPPEVILLE (7282) and await orders in Div Rcs.

- c. 60th CT (less 1st Bn atchd 4th Cav Grp)
Atchd: No change

Moving rapidly will seize bridgeheads in zone DIERET (9988) exclusive - GIVET (9275) inclusive.

- d. 15th Engr Bn - No change.

- e. 2nd Recn Tr - No change.

- f. 766th Tk Bn - No change.

- g. Div Arty - No change.

- h. Div Rcs - Await orders in present area.

i. (1) Where bridges are not available in zone of action, daylight for proper sites for crossings is a matter of urgency. Crossing will be attempted pending results of recon.

(2) Point of Origin: 040001

UNCLASSIFIED

UNCLASSIFIED

4. See Adm O #23.
5. a. See Current SOI
- b. Axis of Signal Communication: No change
- c. CPs to be reported.

CRAIG
Comdg

OFFICIAL:

Fell
FELL
G-3

Appendix B (VII Corps Orders Field Orders #1, #10, Neptune (Normandy), Attack on Meuse River, dated 28 May 3 Sept 1944)

Auth: CG VII C :
Init: RAP :
Date: 28 May 44:

HQ VII CORPS -
APO 307
28 May 44

10
Copy 10 of 200.
Page 1 of 5 pages.

FO 1
(Corrected Copy)

Maps: Frame, GSGS 4250, 1:50,000, Sheets 5E/2, 6E/1, 5E/4, 5E/6, 6E/3 & 4, 6E/5, 6E/6, 5F2 & 6F/1.

1. a. See Annex 3 - Intelligence, and Amendments 1 & 2 thereto.
b. (1) Task Force 125 provides lift, protection at sea, and support.
See Annex 6 - Naval Fire Support.
(2) Ninth Air Force will support the VII Corps. See Annex 5 - Air Support.
(3) V Corps lands on left of VII Corps.
2. a. VII Corps assaults UTAH BEACH on D Day at H Hour and captures CHERBOURG with minimum delay.
b. See Annex 1 - Operations Overlay.
3. a. 101st A/B DIV (less certain glider elements) with Co D, 70th Tk Bn, 65th Armd FA Bn and Tr C, 4th Cav Sq, attached--REICARDIER GENERAL MAXWELL D. TAYLOR, commanding.
(1) Will land by parachute and glider at H - 5 hours on D Day south-east of STE MERE EGLISE (3496) with the principal mission of assisting the 4th Div landing by seizing the western exits of the inundated area west of UTAH BEACH between ST. MARTIN DE VARREVILLE (4098) and POUPEVILLE (4393), both inclusive.
(2) Will protect the south flank of the 4th Div. The bridges north of CARENTAN at 365872, 382855 and 383862 will be destroyed; the dam at 397868 will be seized and defended.
(3) The bridges over the DOUVE at 419873 and 427876 will be seized and a bridgehead southeast of the DOUVE will be secured covering these bridges.
(4) As soon as practicable after its elements in the 4th Division sector have been relieved by the 4th Div, CARENTAN will be seized and contact with the V Corps in the vicinity of CARENTAN established and secured.
(5) Thereafter the 101st A/B Div will protect the south flank of the VII Corps east of the MERDERET RIVER.
(6) Upon landing, seaborne elements will assemble south of STE MARIE DU MONT (4192).
b. 82D A/B DIV (less certain glider elements)--MAJOR GENERAL MATTHEW B. RIDGWAY, commanding.
(1) Will land by parachute and glider at H - 4 hours on D Day astride the MERDERET RIVER with one regiment east thereof. It will capture STE MERE EGLISE and secure the north and west flank of the 101st A/B Div west of BEUZEVILLE-au-PLAIN. It will seize and hold the crossings of the MERDERET at 315957 and 321930 and will destroy the crossings of the DOUVE at 309910 and 269928.

SECRET
FROM RECORD MATERIAL
BY: II RECORD DIV, NARS.



Page 2 of 5

- (2) After relief of the regiment east of the MERDERET by the 4th Div, the 82d Div will attack to the west in conjunction with the 4th Div and will seize and destroy the bridges over the DOUVE RIVER east of NEROU (1898) and east of ST SAUVEUR LE VICOMTE (1894).
- (3) Thereafter it will protect the south and west flank of the VII Corps along the DOUVE RIVER from the bend southeast of TIERRE DE BEAUVAL (1900) to the mouth of the MERDERET RIVER (3191).
- (4) The 82d A/B Div will be reinforced by Co C, 746th Tk Bn (D Day), Tr B, 4th Cav Sq (D + 1 (less one Plat on D Day)), 87th Armd FA Bn (D + 1) and Co A, 294th Engr C Bn (D + 1) as soon as these elements can be dispatched from UTAH BEACH. As these units become available after landing, they will be assembled in the area indicated on Incl No. 2 to Adm O No. 1, 12 May 1944, Assembly Areas and Main Supply Roads, under command of CG 2d Front Inf Brig.

c. 4TH INF DIV with following attachments--MAJOR GENERAL RAYMOND O. BARTON, commanding.

6th Armd Co (less Co D, 70th Tk Bn to be released to 101st A/B Div on D Day)
 63th Armd FA Bn (to be released to 101st A/B Div on D Day)
 87th Cml Bn, Mtr
 1106th Engr C Co
 377th AAA AW Bn (M)
 801st TD Bn (T)
 Btry B, 980th FA Bn (155mm Gun)
 Det 13th FA Chan Bn

- (1) Will assault UTAH BEACH on D Day at H Hour and, in conjunction with the 90th Inf Div, will seize CHERBOURG with the minimum delay.
- (2) The D Day objective will be seized by dark D Day; the intermediate objective as soon as practicable; and the 4th Div will be prepared to advance without delay on CHERBOURG.
- (3) As soon as practicable on D Day, the 4th Div will relieve elements of the 82d and 101st A/B Divs within its sector east of the MERDERET RIVER and will push one Regiment to the west of the MERDERET RIVER within the zone of action of the 82d A/B Div preparatory to a continuation of offensive operations to the northwest.
- (4) RCT 359, 90th Div after landing on UTAH BEACH commencing D Day will be attached to the 4th Inf Div for operations on the north flank of that division. It will revert to control of the 90th Inf Div as soon as the latter is established ashore.

d. 90TH INF DIV with 537th AAA AW Bn attached--BRIGADIER GENERAL JAY W. MacKERVIE, commanding.

- (1) Will land on UTAH BEACH commencing D + 1 day; will advance to the northwest on the right of the 4th Inf Div, and in conjunction with that division, will seize CHERBOURG with the minimum delay.
- (2) See par 3 & (4) above.

- 2 -

TOP SECRET - HIGOT

N E P T U N E

Appendix B (VII Corps Orders Field Orders #1, #10, Neptune (Normandy), Attack on Meuse River, dated 28 May 3 Sept 1944)

307
(Corrected copy)
Hq VII Corps
28 May 44

Page 3 of 5

3. e. 9TH INF DIV with 376th AAA Bn and 607th TD Bn (T) attached--MAJOR GENERAL MANTON S. EDDY, commanding.

Will land on UTAH BEACH commencing D+1 day and as soon as practicable thereafter will be assembled in Corps reserve in the area DEVILLE (2601) -- COLOMBY (2202) -- HAUTTEVILLE (2298) -- ORGLANDES (2598), prepared for offensive operations to the northwest.

f. 79th INF DIV--MAJOR GENERAL IRA T. WYCHE, commanding.

Will land on UTAH BEACH commencing D+1 day and as soon as practicable thereafter will be assembled southeast of VALOGNES in Corps reserve.

g. 1ST EGER SPEC BRIG.

Will support the assault landing of VII Corps; organize and operate all shore installations necessary for debarkation, supply, evacuation, and local security in order to insure expeditious movement across beaches.

h. ARTILLERY:

(1) Field Artillery - See Annex 4.

(2) Antiaircraft Artillery - 11th AAA Gp. Will provide close-in AAA area defense of UTAH BEACH and beach installations, air fields and air strips in the UTAH area.

i. The following units will land on UTAH BEACH after D+1 day and proceed to the assembly areas designated in Adm O #1:

109th AAA Gp
1st TD Gp
744th Tk Bn (L)
14th Cav Gp (less Dets)

j. ENGINEERS. See Annex 7 - Engineer.

k. DET 14TH CAVALRY GROUP -- LT COL EDWARD C. DUNN, commanding.

(1) Will land on the ILES ST. MARCOUF at H-2 hour on D day to capture and destroy any enemy installations thereon.

(2) Upon relief by Det 535 AA Artillery late on D day will land on UTAH BEACH and proceed to VII Corps CP to provide local guard.

- x. (1) The assault on UTAH BEACH will be pushed at all costs.
(2) Assault craft will be timed to land exactly at H Hour.
(3) Contact will be maintained from right to left.
(4) Essential elements of enemy information: See Annex 3 - Intelligence.
(5) G-3 reports will be submitted to reach this Hq at 0500 H hours daily by divisions and separate units assigned or attached to VII Corps.
(6) All troops, when briefed, will be informed of the employment of friendly airborne troops. See Annex 5 - Air Support.
(7) Violet smoke will be displayed by engineers one to two minutes before major demolitions on the beaches.
(8) Sitreps (situation reports) will be submitted to reach this headquarters not later than 1200 H hours D day and every twelve hours thereafter.

4. See Adm O #1, 2, and 3.

HQ VII CORPS
APO 307
3 September 1944

FO 10 (Confidential) - Issued
2 September 1944.

Maps: OGS 4042, FRANCE - Scale 1/250,000

1. a. See Annex 2, Intelligence.

b. (1) V Corps attacks to seize the road centers at ATH (1932) and LEUZE (0890).

(2) THIRD ARMY continues its advance to the EAST.

2. a. The VII Corps will attack early 3 September to seize crossings of the MEUSE River between NAMUR (9611) and GIVET (9275) (both inclusive)

b. Boundaries and initial objectives - See Annex 1, Operations Overlay.

3. a. 3d Armored Division, Brigadier General Maurice Rose, Commanding.

(1) Attachments:

486th AAA AN Bn (SP)
703d TD Bn (SP)
56th Armd FA Bn (105 How) (SP)
991st FA Bn (155 Gun) (SP)
18th FA Bn (105 How)
1st Bn, 26th Inf (1st Inf Div)

(2) Will attack to the EAST early 3 September to seize initially the crossings at NAMUR (9611). See Annex 1, Operations Overlay.

(3) Will be relieved 3 September by elements of 1st Inf Div at MONE (3112), RAVAI (1996), and BOUSSU (2010).

b. 9th Infantry Division, Major General Louis A. Craig, Commanding.

(1) Attachments:

376th AAA AN Bn (M)
746th Tk Bn
499th TD Bn (SP)
Cos C & D, 67th Cal Bn
Btry A, 13th FA Oben Bn
Btry A, 981st FA Bn (155 Gun)
690th FA Bn (105 How)
951st FA Bn (155 How)

(2) Will attack to the EAST early 3 September to seize initially the crossings of the MEUSE River from NAMUR (9611) (exclusive) to GIVET (9275) (inclusive) per Annex 1, Operations Overlay.

(3) Will protect the right flank of the Corps.

c. 1st Infantry Division, Major General Clarence R. Huebner, Commanding.

(1) Attachments:

103d AAA
745th Tk
634th TD
Cos A & B, 67th Cal Bn
Btry B, 13th FA Oben Bn

Appendix B (VII Corps Orders Field Orders #1, #10, Neptune (Normandy), Attack on Meuse River, dated 28 May 3 Sept 1944)

~~SECRET~~

(2) Will initially advance NORTH early in the morning to seize MONTMORILLON, Annex 1, Operations Overlay, and relieve elements (3112), BAVAI (1996) and BOUSSU (2010).

(3) Will continue its advance to the EAST in the zone of action of the 3d Arm Div on order CO, VII Corps.

d. 4th Cavalry Group (Reinf), Colonel Joseph M. Tully, Commanding.

(1) Attachments:

4th Cav Recon Sq
24th Cav Recon Sq
759th Tt Bn (L) (-1 Co)
635th TD Bn (T)
87th Armd KA Bn (105 How) (SP)
1 Inf Bn, 9th Inf Div

(2) will attack 3 September to seize MEZIERES (6232) and ROCROI (6952).

(3) Will reconnoiter the SOUTH flank of the Corps, maintaining contact between elements of THIRD ARMY at NETHEL (5606) and 9th Inf Div.

e. VII Corps Artillery. Corps Artillery will support advance of infantry divisions in the Corps zone of action.

f. Divisions and 4th Cav Gp will report locations of units and progress of movements every two hours, beginning at the time of initial attack or movement and continuing to the end of the day's operation. Spot reports will be submitted to supplement two hourly reports as required.

4. See Administrative Orders.

5. a. See current SOI.

b. Initial Command Posts:

(1) VII Corps - 316261 (MONTMORILLON).
(2) 4th Cav Gp - 415266 (vic ROCROI)
(3) 3d Arm Div - 320026 (vic QUEVY)
(4) 1st Inf Div - 195687 (vic MALEMERCHIE)
(5) 9th Inf Div - 327406 (vic FLOMIGN)

c. Axis of Signal Communication.

(1) VII Corps - MONTMORILLON (03228) - CHATELET (J7205)

(2) Others to be reported.

/s/ J. Lawton Collins
J. LAWTON COLLINS
Major General, U. S. Army
Commanding.

Annex 1, Operations Overlay
Annex 2, Intelligence.

DISTRIBUTION:

First Army	10	XI Corps	2	1st TD Gp	1
Third Army	3	1st Div	4	109th AAA Gp	1
12th U. S. Army Gp	3	9th Div	4	1106th Engr Gp	1
VII Corps	25	3d Arm Div	4	1120th Engr Gp	1
V Corps	2	VII Corps Arty	2	50th Sig Bn	1

ENDNOTES

¹ Moltke, Military Works, Volume IV, Operative Preparations for Battle, The Great General Staff, Military History-Historical Sections Berlin 1911, translated by Harry Bell, Army Service Schools 1916. pg. 66

The quotation that has been attributed to Moltke the Elder is used widely and without any reference to a primary source. Even the famous and thorough German historian Delbruck attributes this statement to Moltke the Elder with any reference to a primary source. Delbruck was the earliest reference to this quote I found. The likely source of this is a poor translation of a secondary German source. This mistake is not universal; J.F.C Fuller in correctly quotes Moltke in his 1961 book "The Conduct of war 1789-1961."

The section of Moltke's works referenced emphasizes that it is impossible to lay out a clear and predictable scheme of maneuver for future events. He stated that only a layman could think that he could see all consequences of the original plan, deciding all details in advance and having studied all the details, adhered to it to the very finish. He instead believes that since war is reciprocal, we must plan for probabilities and that when we take the initiative with a clear goal with means at hand we increase the probabilities of victory.

² This term is in common usage amongst the BCTP teams and CTC observers and is used during AARs to point out the value of the Military Decision making process. The author has heard this innumerable times in these contexts.

³ Crowley, James C and Hallmark, Bryan W., Company Performance at the national Training Center, Battle Planning and Execution, Arroyo Center, Rand Study 1997

⁴ Instructional text and Field Manuals until 1960 had a common theme when writing about plans. The format was mentioned but it was only in the context of clarity in the presentation of the order. These manuals focused on the developed of a clear and concise presentation of the commanders will. Terms that have been presentation at the Command and General Staff college as new, had been found and used decades earlier. A mission that was Task-Purpose- 1905, the elimination of adjectives like attack aggressively, bolding was advocated 100 years ago. The 1960 version of FM 100-5 dropped all these lessons learned and dedicate half the manuals to formats. Hence the cognitive aspects of orders began losing ground.

⁵ The exceptions in United States History are Korea and Vietnam. The war in Korea started from a cold start so orders almost immediately reverted to the standard of the final day of World War II. Since the war stalemated by 1952 order actually revert backwards and became similar to those that inexperienced World War II unit produced, except that they include a prodigious amount of SOPs and How to Fight unit manuals. The Vietnam War is unique in that orders didn't improve; they became longer, vague. These situations probably developed out of the lack of time pressure of staff at the highest levels to produce orders to changes events.

Desert Storm continues the historical trend with pre-war orders being large, long, staff specific. The 24ID had an over 250 pages to its pre-war Division order. Subsequent orders were verbal or simple overlays with short order attached.

⁶ VII Corps and 9th Infantry Division 9(ID) produced dozens of Field Orders in their drive from Normandy to Germany. VII Corps and (ID issued orders under great pressures, very quickly. Anything not vital to the plan was quickly pruned after the first few orders. But these orders continued to plan beyond first contact until the end of the war. What they found of value in plans is the central component of this monograph.

⁷ The 90th Infantry Division is the best case of this suffering 300 percent casualties until a new division commander brought new leadership and a new planning methodology.

⁸ FM 101-5, Revised 1950, Revised 1954; used actual combat orders as examples.

FM 101-5 1960, eliminated all the example orders that had been used in the 1950 and 1954 editions. The 1960 edition introduced a new rational approach to planning, which included then new Military Decision Making Mode, the old estimates process was dropped. The examples used were created with fictitious information. Concepts for mission statements such as Task-Purpose were dropped in favor of Who-What-When-Where. Coincidentally when these terms and concepts came back into favor, so did the old combat orders.

⁹ FM 101-5, 1997, Staff Organization and Operation, Appendix H, Page H-73-79.

This Field manual uses FO #18, issued 23 March 1944, six months after the Meuse River crossing order (FO #10) examined as a case study in this monograph. Its format and content are identical to FO #10.

¹⁰ FM 101-5, 1940, Staff Officers Field Manual - The Staff and Combat Orders.

This was the manual available to provide guidance to commander and staffs throughout World War II. It was not updated with lessons learned until 1950. The 1950 update was not a great departure, it did expand the examples provided.

¹¹ Ibid., 49

¹² V Corps and VII Corps and their subordinates issued orders that were doctrinal correctly formatted. V Corps and VII Corps started Operation Neptune, the invasion of Normandy with the Field Order #1.

¹³ Leavenworth Papers No. 16 Deciding What has to Be Done: General William E. Depuy and the 1976 Edition of FM 100-5, Operations. Pg. 12-16, The 90th Inf Division did not move closer to the ideal that 1940 doctrine had laid out. This Division under several commanders produced orders of greater and greater detail to compensate for the chaos. It also suffered over 100 percent casualties in the first two months of combat.

Examples of units that adapted orders in the same manner as VII Corps and 9ID and which detailed operations reports are available for:

- 3rd Armd Div
- 1st Inf Div
- 2nd Armd Div
- 7th Army
- 6th Army
- 77th Inf Div
- 8th Inf Div

Many units produced similar style orders, but lack of documentation is available to conclusively prove how they arrived at them and what subsequently happened in combat.

¹⁴ VII Corps Field Order #1 was over eighty pages long, which included fourteen annexes. Two hundred copies made and distributed.

¹⁵ FM 101-5, 1997

¹⁶ VII Corps 9ID issued G-2 periodic reports on a routine basis throughout the war. A comparison of these documents demonstrated that while both headquarters did not always interpret the data the same way, they did compare these discrepancies. An excellent example is provided by the discussion paragraphing the 9th ID G-2 periodic report dtd 2 Sept 1994. This paragraph stated:

"It is reasonable to assume that his(German) main effort at any attempted delay may well be to stop out advance to the N. A swing to the east may catch him by surprise although it is believed that a delaying line, and probably a strong defense line will be found along the Meuse river."

This discussion started was the genesis for the VII Corps shift to the east. The G-2 idea. Became the VII Corps course of action. A great level of shared information and understanding.

¹⁷ Report of Operations 9ID 1-30 Sept 1944.

This document was required by regulations for all units in World War II. The fact that most unit did not complete it speaks highly of the 9th Infantry Divisions Disciplines. This document, which covers the war from month to month is a vast source of original information. The contains all the intelligence reports, field orders with annexes and overlays and daily situation reports. It also contains an after action reports. Appendix B contains samples from this document.

¹⁸ The Red Ball express at this time was trucking fuel from the Normandy Beachhead into the interior of France. It was only the completion of Allied oil pipelines and the reestablishment of the French railroad infrastructure that eased this burden. Most of the trucks came from newly landed division that had all their trucks requisitioned to support this shuttle.

¹⁹ This Intelligence Update also contained the first detailed intelligence report on the SIEGFRIED Line. As mention earlier the standard procedure at that time was to continually intelligence to provide a common picture. That this report was issued with the order to cross the MEUSE confirms that continual process of developing the situation and detailed analysis before the order. The SIEGFRIED Line order was still a few weeks away.

²⁰ VII FO #10, Annex 2, dated 3 Sept 1944

²¹ VII Corps Intelligence Annex 2 to FO #10.

VII Corps Report of Operation, dated 1 October 1944, covering 1-30 Sept 1944, Section III dates 1-4 Sept 1944, paragraphs 1,2,3., pages 2,3

9ID G-2 periodic report #49 dated 012200-022200 Sept 44

9ID G-2 periodic report #50 dated 022200-032200 Sept 44

²² 9ID G-2 Periodic Report, dated From: 012200 Sept 1944 to 022200 Sept 1944.

²³ Mission drawn from G-2 Battlefield summaries that involved the interrogation of capture German Commanders.

²⁴ This is a ideal example of system theory. That any input in fact changes the situation. The input in this case was based upon facts and observation that were entirely true, but when the solution was presented it changed the problem.

²⁵ One reason for the lack of a written Concept of Operations and Scheme of maneuver was that the Operation overlay presented that information graphically and the redundancy of a written explanation was considered unnecessary.

²⁶ FM 101-5 (1940)., pg. 51

²⁷ A Nonstandard Doctrinal term used exclusively by the Infantry Advance and Basic course at Fort Benning.

²⁸ FM 101-5, 1997, pg. 1-111

²⁹ FM 101-5 (1940)., pg. 131

³⁰ 9ID Field Order #30, dated 030230 Sept 1944, Annex 1 (Operations Overlay). The overlay was produced on Onion Skin paper. This overlay designated the start point and route along with the team and Division boundaries. The information in the Operations Overlay and Operation order were exclusive. Information presented on one was not reproduced upon another. In effect both were required to understand the order.

³¹ Report of Operations, 9ID, dated 1 October 1994, period covers 1-30 Sept 1944. Page 4, paragraph 4c

³² FM 101-6,. Pg. G-8

³³ FM 100-5, Operations, pg. 2-14-16, Glossary-1

³⁴ 9ID Field Order #30, dated 030230 Sept 1944, Annex 1 (Operations Overlay).

³⁵ Report of Operations, 9ID, Page 4, paragraph 3 c, d, e

³⁶ A light, portable rocket artillery piece. Once loading with is stubby rocket it could be manhandled and fired and quickly moved to another sight.

³⁷ Crowley, James C and Hallmark, Bryan W., Company Performance at the national Training Center, Battle Planning and Execution, Arroyo Center, Rand Study 1997.

Units at the combat training center achieve their mission less that 35% of the time.

³⁸ MG Collins and BG Craig had hoped to reach the Meuse River by surprises the enemy. But no part of the plan required surprise, so when it was lost by German preparations the plan was invalidated.

³⁹ The defenses were under the command of the 25th Regt, 12th SS Div "Hitler Jugend". Defectors reported that the SS units would command all unit in the sector. This lead to cases of SS Lieutenants giving orders to majors of the Volks units defending the river bank. The 9ID G-2 section reported this but found no instances of this internal tension effecting military operations.

⁴⁰ Why the 9ID issued a field order with the same order number and basically the same order is unknown. However the after action review leads me to believe that reason was to assign a deception mission to the 47th, the division reserve.

⁴¹ The reasons for these complications and delays are not explained further

⁴² FM 101-5(1997),. H-11

⁴³ FM 101-5 dtd 1940, pg. 43

⁴⁴ FM 101-5 1997

⁴⁵ Generals Balck and Von Mellenthin both fought as General officers on the eastern front in World War II. They achieve "an unmatched record of battlefield success, despite being greatly outnumbered" General Balck commanded several divisions, two Corps, and Army and an Army group. General Mellenthin was a General Staff Officer and frequently General Balck's Chief of Staff. He was chief of Staff of a Corps, Panzer Army, and an Army Group.

⁴⁶ Generals Black and Von Mellenthin on Tactics,. Pg. 18

⁴⁷ Ibid., 19.

⁴⁸ Ibid., 25-39.

⁴⁹ Ibid., 39.

⁵⁰ FM 101-5, dtd 1960, The idea that an optimal solution existed to every problem was first introduced in 1960 edition of FM 101-5. It believes that with enough information an answer could be arrived at systematically, without having to rely on the intuition of the commander.

⁵¹ Russell Ackoff taught at the University of Pennsylvania and has written several books on planning from a corporate perspective.

⁵² Ibid., 58.

⁵³ Ibid., 53.

⁵⁴ Ibid., 58.

⁵⁵ INTERACTIVE PLANS require experience or systematic study to show which parts of the problem are similar to other faced and which are different or new. Interactive plans also require more art than science to determine which parts of the problem is unique and when new solutions will be required.

⁵⁶ Ibid., 61.

⁵⁷ FM 101-5 1997

⁵⁸ BG Craig had laid out some of the possible enemy courses of action based upon the information that was then available, they were all wrong.

⁵⁹ Moltke., 66.

⁶⁰ Ibid., 66.

⁶¹ Ackoff., 63.

⁶² Moltke., 67-68.

⁶³ MG Collins and BG Craig clearly understood the purpose of crossing the Meuse River was to penetrate the Siegfried Line in the future. The intelligence only provided information on the situation, roads, River banks, weather and enemy for a limited amount of time, 2-3 days, and the terrain 20-40 kilometers to the front. So that was the time and space the plan covered. The knew that after the River was crossing they would need other plans and orders, but since that situation was unknown, it was left until that situation fell within the window of what they could know. Once the River was crossed and new terrain, enemy and weather information was available, a new plan was developed to cover that time, still all linked to getting to the Siegfried line.

⁶⁴ Moltke., 66.

⁶⁵ FM 101-5, 1997. The MDMP required that each level of command conduct a Mission Analysis and course of action development, either sequential or in parallel with the higher headquarters.

BIBLIOGRAPHY

Books

- Ackoff, Russell L. Creating the Corporate Future, Plan or be Planned for. New York, John Wiley & Sons, 1981
- Beniger, James R. The Control Revoltion, Technological and Economic Origins of the Information Society, Cambridge, MA Harvard University Press, 1986
- Bond, Stanley. Technique of Modern Tactics, Menasha, Wisconsin, U.S. Cavalry Association, George Banta Publishing Company, 1916
- Crevald, Martin van. Supply War, Logistics from Wallenstein to Patton. New York, Cambridge University press, 1977.
- Fuller, Colonel J. F. C. The Foundations of the Science of War. Fort Leavenworth, Kansas, U.S.Army Command and General Staff College Press, 1993
- Hallmark, Bryan W. & Crowley, James C. Company Performance at the national Training Center, Battle Planning and Execution, RAND, 1997
- Kelly, Kevin. Out of Control, The New Biology of machines, Social Systems, and the Economic World, Reading Mass: Addison-Wesley Publishing Company, 1995
- Klein, Gary. Sources of Power, How People make Decisions. Cambridge Massachusetts, MIT Press, 1999.
- Mintzberg, Henry. The Rise and Fall of Strategic Planning, Preconceiving Roles for Planning, Plans, Planners. New York, The Free Press, 1994
- Moltke, Gen. Helmuth Karl Bernhard von. Moltke's War Lessons, Vol. III - The Battle, part I (Bell, Harry. trans. Fort Leavenworth 1912) Great General Staff, Military Historical Section I, Berlin 1912.
- Moltke, Gen. Helmuth Karl Bernhard von. Moltke's War Lessons, Vol. IV - Operative Preparations for Battle, part I (Bell, Harry. trans. Fort Leavenworth 1916) Great General Staff, Military Historical Section I, Berlin 1911.
- Moltke, Gen. Helmuth Karl Bernhard von. Moltke on the Art of War Selected Writings (Hughes, Daniel J. ed.) Novato, California: Presidio Press, 1993.
- Waldrop, Mitchell M. Complexity the Emerging Science at the Edge of Order and Chaos, NewYork, Touchstone, 1992

BIBLIOGRAPHY

Articles

Liddel Hart, B. H. "The Ration of Troops to Space," Military Review, 40 April 1960 pg: 3-14

Monograph and Thesis

Abt, Frederic E. "The Operational End State: Cornerstone of the Operational level of War." MMAS monograph, School of Advanced Military Studies, Fort Leavenworth, 1988

Generals Black and Von Mellenthin on Tactics: Implications for NATO Military Doctrine. The BDM Corp., for the Secretary of Defense, 19 December 1980.

Government Documents

U.S. Department of the Army. FM 101-5-1 Operational terms and Graphic. Washington, D.C.:Government Printing Officer, 30 Sep 1997

War Office, Staff Officers Field Manual, Part one. Washington D.C.: Government Printing Office:1932

War Department, FM 101-5, Staff Officers Field Manual, Part One. Washington D.C.: Government Printing Office: 26 Sept 1932

War Department, FM 101-5, Staff Officers Field Manual, The Staff and Combat Orders. Washington D.C.: Government Printing Office: 19 Aug 1940

Department of the Army, FM 101-5, Staff Officers Field Manual, Staff Organization and Procedure. Washington D.C.: Government Printing Office: July 1950

Department of the Army, FM 101-5, Staff Officers Field Manual, Staff Organization and Procedure. Washington D.C.: Government Printing Office: Nov 1954

Department of the Army, FM 101-5, Staff Officers Field Manual, Staff Organization and Procedure. Washington D.C.: Government Printing Office: July 1960

U.S. Department of the Army. FM 101-5 Staff Organization and Operations. Washington, D.C.: Government Printing Officer, 31 May 1997

U.S. Department of the Army. FM 100-5 Operations. Washington, D.C.: Government Printing Officer, 14 June 1993

BIBLIOGRAPHY

Headquarters United States Army, Europe, Foreign Military Studies Branch, Technique of Command. MS #B-303, translated from original text written by Guenther Blumentritt, General der Infanterie a.D. 27 Jan 1947

Headquarters United States Army, Europe, Foreign Military Studies Branch, Combat Orders. MS #D-268, translated from original text written by Dr. Lothar Rendulic, Generaloberst a.D. Garmish, FRG, 30 April 1947

Blumentritt, General G. Theory vs. Practice in War Leadership, U.S. Military History Institute, Carlisle Barracks, PA, 1947

Operation Orders and Supporting Documents

VII Corps

Field Order #1 (Neptune) dated 28 May 1944
Field Order #10 (Meuse River Crossing) dated 3 Sept 1944
G-2 (VII Corps) Periodic Reports from 20 Aug - 10 Sep 1944
Report of Operations (VII Corps)) 20 Aug - 10 Sept 1944

9th Infantry Division

Field Order #30 dated 3 Sept 1944
Field Order #31 dated 4 Sept 1944
Field Order #31 (amended) dated 4 Sept 1944
G-2 (9th ID) Periodic Report from 20 Aug - 10 Sept 1944
Report of Operations (9th ID) 20 Aug - 10 Sept 1944