

**GENERALS BALCK AND VON MELLENTHIN ON TACTICS:
IMPLICATIONS FOR NATO MILITARY DOCTRINE**

by
General William DePuy (U.S. Army Ret.)
BDM Corporation,
December 1980

reproduced and edited by
Reiner K. Huber
Universitaet der Bundeswehr Muenchen,
December 2004

ABSTRACT

This paper presents an edited version of the BDM-report* by General William DePuy (U.S. Army Ret.) summarizing the analysis of the opinions and ideas of retired German Generals Balck and von Mellenthin with respect to tactical problems of NATO vis-à-vis the Soviet Union in the late seventies / early eighties. It was scanned from the type-written original without the two photographs showing the German Generals with U.S. Generals Gorman and Otis during the simulation exercise organized within the framework of a conference held at BDM. May 19-23, 1980. The purpose of the conference was to examine twentieth century German military experience in battle against Russian forces with the intent of developing insights useful in aiding understanding of the challenges NATO faced Europe as it prepared to confront the Soviets in any future conflict.

The editor rediscovered the DePuy-report when searching his personal archives for pre-internet materials on human and organizational factors relevant for military command and control. Even though C2 is not addressed in any detail context in the BDM-report, and with reference to organizational aspects only, in their statements the German Generals referred to a series of human factors and behavioral parameters which they regarded as important for success based on their extensive field experience in World War II, especially in situations when they fought successful battles against a numerically superior enemy. The respective statements in the report are marked by a yellow background.

*Technical Report BDM/W-81-077-TR, McLean, VA, December 19, 1980

TABLE OF CONTENTS

INTRODUCTION	3
BIOGRAPHIES	7
MAJOR THEMES AND ISSUES	
1. Generals Balck and von Mellenthin	9
2. The Character and Style of the Russian Army	10
3. The Character and Style of the German Army	14
4. Defensive Doctrine and Tactics	19
- The Simulation Process	20
- The German Solution	21
- The U.S. Solution	28
5. Tactics and Techniques in General	35
6. Organizing the Fighting Elements	40
7. Other Subjects on which the Generals had important and interesting Comments	43
SUMMARY COMMENTS	46

INTRODUCTION

Under the auspices of the Director of Net Assessment, Office of the Secretary of Defense, The BDM Corporation hosted a conference on tactical warfare during the period 19 to 22 May 1980.

The purpose of the conference was to examine twentieth century German military experience in battle against Russian forces with the intent of developing insights useful in aiding our understanding of the challenges NATO faces today in Europe as it prepares to confront the Soviets in any future conflict.

In World Wars I and II the Germans learned many valuable, if enormously costly, lessons about the Russians as a people with a distinctive cultural heritage, and as soldiers whose military traditions, proclivities and character in battle derive from these same cultural roots. Owing to their intrinsic nature, these same basic traits and broad patterns of behavior would likely find similar expression on any future battlefield. Thus, the relevance of their study is meeting our current knowledge needs.

In spite of the vast wealth of experience the Germans gained in modern warfare against the Russians, there has been little systematic examination of it in the United States, especially as the result of such an examination might be applied to the study of actual and potential problems facing NATO in the event of conflict with the Soviets in Europe. This conference, then, was an effort at developing relevant, transferable insights, appropriate for application in contemporary and future tactical situations, based on the extensive experience of two veteran German general officers who came to know the Russians as few living persons have.

In this endeavor, BDM was extremely fortunate in being able to arrange for the participation of two distinguished retired German generals, Hermann Balck and Friedrich von Mellenthin. Brief biographies of Generals Balck and von Mellenthin follow this Introduction

Both of these officers gained considerable command experience in combat against the Russians on the Eastern Front during World War II. In so doing, they achieved a virtually unmatched record of battlefield success, despite being greatly outnumbered, in terms of men and materiel, on many occasions. Indeed, toward the end of the war it became the normal condition. Of special significance for us today is the fact that while expecting to be outnumbered by as much as ten or more to one, they also expected to win - and often did. General Balck experienced battle against the Russians in World War I as well, sustaining seven wounds and earning the Iron Cross First Class as a junior

officer. During the conference, Generals Balck and von Mellenthin served as guest lecturers and participated in a series of discussions and manual European conflict simulations. The success of the conference, gratifying by any standard, was due in large measure to the unique contributions made by these two truly exceptional officers.

Both General Balck and General von Mellenthin had visited the United States on other occasions to participate in conferences addressing their experiences during World War II. These efforts produced a number of interesting historical insights into German doctrine and operational concepts that were employed in combat against Russian forces. The goal of the present effort was to have the generals describe techniques and principles of warfare which they found successful in their experiences and considered relevant for NATO in Central Europe today.

In order to provide a forum best suited to pursuing these discussions, a small panel of experienced and highly qualified defense experts, both military and civilian, was chosen to participate in the conference. The panel included:

- General William E. DePuy (USA, Ret.), former commander of the 1st Infantry Division, Assistant Vice Chief of the US Army General Staff, commander of the US Army Training and Doctrine Command, and principle author of FM 100-5, Operations. General DePuy generously agreed to serve as rapporteur for the conference and prepare this report of the proceedings. BDM would like to extend a special thanks to General DePuy for his immeasurable contributions to enhancing the quality and usefulness of the conference and for the widespread interest shown in its results. Balck and von Mellenthin's respect for General DePuy was evident in their references to him as a "kindred spirit". Later, General von Mellenthin noted in reviewing this report, "I find the report very good, the tactical lessons of General Balck and myself came out very well."
- Lieutenant General Glenn K. Otis, US Army Deputy Chief of Staff for Operations and Plans. General Otis previously commanded the 1st Armored Division in VII Corps and served as head of the US Army Combined Arms Combat Development Activity at Fort Leavenworth, Kansas.
- Lieutenant General Paul Gorman, USA, J5 (Plans and Policy), Organization of the Joint Chiefs of Staff. General Gorman formerly commanded the 8th Infantry Division (Mechanized) in V Corps and was one of the authors of the US Army's tactical doctrine as set forth in FM 100-5, Operations.
- James Dunnigan, President of Simulations Publications, Inc., New York, a leading authority in military gaming and both NATO and Warsaw Pact forces.

- Dr. Dan McDonald, one of the founders of BDM and a leading figure in the technology of engagement simulation, test and evaluation, and operational experimentation.
- Colonel von Uslar-Gleichen German Army Attaché, who participated and assisted throughout the conference.

The conference lasted four days. The first three days consisted of a series of discussions and manual map exercises, the latter involving the active participation of the panel of US defense experts and Generals Balck and von Mellenthin. This provided a realistic operational context for comparing and contrasting approaches. On the last day of the conference, the results of the previous days' activities were reviewed and summarized. For this purpose, the panel was expanded to a much larger group of some thirty participants from government and the research community.

The conference attempted to identify and analyze insights provided by Generals Balck and von Mellenthin that are relevant for current NATO defense problems. A key element of this approach was the need to articulate and understand the detailed complexities of Soviet offensive and NATO defensive tactics. To facilitate this understanding, the guests and panelists used a manual map board simulation designed by BDM to deploy forces and illustrate the various defensive tactics discussed during the course of the conference. The simulation was used principally to depict combat methods; the US V Corps area of AFCENT served as the basis for discussion. During the conference, Generals Balck and von Mellenthin were asked to assume the roles of US commanders and illustrate their defensive concepts for US V Corps using the simulation technique. Their concept was then compared and contrasted with V Corps defensive concepts presented by both General Otis and General Gorman, using the same technique. This approach provided a framework for discussion as well as some very interesting insights into the players themselves. The results of these exchanges are treated, in some detail, in the body of this report.

A transcript of the entire conference, consisting of 155 typed pages of material, was prepared from more than twenty hours of audio tapes recorded during the four days of meetings. Where ambiguities appeared, the discussion was reconstituted through consultation with certain of the participants. The present report, prepared by General DePuy, summarizes the major themes and most significant comments contained in the original conference transcript of 18 August 1980. During the conference itself, various subjects came up for discussion on more than one occasion. This final report individually addresses all topics of consequence, bringing to bear all relevant comments regardless of where they may have appeared in the original transcript. The footnotes found throughout are keyed to the original transcript as well.

The most interesting themes to emerge during the four days of the conference were:

- Generals Balck and von Mellenthin themselves and their relationship, one to another - that of a commander and his trusted chief of staff.
- The character and style of the Russian Army.
- The character and style of the German Army, including a discussion on the concept of Auftragstaktik.
- Defensive doctrine and tactics:
 - Generals Balck, von Mellenthin and Otis
 - Generals Balck, von Mellenthin and Gorman
- Tactics and techniques in general
- Organization of the fighting elements
- Some trenchant comments by Generals Balck and von Mellenthin and other subjects:
 - The position of command posts in the delay
 - The impact of tactical air forces
 - Balck unfamiliar with Hutier (infiltration) tactics
 - The impact of Soviet guerrilla operations

BIOGRAPHIES

GENERAL HERMANN BALCK

General Balck was born on December 7, 1897 in Danziglanfuhr, Prussia. In 1913, he became a cadet with the Goslar Rifles. He joined the Hanoverian Military College in February 1914 and returned to his unit at the outbreak of World War I. During World War I, General Balck fought on the Western, Eastern, Italian and Balkan fronts while rising to the rank of company commander. In 1922, he joined the 18th cavalry regiment at Stuttgart. Balck was transferred to General Guderian's - Inspectorate of Mobile Troops at the Army High Command in Berlin in 1938. During the Polish Campaign, Balck was in charge of the reorganization and refitting of the Panzer division. He fought on practically every major German front during the war. A synopsis of his posts during World War II includes Command of the 1st Motorized Infantry Regiment 1st Panzer Division; Command of the 3rd Panzer Regiment of the 2nd Panzer Division; Economy Commissioner; Inspector of Mobile Troops; Commander 14th Deutschland Division; Commander 14th Corps at Salerno; Commander 48th Panzer Corps; Commander 4th Panzer Army; Commander in Chief Army Group "G" in Alsace; and, at the end of the war, Commander in Chief 6th German Army. He surrendered to US troops in Austria in 1945 and was in captivity until 1947. He is currently publishing his war diary which he kept from August 1914 until May 1945.

GENERAL MAJOR A. D. F. W. VON MELLENTHIN

General Von Mellenthin was born on August 30, 1901 in Breslau, Germany, located in the province of Silesia. He was educated in the Real Gymnasium in Breslau. His first military assignment was with the Seventh Cavalry Regiment in April of 1924. Two years later he was sent to the Infantry School in Ohrdurf and later that year attended the Cavalry School in Hanover. General Von Mellenthin was commissioned a lieutenant, February 1, 1928 and served as a Regimental Cavalry Officer until October 1935 when he attended the War Academy in Berlin for General Staff training. Upon graduation from the Academy, he was assigned to the Third Corps staff in Berlin as the intelligence officer. At the outbreak of World War II, he proceeded from post to post eventually having appeared on practically all of Germany's fronts, at one time or another. A synopsis of the positions he held during World War II include: Operations Officer for the 197th Infantry Division; Intelligence Officer - 1st Army; Intelligence Officer 2nd Army; Intelligence (later operations) officer to the Panzer

Army Africa; Chief of Staff - 48th Panzer Corps; Chief of Staff 4th Panzer Army; Chief of Staff - Army Group "G"; and Chief of Staff - 5th Panzer Army. After the war, General Von Mellenthin emigrated to South Africa where he was an executive for Lufthansa Airlines until his retirement. He has been the author of numerous articles and books; the most famous of these are Panzer Battles and German Generals of World War II.

MAJOR THEMES AND ISSUES

1. Generals Balck and von Mellenthin

Those readers who may not have studied the background of the distinguished German participants might not appreciate the full authority with which they speak - **authority growing out of an incomparable set of experiences in war** against Russians -- and others, including U.S. forces - and **a record of battlefield performance** unsurpassed anywhere in the history of modern warfare. Additionally, the character and personalities, as well as the personal relationships between these officers, were fascinating and compelling.

General Balck tends to be a man of few words - somewhat brusque almost laconic, but deeply thoughtful. He was, and is, clearly **a man of iron will and iron nerves**. He exudes a strong aura of confidence - **confidence in himself, in the German Army and in the German soldier**. He has no doubt about the superiority of the German over the Russian, although he sees enviable strengths in the Russian character - about which, more later.

General von Mellenthin is a more gentle officer on the outside. However, his record and Balck's esteem tell us that he is also a man of steel at the core. Von Mellenthin is **thoughtful, bright and articulate**. He is a product of the German General Staff system - a **thorough professional**. Consistent with the tradition of that corps, von Mellenthin played the **loyal and faithful** role of close advisor and principal staff officer during our discussions, just as he did on so many critical occasions when serving as General Balck's Chief of Staff on the field of battle. His working example of the Commander/Chief of Staff relationship was worth 10,000 words of description. General Balck also considered von Mellenthin as his deputy commander and used him as a pinch-hitter when subordinate commanders failed or faltered. One exchange during our discussions put all this into a clear perspective:

Gen. von Mellenthin: "The Position of the Chief of Staff of a tank corps, of an army, etc., together with the commander there must be a good marriage. They must **live together and think together**, General Balck and myself were very close. When he went to the front lines I stayed behind and kept all things under control while he was at the Schwerpunkt, or vice versa. I myself, every second or third day, went to the front. General Balck then sat at the desk at Corps or Army Headquarters. I don't know if you

have in the United States the same strong Position of Chief of Staff as we have in the German Army. You know, I had **complete freedom** when he was away - **to make my own decisions**. It is very important that the Position of the Chief of Staff should be a strong one." 1/ p.18

The combined experiences of these officers at Division, Corps, Army and Army Group levels in Russia, at Salerno, in North Africa, before Budapest, in Lorraine against Patton, over many years of continuous fighting, are the bona fides of the opinions they have offered. Furthermore, these officers have faced the Russian Army under conditions of substantial inferiority in numbers and equipment, in the cockpit of armored and mechanized combat, a Situation that American officers may face in the future.

2. The Character and Style of the Russian Army .

Gen. Balck: "Many military leaders [of foreign armies] got to Moscow, but nobody came back unharmed."

Gen. v. Mellenthin: "The Russian is unpredictable. Today he is a hero attacking in great depth, tomorrow he is completely afraid and not willing to do anything."2/ p.4

General Balck was indelibly impressed with the vast distances encountered in Russia and their impact on military operations. In short, Russia is endless. It absorbs armies. Coupled with an enormous population, vis-à-vis the Germans, these characteristics placed victory out of reach in World War II.

It was General Balck's opinion that the defeat of Russian armies in World War I resulted from the closing of the Dardanelles and the ensuing crisis in war materials. This led to a Situation in which senselessly drilled Russian soldiers were sent to the battlefield unarmed, and were expected to follow and pick up the rifles of their dead and wounded comrades from the preceding waves. This bloodthirsty method of waging war, he thought, speeded the onset of revolution: "That is too much even for the Russians." 1/ ibid.

On the positive side, General Balck attributed to the Russians an **ability to "fall back into primitive existence"** when the weather or the tactical circumstances were appalling.2/ ibid. He

also recognized that **the Russians learned as the war continued** but his faith in the Russian **capacity to improve** was clearly limited:

Mr. Dunnigan: "Do you feel that on the Russian side there was an excessive amount of command from the top, or was it just that they did not have any initiative?"

Gen. Balck: "It was a combination of both."

Mr. Dunnigan: "You think that is still in effect today?"

Gen. Balck: "That won't change."

Mr. Dunnigan: "Why would you think that?"

Gen. Balck: "It is because **no army can separate itself from the principles on which it has acted from the very outset.**"^{3/} pp. 21-22

Gen. v. Mellenthin: "Believe us, **they are masses and we are individuals.** That is the difference between the Russian soldier and the European soldier."

Mr. Dunnigan: "More **education** on the part of the Russian soldier, more **sophistication**, more **exposure to Western ideas** - do you think that would change it in any way?"

Gen. Balck: "No, I don't believe so."^{1/} pp. 23-24

The discussion turned to the critical question of Soviet methods. Because the Russians place great emphasis upon the use of set formations in the attack - almost geometric in their precision - the question always arises as to whether, therefore, they lose the ability to use the terrain for cover and concealment. On this point General Balck was drawn into an interesting discussion of the relative military merits of mountain people versus prairie people.

Gen. DePuy: "[Did the Russians in World War II attack in very specific formations, and if so] did they use the cover and concealment of the terrain?"

Gen. Balck: "It is understood of course that the terrain is to be used. Occasionally that use of terrain may be replaced by speed."

Gen. DePuy: "This is by the Russians?"

Gen. Balck: "Yes, they were quite good at it."

Mr. Karber: "....." "When a tank company attacked, did the tanks line up in a geometric formation, a rigid formation, or did the attack from one terrain feature to another, covering each other with fire?"

Gen. Balck: "Both were done, sometimes correctly, sometimes in the wrong way."

Gen. DePuy: "The Israelis say, that [the Syrians] did not use the terrain. They kept their Soviet-style formations. They kept on line and in columns, and therefore denied themselves the use of covered routes and concealment. Did you observe anything like that in Russia?"

Gen. Balck: "The answer is yes. Normal European and American countries educate their people like we do. There is a different class of prairie people - prairie nations like Hungary, like some peoples in Asia. They are used to flat, open terrain, and they use this kind of attack - the formation that was previously criticized. Then there is a third category: mountain people. They adapt more to the features of the terrain, and they are more apt to adapt to modern warfare. Prairie people should not be used in modern warfare because that courts disaster."

Mr. Karber: "Does the General consider the Soviets to be prairie people?" .

Gen. Balck: "Partially." 1/ pp. 25-27

The discussion then touched on a related and important point, the value of speed.

Mr. Karber: "The General said that sometimes the Soviets would use terrain - and sometimes they would use speed. Which did General Balck and General von Mellenthin consider the most difficult to defend against?"

Gen. Balck: "Speed." 2/ p. 27.1

There are three classic methods of breaching a defense. The first is by surprise or stealth - falling unexpectedly upon the defender at night or in bad weather, without visible preparation, often involving feints in some other area. A variation of this tactic is infiltration of the defense prior to a deliberate attack. The Russians were acknowledged as masters of Infiltration.

The second method is to advance from position to position using cover and concealment - fire and maneuver. It is more difficult to determine the extent to which the Russians use these tactics. They are the heart of the tactical methods used by the Western armies. There is some recent evidence in Soviet military publications that the Russians may be moving in this direction - that they may be emphasizing direct fire suppression from successive over watch positions.

The third method is the concentration of large forces, in narrow zones, in specified formations, with follow-on echelons positioned and scheduled to pass through or around the leading assault waves should they lose momentum. This tactic relies on mass and Speed and saturation of the defense. It is the classic breakthrough tactic heretofore favored by Soviet doctrine.

The Impression gained from the conversations with Generals Balck and von Mellenthin is that the Russians in World War II favored the mass and Speed tactic, but also employed the other two when conditions required. Today we can probably expect a diversified mixture of all three.

General von Mellenthin had more to say about the Russian character and performance:

"He always attacks with massive superiority. Normally in doing so he follows a certain pattern. Often he was very skillful in making use of the terrain. He was a master in infiltration in forest conditions, in the villages and during night combat.

"He learned operations during the war and trained and educated the leadership without any respect for life during combat actions.

"His **reaction** to [terrifying developments] **was really unpredictable** It **can vary from courage to panic**.

"Meeting engagements confuse the Russian, disrupt his concept, and he will wait for new orders from above. He often simply stops and waits until some more forces arrive, or he just waits for new orders. The Russians are **strong**, but they are **immobile** - they are **rigid and bound to certain patterns**, and they are **thus more vulnerable** than we are. Especially on the lower command levels, we have the better individuals." 1/ p. 114.

There was another characteristic of the Russians that apparently made a deep impression on General Balck. He regarded them as **untrustworthy**, or perhaps **cunning** would be a better word, as well as **faithful to their cause**. Cited here is only one comment on this point, but there were many more:

"A division took up quarters near a wooded area. The evaluation of the commander was that there were 10,000 guerrillas in the forest, with an airfield and fortifications, and that we could expect an attack any hour. One guerrilla and his [girl friend] had come over to our side "he is keeping us up to date on everything." After two weeks [the Germans invaded that wooded area from three sides]. Results: a deserted air strip, no fortifications, at most 300 guerrillas, and all the rest had been propaganda. The [defector and his girl friend] had disappeared without trace. Any Russian that changes sides is suspect. Only once did I see a Russian that was really ready to change sides." 7/ p. 4

3. The Character and Style of the German Army

" We always felt superior toward the Russians we were not afraid of them....."
(General von Mellenthin) 2/ p. 23

Throughout the discussions it was clear that both the German generals considered the **individuality** of the German fighting man - his **freedom to take initiative** and the **system which engendered these policies and attitudes** - to be the key to superlative German performance.

Gen. DePuy: "...Were you successful in receiving from your company, platoon, and squad leaders the same **individualistic responses to situations, opportunities and initiatives** as you did at division, brigade and battalion?"

Gen. Balck: "Yes, and it is very important how that was achieved. Generally the German higher commander rarely or never reproached their subordinates unless they made a terrible blunder. They were fostering the individual's initiative. They left him **room for initiative**, and did **not reprimand him unless he did something very wrong**. This went down to the individual soldier, who **was praised for developing initiative**. Of course, there were exceptions, and there was sometimes trouble, but generally **independent action along the line of the general concept** was praised and was accepted as something good." 1/ p. 24

In this same vein the discussion turned early on, and returned often, to Auftragstaktik - the theory and practice and **training in the use of mission-type orders**, in order to amplify the

advantages which flow from the full **exploitation of the battlefield initiative** of the German officer and soldier.

Gen. DePuy: "The American Army in World War II talked a lot about mission-type Orders, which is our version of Auftragstaktik. One of the examples given to the American Army by German officers visiting our service schools in the 1930s was this: "The division commander ordered the cavalry commander to seize a Bridge over a river because the division was going to cross that river. When the cavalry commander got to the bridge there was an enemy tank regiment [there]. Question: what does the cavalry commander do? Auftragstaktik solution: report to the [division] commander by radio - look for other bridges, fords, boats - in other words, do what the next higher commander would do if he were there and knew the same situation. Is that a good explanation of Auftragstaktik?"

Gen. v. Mellenthin: "Exactly." 2/ p.78-79

The success of Auftragstaktik presumably rests, at least in part, on **knowledge by the subordinate of the higher commander's concept** of operations and objectives. In these circumstances the Subordinate can choose sensible courses of action which contribute to the desired outcome within the framework of the overall schema. Obviously there are two ways to achieve this **understanding**. One is to **explain it carefully**; the other is to **campaign together over such a long period that the "modus operandi" is second nature to all concerned**. **It is also a by-product of doctrine and training.**

Gen. DePuy: "...I would like to have General Balck tell me what [orders he would have issued] to that Panzer Division commander - in order to find out how much detail is required - how simple or extensive would that order be?"

Gen. Balck: "The order would be, and was, the following: 'The Russians are breaking through at point X - at a certain command you attack [at point Y]' - and that is what they did."1/ p.19

Further on the same subject:

Gen. DePuy: "[Coming back to the same point], how explicit, how complete, how detailed was the concept of the defense on the Chir River: was it standard operating procedure (SOP), or was it 'a detailed explanation of how [General Balck] intended to operate?'"

Gen, v. Mellenthin: - Wants General Balck to answer - 2/ ibid.

This is one example of the way General von Mellenthin habitually deferred to his commander: a **deference rooted in respect** - **respect for the system**, and **respect for the man**.

Gen. Balck: "It depended entirely on the subordinate. If he was a stupid fellow, you had to go into much detail explaining the situation to him; if he was an intelligent officer, a word was sufficient for him."1/ ibid.

Mr. Karber: " Did the Subordinate who was given a very short order, to attack such and such a unit at such and such coordinate -did he, before that, have a detailed concept of General Balck's Overall battle plan?"

Gen. Balck: "I can only answer that by saying yes, because word had gotten around that the Chir line was to be held. We lived off a **century-long tradition**, which is that **in a critical situation the subordinate with an understanding of the overall situation can act or react responsibly**. We always placed great emphasis on the independent action of the subordinates, even in peacetime training."2/ p.21

This led to several exchanges on the selection of **leaders and their training**:

Mr. Karber: "It has been said that on the Eastern front, in the German Army, it was the NCOs that held the fabric of the troops together. Do you feel that the NCOs had a much stronger position than you would estimate in today's armies?"

Gen. Balck: "Yes. When I was a peacetime commander, I made a point to see that nobody could become an NCO unless he had a half year of training. Later on, when I was commander of the fast, or motorized, unit, I developed the concept of having these NCO schools. I had an argument about this with our Chief of Staff (General Halder) who said: 'Oh no, two weeks will be enough!' Then there was a compromise. He said all right, 3 months - and I agreed, and then I extended it without saying anything to half a year The fact is if somebody knows his craft, if he knows what to do, then

you don't have to give him any commands, any orders. One of my successors [as regimental commander] told me after the Poland Campaign that [the regiment] had few losses among the officers because the NCOs were so well-trained that the officers did not have to be around everywhere. Another aspect is that there were very few incidents of mistreatment of subordinates, because an NCO had some knowledge. He did not have to go around mistreating his subordinates, he can convince them by his mind -not by force."

Mr. Dunnigan: "How did you select NCO candidates, and what did you teach them in those six months?"

Gen. Balck: "The company commander selected them. He said, 'Oh, well, this private might be fit to become an NCO.' Then we tested them and anyone who flunked - they were out I tried to train them to teach the recruits in a sensible way - to make them understand: not just dumb drill or something like that, but by giving them something to think. Any education has to be carried [out] by respect for the human being, and by respect for the individual's own free will. That is not always easy, but that is the only thing that gets you somewhere."1/ pp.24-25

Mr. Dunnigan: "...Do you have any other advice for the training system that a Corps commander should use?"

Gen. Balck: "It is extremely important for the NCO training units not to be employed under any circumstances. It happened so often in combat operations that there were losses and these valuable units were senselessly sacrificed." 2/ p.66

Obviously General Balck as Corps commander did not receive enough replacement NCOs from the training base in Germany. This is an endemic problem in all armies in peace and war. His message seems to be that you must select and train these key leaders even when their temporary absence hurts - and their training must not be interrupted, regardless of the emergency. In short, one must not eat the seed corn.

The selection of good combat leaders in peacetime poses a problem, as far as General Balck is concerned.

Mr. Karber: . Have you noticed any characteristics in soldiers, especially your leaders, that you observed in peacetime, which comes through as a competent wartime leader?"

Gen. Balck: "I can only answer that by saying no. It is just by accident if you can observe that in peacetime." 1/ p.71

Again on the same subject:

Gen. Balck: "You will experience in any war that there will be a total reversal. Those people who were considered very good people in peacetime often would be lousy in war, and those who were doing very poorly in peacetime can suddenly become excellent." 2/ p.69

On the last day of the discussion, when a large number of interested observers attended that session, it became apparent that invidious comparisons were being drawn between the German and U. S. Armies, to the effect that the German leaders were uniformly superior in battlefield tactics. The patent excellence and superb performance of Generals Balck and von Mellenthin at the discussion led the audience easily in that direction. In this connection, a graphic and important German term is **Fingerspitzengefuehl**. Translated literally, it means "fingertip-feeling." The idea it conveys, however, is that of an **instinctive sixth sense for terrain and tactics** - a masterful touch in the art of war.

Gen. DePuy: "Out of every one hundred German generals, [how many] had Fingerspitzengefuehl?"

Gen. Balck: "Three or four, but they were unrecognized." 1/ p.147

Nevertheless, the character and style of the German Army were powerful forces at work on the battlefield. **Performance is the final measure of effectiveness**. The performance of the German Army was consistently higher than its adversaries. Even in the last years of the war, the numerical superiority of the Allies and their overwhelming advantage in materiel was often frustrated by the tactical and technical competence of the German forces. General von Mellenthin in his summary statement touched on factors which contributed to that relative superiority in battlefield performance:

Gen. v. Mellenthin: "We found that **leaders at any level grow with their experience**. [Their] initiative should be fostered in the case of a division commander just as much as in the case of a platoon commander...

"Commanders and subordinates start to understand each other during war. **The better they know each other, the shorter and less detailed the orders can be. To follow a command or an order requires that it is also thought through on the level from which the order was given.** The following-through of an order requires that the person to whom it was given **thinks at least one level above the one at which that order was given.** For example, an order for a tank battalion requires thinking also on the level of the brigade. The mission requires one to be able to think, or to penetrate by thought, the functions of higher command. "Auftragstaktik is not limited to any levels. It applies to the division commander and his chief of staff just as much as to the tank commander and his gunner. "Our training system and the German mentality are favourable to this historic principle." 2/ pp.113-114

There are no doubt other reasons for German successes on the field of battle, including their meticulous **attention to detail**, their **manifest courage** and **steadfastness in the face of difficulties**, and their strong **initiative and perseverance**. We will now turn to the application of these skills and characteristics to the conduct of defensive operations.

4. Defensive Doctrine and Tactics

Over the past six or seven years, a lively and important new debate has arisen over the proper tactics for the defense of Western Europe by NATO land forces.

The U. S. Army, turning from its long war in Vietnam against a lightly armed and elusive enemy to a heavily armed and numerically superior Warsaw Pact force, proposed an "active defense". This defensive concept, involving a variety of tactics, counts upon superior intelligence, high mobility, rapid concentration, elasticity in the face of breakthrough attacks, and carefully executed counterattacks.

Certain critics have argued that such a defensive concept relies too much on attrition, does not fully exploit the mobility of modern armoured forces, and - perhaps most importantly - does not take advantage of the presumably less flexible Soviet mentality and control procedures.

Others simply recommend that NATO adapt the tactics used so successfully by the German Army in Russia. It is for this reason, above all others, that the meetings with Generals Balck and von Mellenthin are of such current interest.

There are two major differences between the situation in NATO in 1980 and the combat environment in Russia in 1942 and 1943. The first is space. The German Army had room to maneuver. For example, von Manstein's counterstroke at Kharkov carried the equivalent distance from Frankfurt to Hanover. The Russian sweep around his left flank after Stalingrad carried more than the distance from the East German border through Germany, Holland and Belgium.

The second major difference is the composition of the defending forces. A U. S. or German armored division disposes of about 300 main battle tanks. General Balck's 11th Panzer Division more often than not contained about 25. Additionally, all NATO infantry in the Central Region is fully mechanized. In Russia, almost all German infantry was an foot.

Against this background, discussion of defense tactics took place throughout the four sessions but particularly on Tuesday, 20 May. On the morning of that day, Generals Balck and von Mellenthin gave a visual and descriptive explanation of their concepts for the defense in the sector of U. S. 3rd Armoured Division, through the use of a simulation technique developed at BDM. With the visual assistance of that simulation technique, the German generals deployed 3rd Armoured Division's units in the defense in accordance with their judgment and experience fighting Russians. Participating with them, as the principal observer, was General Glenn Otis, Deputy Chief of Staff for Operations and Plans in the U. S. Army. Just two years ago General Otis had commanded U. S. 1st Armoured Division in VII Corps, and not too many years before that he was a brigade commander in 3rd Armoured Division. His interaction with the German generals focused on the question of the applicability of the tactics and techniques they had developed on the Eastern Front in World War II to the situation facing NATO on its central front today.

The Simulation Process

The BDM simulation technique utilized Department of Defense maps at the 1:50,000 scale covering the area guarded by the U. S. Vth Corps. Acetate was overlaid on the maps, allowing

unit boundaries and obstacles to be marked directly on the maps. The units themselves were battalion-sized formations representing all of the maneuver and fire support units within the U. S. Vth Corps and the USSR 1st Guards Tank Army. Unit markers were made of 1:285 scale armor, mechanized infantry, and self-propelled artillery vehicles mounted on stands and colour-coded to denote type (red for artillery, yellow for armor, banded yellow for cavalry, and blue for mechanized infantry). Additionally, range fans were available to quickly reference the capability of the various weapon systems. Upon placing the units in their initial position, discussions were held as to the underlying tactical concepts and to the visualization of the players about how the action might proceed. The battlefields were examined in three phases: covering force, main battle area, and the first major counterattack. During each phase of the battle, factors such as **doctrine, terrain, and force relationships** were considered in connection with probable **battle outcomes**. Discussions were held with respect to each phase. Concepts were explained, expected outcomes were forecast, and major considerations dealt with. From this exercise a transcript plus photographs of unit positions were made.

The German Solution

Generals Balck and von Mellenthin were first briefed on the size and composition of the 3rd Armoured Division, its sector, and its mission. They were pleasantly surprised to find that the division had 11 maneuver battalions (6 tank, 5 mechanized infantry), 1 cavalry squadron, 4 divisional and 4 corps artillery battalions (all 155mm or larger, and self-propelled), plus 2 companies of attack helicopters. They were very nearly astounded to find that they disposed of 325 main battle tanks.

The sector of 3rd Armoured Division was in the general area of Hunfeld - Lauterbach - Bad Hersfeld. The Kassel-Frankfurt Autobahn ran through its left sector in a south-westerly direction. Fulda was just outside its southern boundary.

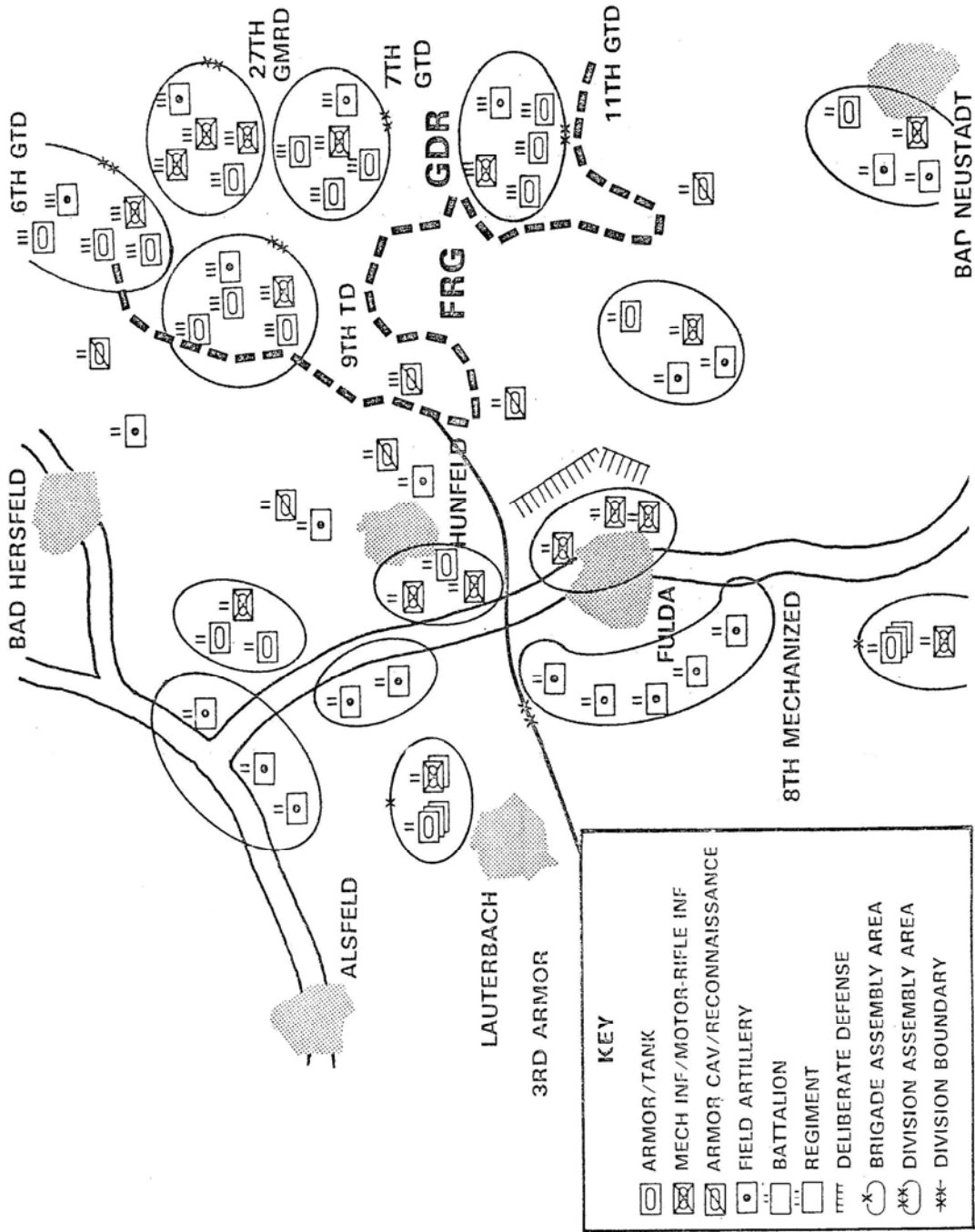
The mission of the division was to defend forward. It was explained to the generals that U. S. policy was to fight a stout covering force battle to slow and define the enemy's main thrust, and then to fight the main battle as far forward as possible - thus doing their best to keep Soviet forces out of the West German political and industrial heartland.

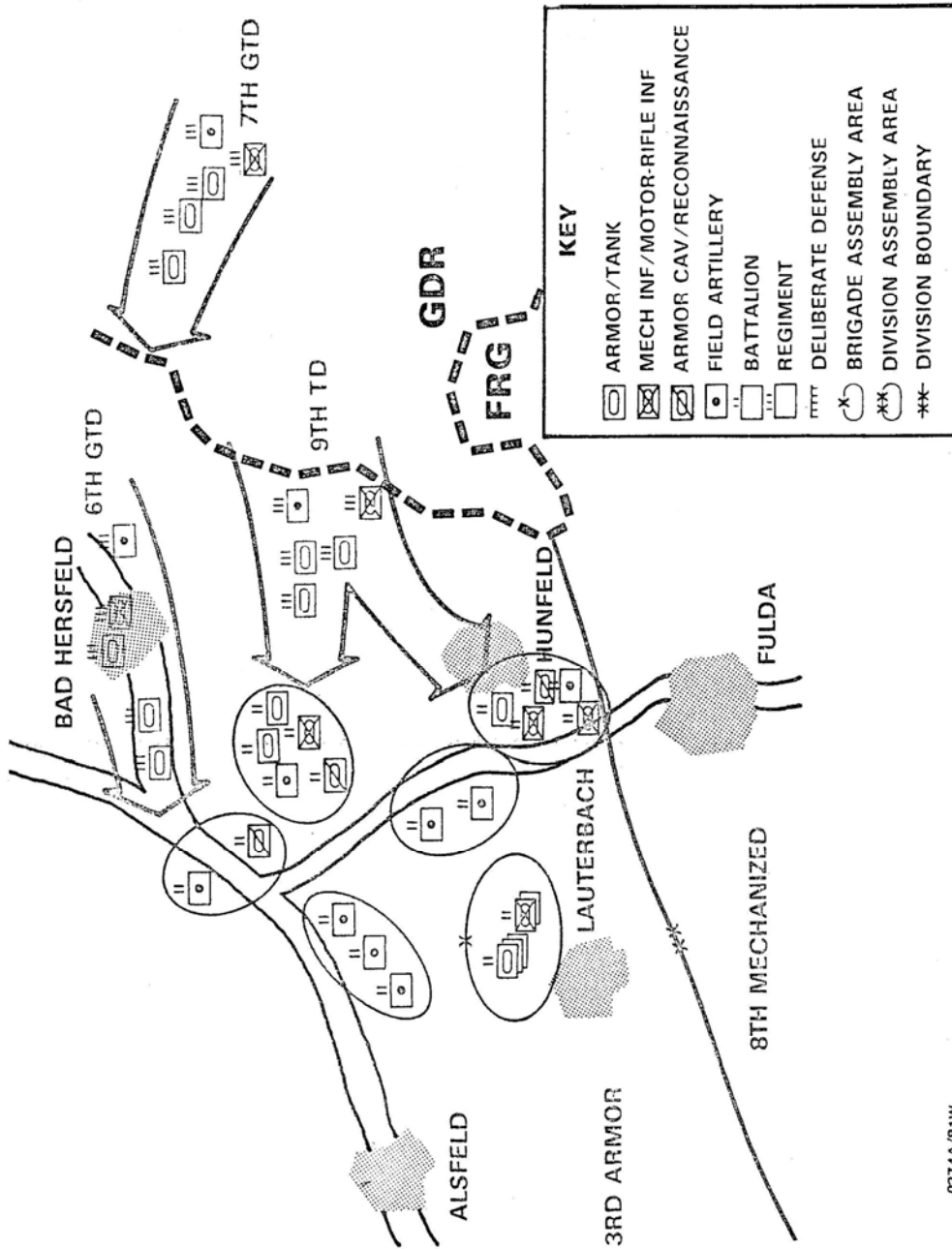
Generals Balck and von Mellenthin accepted the challenge and conferred privately over the map. General von Mellenthin, at one point, turned to the American participants to announce that they would not take long. He observed that in Russia they normally had about 5 minutes to make such decisions.

In a very short time they arrayed their forces and expressed their willingness to explain their concept.

There is an almost irresistible temptation to put words in their mouths in the course of explaining their proposal. But in fact it was short, crisp, and simple. Their concept was the following:

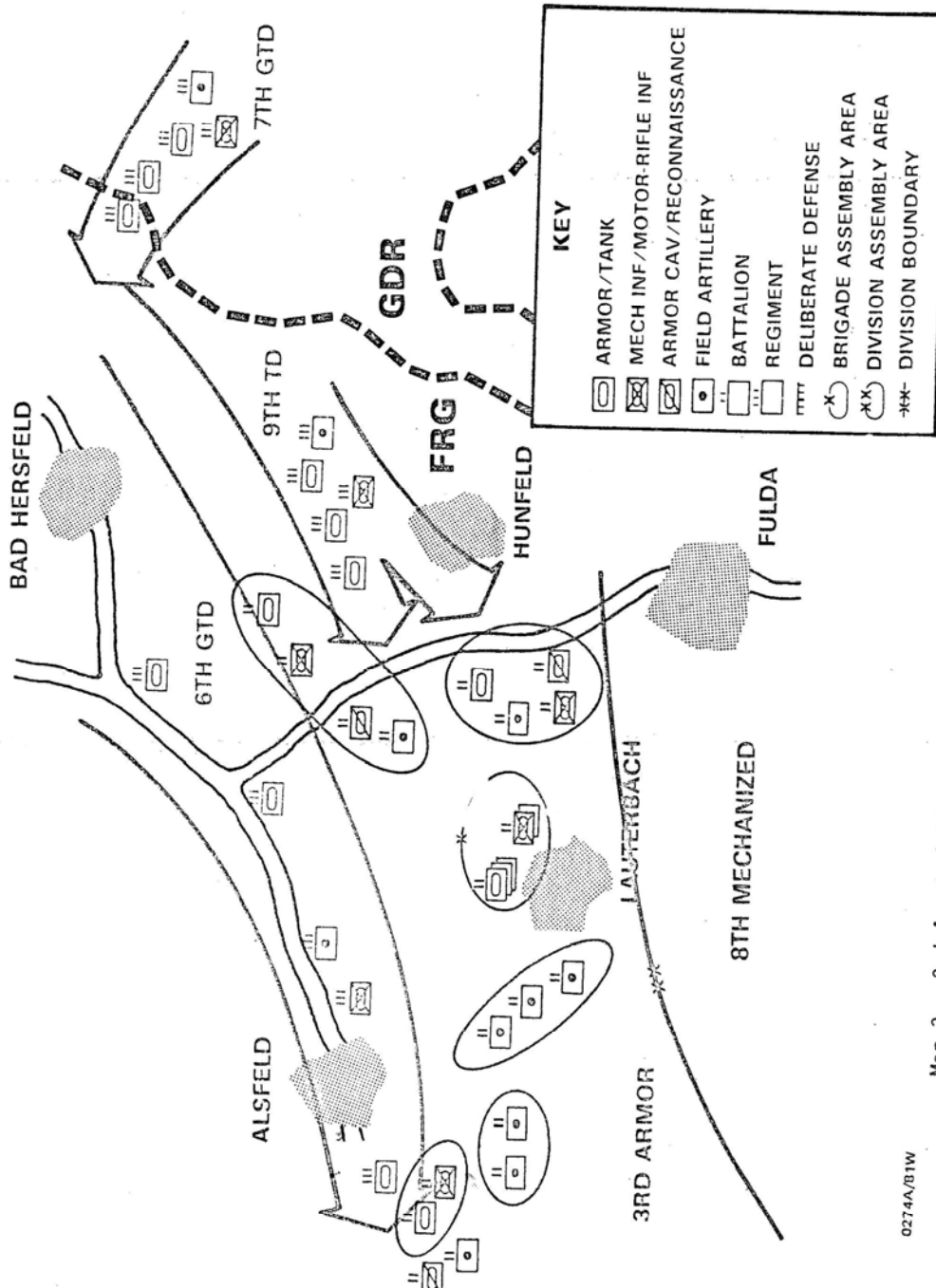
- Three cavalry squadrons would conduct the covering force battle from the border to the main battle position.
- Two brigades of 3 battalions each would defend the southern 3/4 of the division zone. They would be heavily supported by artillery, tactical air, and attack helicopters. Their mission was to hold.
- The leftmost sector would be left open, thus enticing the Soviets to move a division down the Autobahn toward Alsfeld and Giessen. The opening defensive dispositions are shown on map # 1.
- They expected that the apparent success of the lead tank division would cause the Russians to send a second division along the same axis to reinforce the breakthrough.
- The Soviet penetration is shown on maps # 2 and 3.
- A strong brigade of 5 battalions would be positioned just north of Lauterbach, to attack into the flank of the Soviet force proceeding down the Autobahn and to destroy it.
- When the Soviet penetration passed beyond Alsfeld, the counterattack would be launched into the rear of the leading division and the van of the following division (see map # 4).
- The German generals pointed out that their scheme would require very strong nerves on the part of the V Corps commander (not to mention the nerves of the commanders of the German corps and division just to the north). General von Mellenthin made the associated point that this kind of operation could not be undertaken by a division commander alone. Rather, it must take place within the concept of the corps commander.





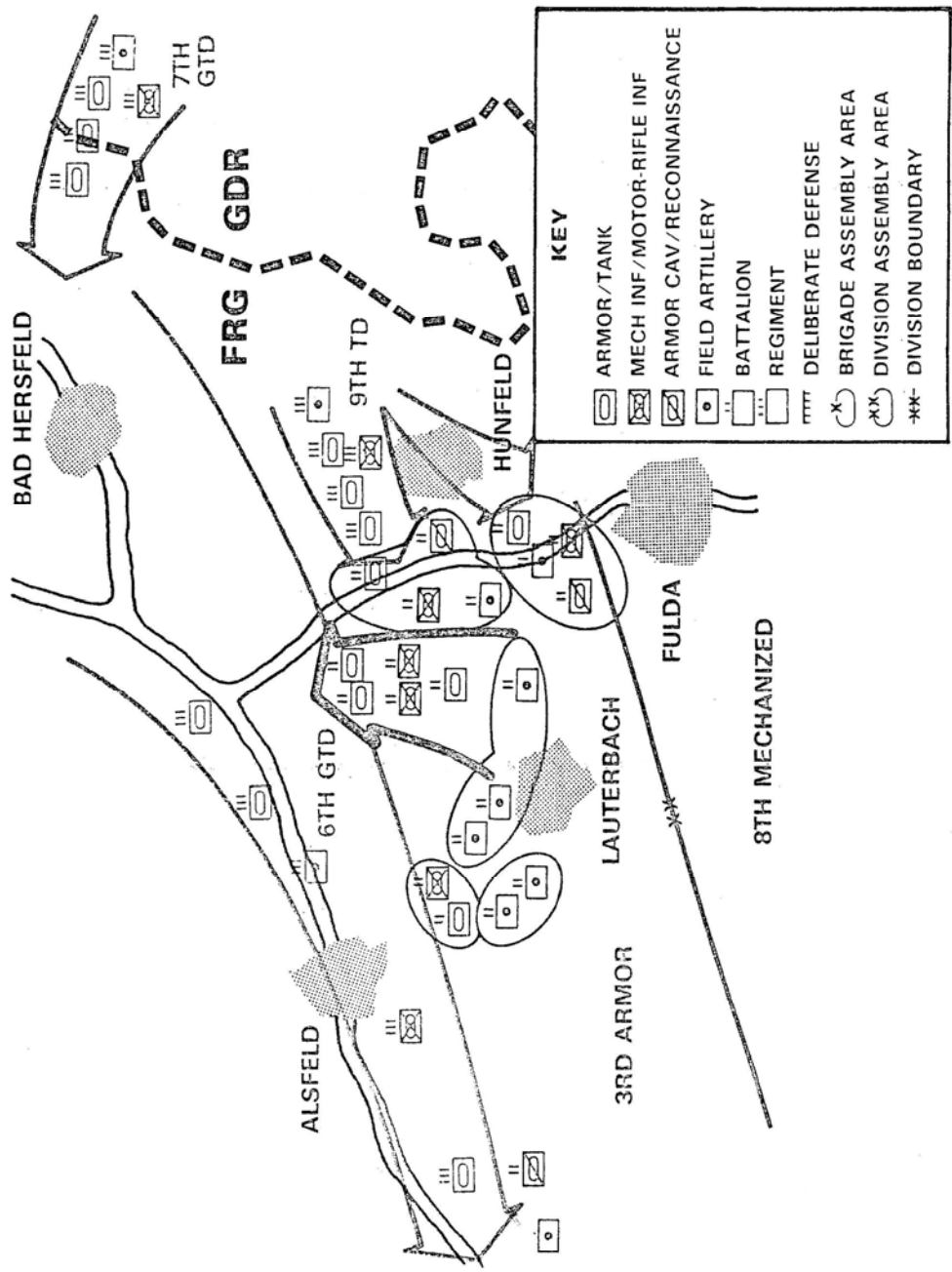
Map 2. 3rd Armored Division Sector: The Covering Force Battle

0274A/B1W



0274A/81W

Map 3. 3rd Armored Division Sector: Soviet Penetration is Drawn into the Main Battle Area



0274A/81W Map 4. 3rd Armored Division Sector: The Counterattack is Launched

The first set of questions by General Otis and the other American participants dealt with the advisability of turning a Soviet tank division loose in the army rear area and deep into the heavily populated areas north of Frankfurt. To this the generals replied at first that the farther the enemy goes, the greater the opportunity for his destruction.

However, after further discussions, the generals thought that the realities might require them to place a force on the Autobahn to limit and slow the penetration. To do this, they withdrew two battalions from the holding brigades on the centre and right and placed them astride the Autobahn near Alsfeld as shown on map # 3. It is instructive that they did not weaken the counterattack force, but **accepted** instead an even **greater risk** in the "economy of force" area.

It was very clear that this step was taken with regret. Obviously they preferred to let the Soviets go on and to deal with them as they had done so often and so successfully in Russia. Their frustration in the face of this dilemma mirrors that of NATO commanders today. However, General Balck made a revealing comment later regarding the political and **humanitarian dimensions of this tactical problem**: "We were very much hampered towards the end of the war in our mobility, because we could not let the Russians get into areas that were settled by Germans." 1/ p.102

General Otis, who had lived on that terrain, was also concerned about the ability of the two weak brigades to hold or even to cover 20 kilometres of ground. General Balck countered by saying that he would rely heavily on artillery in this sector.

The **boldness** - indeed the audacity - of their plan might be regarded as irresponsible, had it been proposed by other parties. But their willingness to open up the battle was rooted in their highly successful experiences and cannot be dismissed. Presumably they had learned that the big pay-offs came under conditions in which they - not the Russians - shaped the battlefield and retained the initiative. They must also have believed that nothing less than big pay-offs could solve the problem with which they were faced. Additionally, it became clear throughout all of the discussions that Russian forces were least effective when hit from an unexpected direction - that they were slow to adapt and were often paralyzed in such circumstances.

Implicit in all this is the assumption that a purely defensive battle would lead either to a grinding or catastrophic defeat. Suffice it to say that the "German Solution" provides ample food for thought.

We will return to the theory and practice of the defense after reviewing "The U. S. Solution".

The U. S. Solution

On Tuesday afternoon Lieutenant General Paul Gorman, J-5 JCS and former commander of U.S. 8th Mechanized Division, deployed his division in the southern sector of V Corps, using the map board and BDM simulation technique.

General Gorman carefully and extensively explained his concept and specific deployment to Generals Balck and von Mellenthin along the following lines:

- The terrain in the sector is characterized by the high forested hills of the Hohe Rhoen in the south, and the flatter but rolling approaches to Fulda in the north. An enemy armoured advance in the south would be canalized into the deep valleys. In the north there is room to maneuver.
- General Gorman thought that his sector might be ignored completely and the main attack concentrate against 3rd Armoured Division in the north, or that any attack in his sector would fall in the area around Fulda.
- His concept was to hold on the right and let the enemy into a pocket in front of Fulda and destroy him there by a counterattack from the south.
- The covering force battle would be fought in such a manner as to delay, but also to channel the enemy attack into the Fulda pocket.
- A brigade of 3 mechanized infantry battalions would block the enemy advance by conducting a deliberate defense on the eastern verge of Fulda (see map # 1).
- The center and right brigades of 2 battalions each plus artillery support would conduct an "active defense" in the rugged terrain of the Hohe Rhoen. While giving a little ground grudgingly they would, nonetheless, be expected to prevent any significant forward movement in this "economy of force" area (map # 5).
- A large brigade comprised of 3 tank and 1 mechanized battalions would be positioned

in mobile reserve south of Fulda, prepared to counterattack on order against the southern flank of the penetration as soon as its forward movement was blocked by the brigade near Fulda (map # 6).

- If this counterattack was highly successful, or if the enemy did not move into the Fulda pocket in force, the counterattack force would be committed in the Alsfeld area, giving aid to 3rd Armoured Division in whose sector he felt the main attack would fall (see maps # 7 and 8).

Generals Balck and von Mellenthin said that General Gorman's plan was ' excellent. It coincided with their general concept on how to fight Russians. General Balck told General Gorman that they were "brothers under the skin". A discussion of General Gorman's solution then ensued, of which the following were highlights:

Gen. Balck: "It will be necessary to instruct the forward line either to destroy or prepare for destruction every single bridge, even the smaller ones. Minefields should be laid [consisting] of 1000 live mines and maybe 5000 dummies possibly only dummies. mine dummies can be just as effective as a live mine, maybe even more effective..... Also you have the advantage that you can use everybody for these mine emplacements, even women, they can do it just as well."1/ p.41

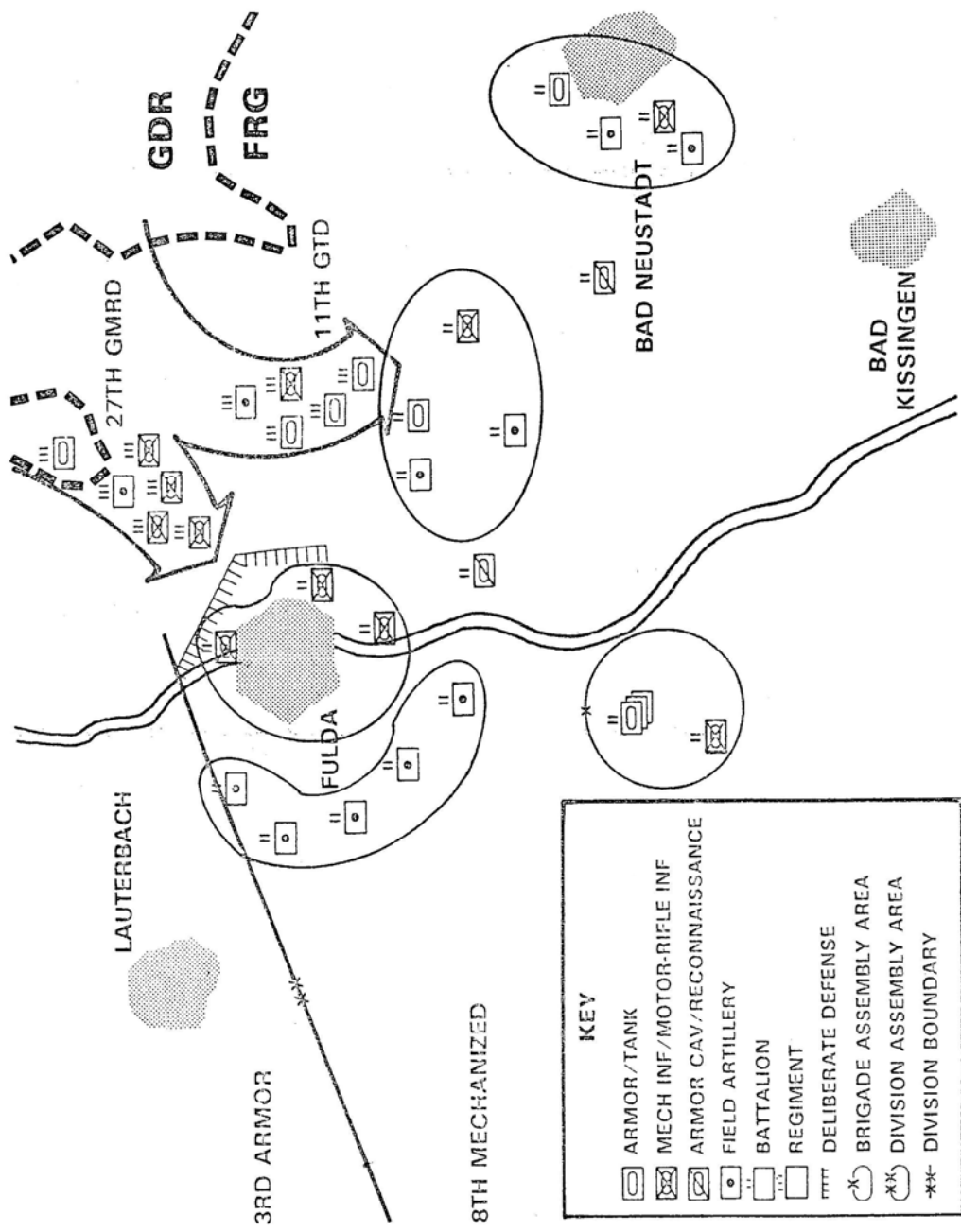
Then the German generals suggested that General Gorman might have considered holding back even one more battalion in reserve. This led to a discussion of the role of the corps commander.

Gen. v, Mellenthin: " The corps commander should concentrate the division reserves into one counterattack, to destroy one enemy and then the next one."1/ p.42

In addressing himself to General Gorman's deliberate defense before Fulda:

Gen. Balck: "One interesting question. How are the Russians going to react [to the] use and application of engineer techniques and of obstacles [which] deny him penetration? How would the Russians react? They probably, in my opinion, would leave all their technology behind and advance with their infantry."

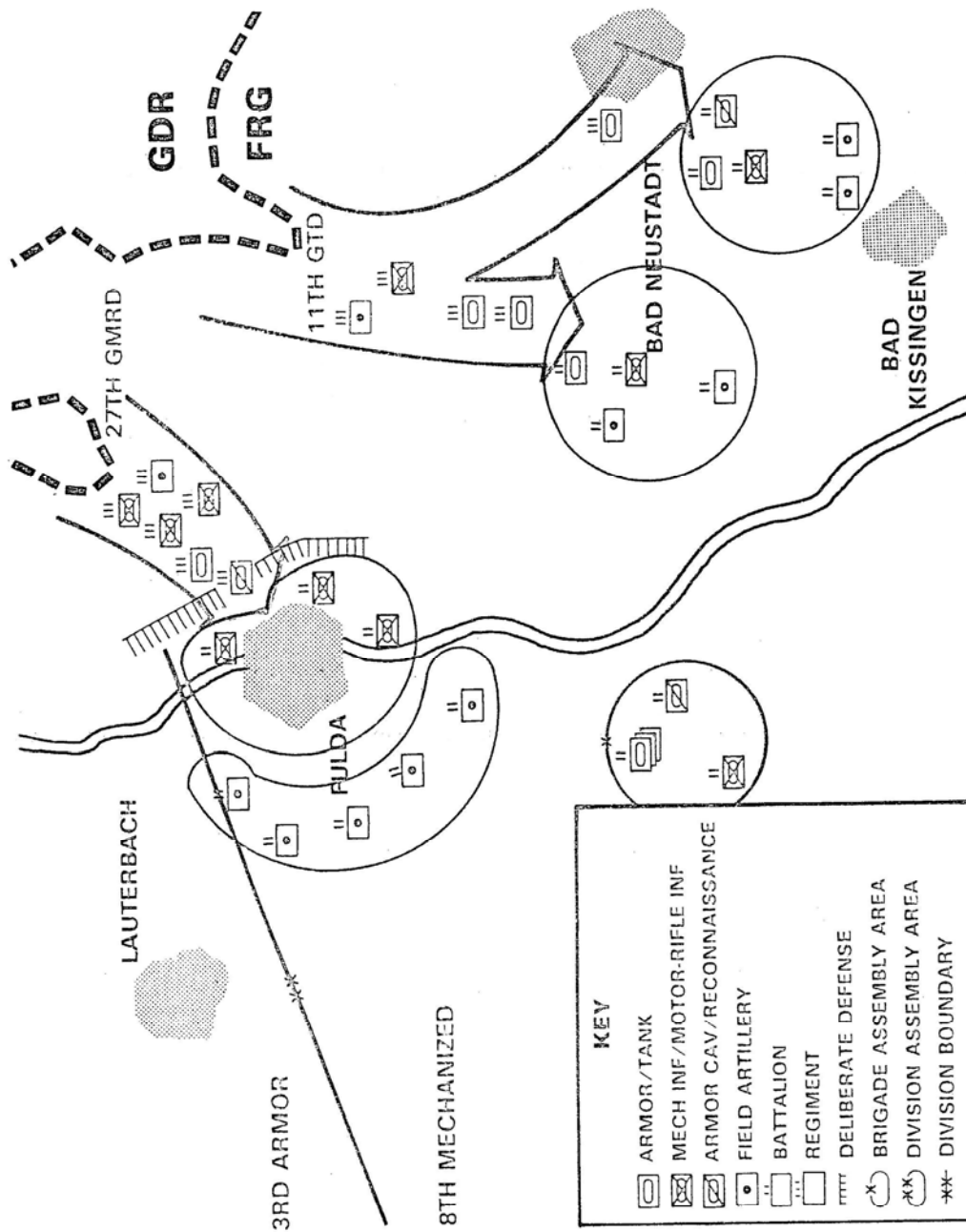
Gen. Gorman: "If they do so, then the artillery would have a field day."2/ p.43



KEY

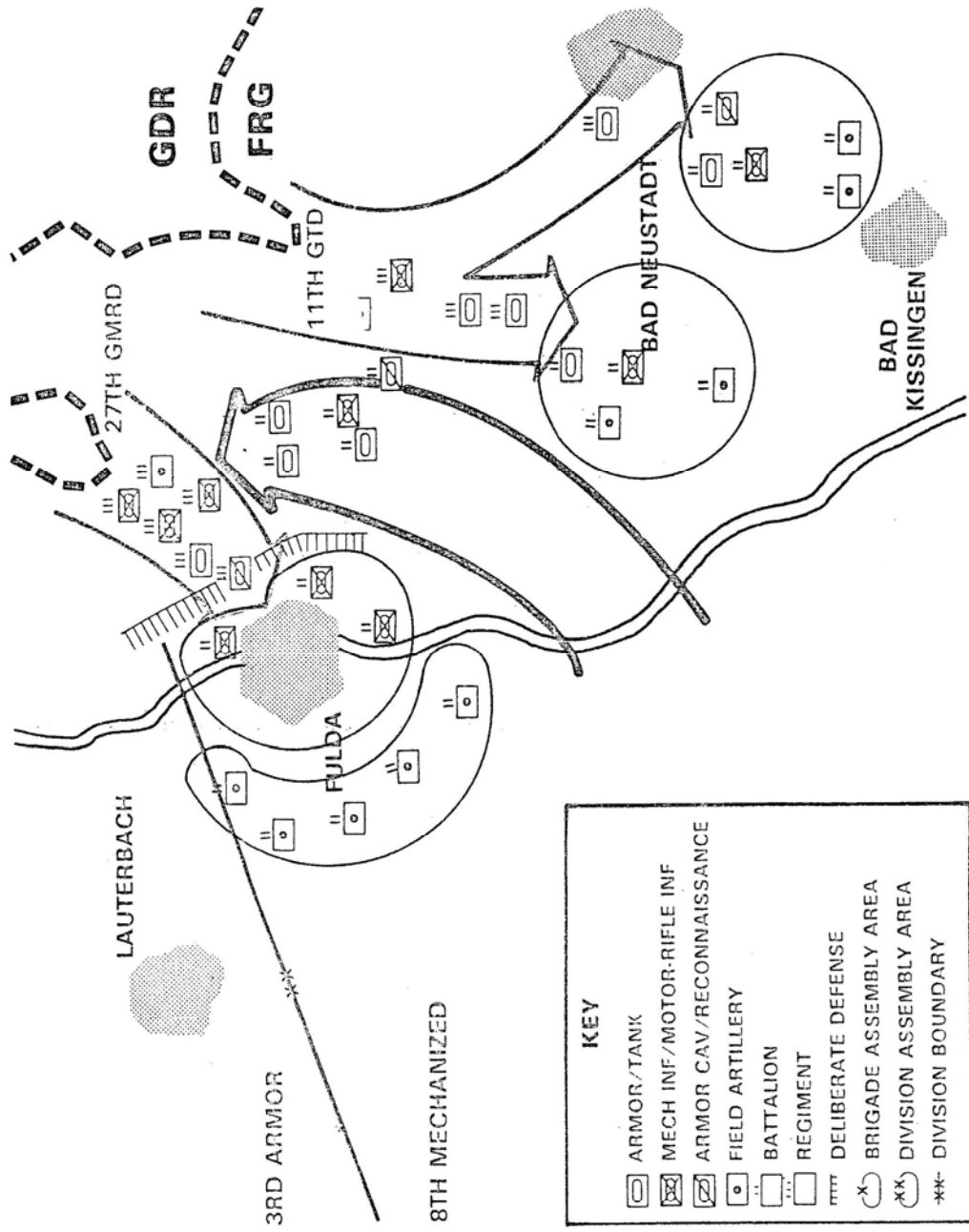
	ARMOR/TANK
	MECH INF/MOTOR-RIFLE INF
	ARMOR CAV/RECONNAISSANCE
	FIELD ARTILLERY
	BATTALION
	REGIMENT
	DELIBERATE DEFENSE
	BRIGADE ASSEMBLY AREA
	DIVISION ASSEMBLY AREA
	DIVISION BOUNDARY

0274A/81W
 Map 5. 8th Mechanized Division Sector: Covering Force Battle



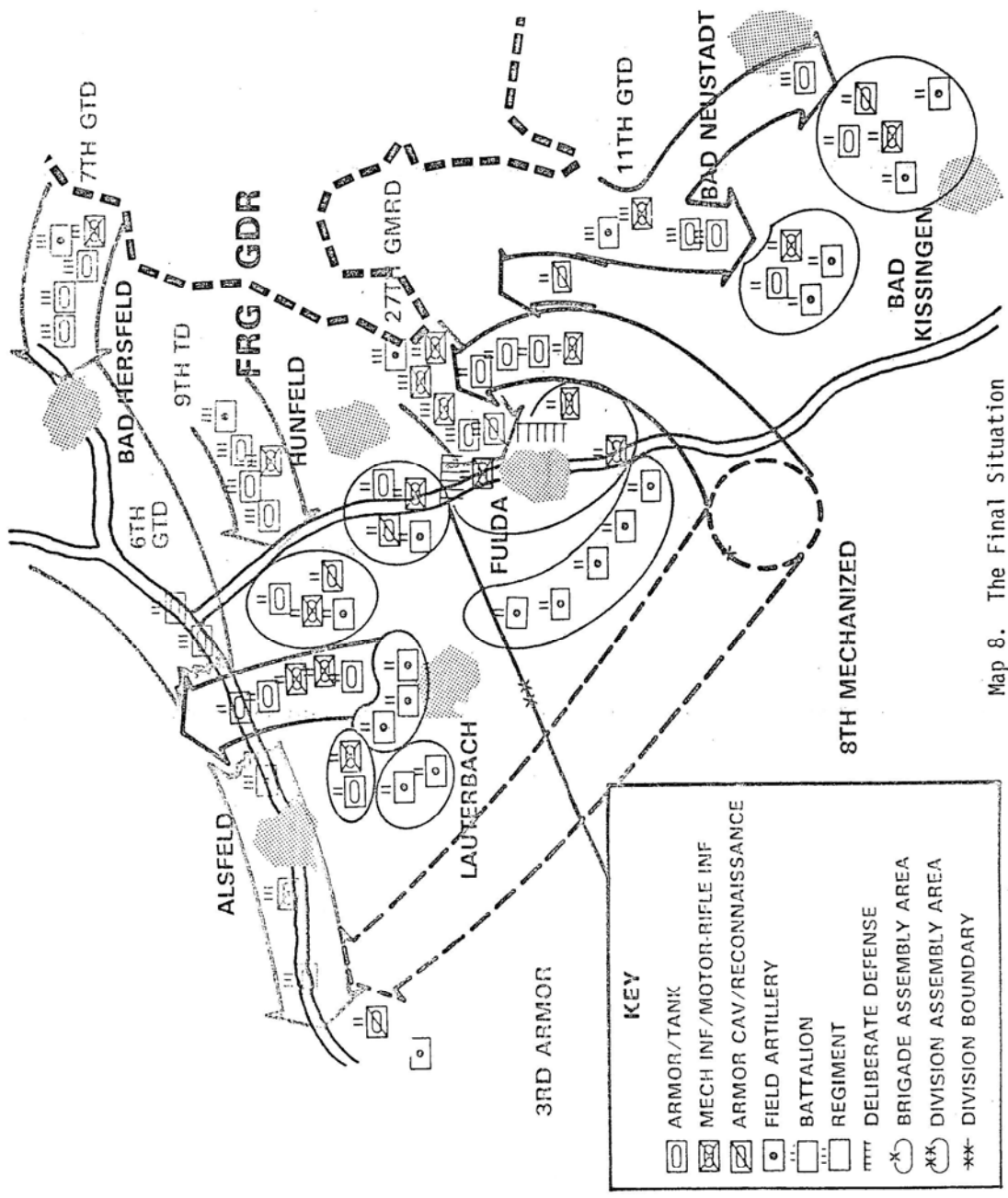
Map 6. 8th Mechanized Division Sector: Main Battle Positions

0274A/01W



Map 7. 8th Mechanized Division Sector: The Counterattack Phase

0274A/01W



Map 8. The Final Situation

0274A/01W

Gen. DePuy: "If the battle is going to be fought the way you and General Gorman propose to fight it, the problem of contact on the flanks is compounded. One solution - the classic rule - is to maintain contact from left to right. The other solution is that the corps commander will assign that mission to his cavalry so that his divisions can concentrate. What thoughts do you have on that?"

Gen. v. Mellenthin: "Now, I agree with your second point. The corps commander is responsible to see the situation - leave it under the leadership of the corps, which has available the reconnaissance [cavalry] units."3/ p.45

The similarity between the two concepts - the German and American - was remarkable. In both cases, the larger part of the sector was held by the smallest part of the force. In both cases, the enemy was "invited in" to a selected avenue or pocket. In both cases, a large reserve was held out for a decisive counterattack. The principal (and only significant) difference lay in the fact that the German generals wished to let the Russians go on - the farther the better - while General Gorman planned to stop them cold in front of Fulda. After more discussion, the German generals reluctantly placed a small blocking force on the Autobahn in deference to the political and humanitarian realities.

The question was raised as to whether General Gorman was conducting an "active defense". He said he was. He went on to say that "active defense" did not require a commander to do anything contrived, that a number of tactical solutions were to be combined - that the brigades on the right were conducting an elastic defense - the brigade on the left a deliberate defense - and the heavy brigade counterattacking to destroy the enemy in accordance with the best tactical practice.

As one of the principal architects of current U. S. Army doctrine, General Gorman's tactical solution was instructive. He did not give ground unnecessarily, but relied on elasticity to maintain the coherence of his defense. He retained the initiative, and his goal was to destroy the attacker. He was **flexible and imaginative.**

The "active defense" is sometimes misunderstood as a simple and continuous delay. In the hands of a Gorman - clearly endowed with Finquerspitzengefuehl - it comprehends a wide diversity of tactical options and takes full advantage of the characteristics of the enemy and the terrain.

The bolder approach favored by the German generals must be a judgment call. In the hands of average commanders it would probably be a disaster. In the hands of a Balck, working with a von Mellenthin, it is an option with distinguished historical precedent.

Before turning to a wider discussion of tactics and techniques, the following is a statement made by General von Mellenthin which summarizes the essence of his and General Balck's defensive concept:

"The constant numerical superiority of the Russian led us to decide against rigid defense in Russia. We favored small forces along the front lines, and we concentrated the tanks far back for counterattacks to the flank and to the rear. Even today we think that rigid defense is dangerous. Mobile defense, which unexpectedly confronts the Russian constantly with new situations, confuses him and disrupts his concept."1/
p.114 L

5. Tactics and Techniques in General

Throughout the four-day conference, discussions ranged over a wide number of tactical questions in some detail. These have been assembled under this heading regardless of the actual sequence in which they occurred.

Very early in the conference General Balck explained a concept for the defense, or perhaps more accurately for the delay, which included, some important technical points.

Gen. Balck: "During my time as a division commander, I thought that our

different tactics of concentrating on fixed lines to be held, during the First World War, was wrong. I developed a different defense method successfully:

- a. I built up a line according to the old method, but only for deception. The armoured infantry regiments and the engineers were deployed in order to demonstrate some activity.
- b. About 50 km away from this line, the armoured regiment, [antitank elements], and [remaining armoured infantry] would attack the advancing Russian

troops and destroy[them].-1/ p.114 L

- c. [We would then] withdraw to the last line, [presumably a rearward line]. Here, usually, the enemy did not have sufficient forces any longer to act energetically. "1/ p.75

Here, again, the impact of space on tactics is readily apparent. On the largely uninhabited steppes of Russia, 50 kilometers was a trivial distance. However, just two or three such steps backward in Western Europe would signal the end of the war.

During the defense of the Chir River line in Russia, during and just after the failure to relieve Stalingrad, the XLVIII Panzer Corps employed one weak infantry division and a Luftwaffe field division on the front, with General Balck's 11th Panzer Division in reserve for counterattack. Over a period of many weeks, this one Panzer Division mounted dozens of crucial counterattacks. Each time, the line of the Chir was restored. In the course of these operations the Russian 5th Tank Army was destroyed, and the German Position west and south of Stalingrad was saved from catastrophic defeat. The discussion turned to the details of this campaign:

Gen. DePuy: "... what weapons did [the armoured infantry regiment] have to stop the Russian armoured attack?"

Gen. Balck: "I put all available antitank weapons at the disposal of the regiment."

Gen. v. Mellenthin: "Antitank weapons did not belong to the regiment, they were at the disposal of the division."2/ pp81-82

Gen. DePuy: "What Orders did General Balck issue to the commander of the 15th Panzer regiment in this particular case where the infantry stopped the attack? What were the orders?"

Gen. v. Mellenthin: " 'Forward.' One column was attacked and destroyed from the rear, then our tanks turned and attacked the other Russian column while it came over the rise and every tank showed its belly With 24 of our own tanks, we destroyed 72 Russian tanks without losing even one single man."

Mr. Dunnigan: "Was that because when you attacked the Russians, they were not facing you, and they were then incapable of resisting the surprise that you gained?"

Gen. Balck: "Naturally."1/ pp.86-87

A recurring theme had to do with the combined arms team, and more specifically with the tactical employment of armoured infantry. Generally, it appears that the German Army, in World War II and even today, sees the infantry as a more static or deliberate-defending force: holding a line shaping the battlefield - maintaining coherence - providing a framework within which the mobile tank formations, usually held in reserve, carry out the counterattacks as the principal agent for the destruction of the attacking enemy. This leads to a situation in which the coordination of tanks with infantry is effected at the level of the brigade or division.

The American concept is not unlike that of the Germans, with one important exception. The American Army habitually cross-attaches its tank and mechanized battalions so that in almost all cases the mechanized battalions will have at least one tank company and the tank battalions will have one mechanized infantry company. This practice (not unheard of in the German Army as well) stems from the fact that battalions on the NATO line have wide frontages, and often conduct their battles independently in separate terrain compartments. This means that in the American Army the coordination of tanks with infantry is at the battalion level.

The German Army today prefers to coordinate tanks with infantry at the Brigade level.

In General Balck's 11th Panzer Division the coordination was apparently often at division level:

Gen. DePuy: "... on the Chir you blocked [the Russian breakthrough] with a Panzer Grenadier Regiment and attacked into the [flank of] the Russian armor with Panzers. Was the other Panzer Grenadier Regiment then used against the enemy infantry [accompanying the Russian tanks] - did it look anything like that?"

Gen. v. Mellenthin: " General Balck and I consulted, and we concentrated both [Panzer Grenadier Regiments] to stop the tanks, and [our] tanks [alone] attacked into the flank."

Gen. DePuy: "Were there other occasions in which the Panzer Grenadier Regiment attacked in a coordinated way with the tanks?"

Gen. v. Mellenthin: "Usually General Balck preferred it if the units separated, the tanks from the infantry; but you are in a fortunate Position today because you have infantry which is mounted and has everything themselves"

Mr. Sprey: "General, is there maybe anything in your memory where Panzers and Panzer Grenadiers attacked combined simply because of the terrain?"

Gen. Balck: "There were occasions, but I tried to avoid it because if you combine two units, the result is so much disorder, and later an you have to separate them again and that will be difficult."

(Unidentified): "You did not run into situations where your Panzers needed infantry to protect them from enemy infantry?"

Gen. Balck: "No." 1/ p.86-87

This entire exchange was somewhat surprising except for General von Mellenthin's recognition that the Situation may be different if the infantry is also armoured and equally mobile in tracked vehicles especially tracked vehicles armed with automatic cannon and ATGMs.

It is generally accepted in all of the modern armies (including the Soviet) that the mechanized infantry will protect the tanks by preceding them into towns and forests in the attack or counterattack, and by clearing strong points or enemy dismounted positions which block or threaten the movement of the armoured force.

We can only take General Balck's strong position at face value. He did not want to mix tanks and infantry below his level. But we must remember that his division consisted of less than one full battalion of tanks. His Panzer Grenadier regiments were merely small battalions. Thus in effect we saw the tactical integration of tanks with infantry at the Brigade level - almost to battalion level - but with a very remarkable commander in charge.

Another aspect of defensive operations to which attention was drawn had to do with antitank weapons in their tactical relationship to infantry and tanks. This Subject is of current importance because of the advent of the antitank guided missile (ATGM).

Gen. DePuy: "In the desert you had the 88mm and 76mm antitank guns. What techniques did you use, in coordinating the employment of the antitank weapons with the maneuver of the tanks, that would be similar to what we are trying to do with the ATGM?"

Gen. v. Mellenthin: "In Africa we deployed the antitank 88 in the front to block the approach of the enemy, and attacked the enemy with tanks separately from the flank and rear."

Gen. DePuy: "Did the tanks normally wait for the British armoured force to be disorganized by the effect of the antitank weapons before the counterattack?"

Gen. v. Mellenthin: "We left them time to kill the attacking tanks in the front line of the 88s. Afterward came the surprise attack of tanks."

Gen. Gorman: "How far off would the 88s engage, assuming that they could see."

Gen. v. Mellenthin: "You know, in the desert you have an enormous view, and therefore I would say he Gould successfully destroy tanks at a distance of 2000-3000 meters."

Gen. DePuy: "What, was the range at which you Gould destroy a T-34 tank with a [German] Mark IV?"

Gen v. Mellenthin: "1500-2000 meters [but] very often we killed them at only 200-300 meters distances."

Gen. DePuy: "[In the counterattack], I wondered whether you stopped so you Gould fire [accurately] and destroy [the Russian tanks] before you closed [with them]?"

Gen. v. Mellenthin: "Yes, quite definitely." 1/ pp.B1-53

This last point is important. Many officers visualize a counter attack as a cavalry charge. However, in almost all seasoned armies the counterattacking force gains a favourable position on the flank from which to destroy the enemy tanks from stationary firing positions. Only after all enemy tanks are destroyed or have taken cover does the force close. In some cases the counterattack never closes.

The desirability of massing antitank weapons was also a central feature of General Balck's defensive operations in Russia:

Gen. Balck: ". . . contrary to the order of the Army Group, antitank units were not dispersed in the front lines and would be massively used at the focal point [by- 11th Panzer Division]."

Mr. Karber: "What kind of antitank units are we talking about?"

Gen. v. Mellenthin: "76mm guns. We took them from the Russians. They were excellent weapons. It is better to keep the antitank weapons in reserve, until you could see where the Schwerpunkt was."

Mr. Dunnigan: "Why did the Army Group commander want to disperse the force?"

Gen. Balck: "The Army Group commander wanted a long continuous line of antitank units, but this would have been [penetrated] anyway, and then we would not have anything to oppose the major threat."

Gen. v. Mellenthin: "He was an excellent soldier, but he was much more infantry-minded than we." 1/ pp.9-10

Here again we see the classic conflict between the desire to hold ground resolutely - to deny it to the enemy and to do so by holding a line - and the alternative tactic of opening up the battle and destroying his forces in the open field. To some extent, as General von Mellenthin points out, this is a difference between the viewpoint of "infantry-minded" officers on the one hand and "armor-minded" officers on the other. This difference should come as no surprise, as infantry is most effective in deliberately prepared defenses where they are protected from artillery and enemy armor by field fortifications and minefields. Tank commanders, on the other hand, are uncomfortable in fixed positions and wish to be able to move about. A judicious mixture of these complementary capabilities seems to shape the battlefield, maintain coherence, and create situations in which the enemy can be destroyed. Either capability acting alone has a value significantly less than 50 percent of their **combined effectiveness**.

6. Organization of the Fighting Elements

When 11th Panzer Division achieved its incredible series of successful counterattacks on the live of the Chir, it was by no means a full-strength fighting organization. In fact, the 15th Panzer regiment, more often than not, comprised no more than 26 tanks - the equivalent of one and a half U.S. tank companies. A U. S. armoured division today has over 300 tanks. Hown was it that such a small force could destroy, over a period of several months, a Russian Tank Army?

Gen. Balck: "In the three years that I was a company commander in World War I, we always had concentrated attacks with few people but much artillery. In other words, you

should have a lot of technology but as few people as possible, that is the way to conduct a war."

Gen. v. Mellenthin: "I can only stress what General Balck told us about **smaller units**: that you **should avoid big units**. It does not matter if it is a company or an Army Corps or a division it is easier to have small formations."^{1/} p.61

Gen. DePuy: "How many officers did the General have in his company most of the time?"

Gen. Balck: "No more than one. He was a platoon leader. Normally you did not need more than two [officers in the company]. Sometimes there was no other officer besides me in the company. On the other hand, I led many special forces, commando forces, raids like Teheran, and in such instances we had up to 4 to 6 officers. ...Company strength should be no more than 70 to 80 people."

"...300 men (in a battalion) are broken into 4 companies - 3 rifle companies and a machine gun company."^{2/} *ibid.*

Gen. Balck: "The ideal [armoured] division would consist of three [Panzer Grenadier] regiments with 2 battalions in watch, and one tank regiment."

....If I had a good tank, 10 tanks per company would be enough ..., there should be 3 platoons with 3 tanks each, and one tank for the company commander. Too many tanks will lead to too many losses."

p"...3 [companies per battalion]."¹ p.62

Mr. Karber: "One of the arguments of the critics [of small units] was that after a battle, the losses you had taken made the unit too weak to still be a viable combatant unit."

Gen. Balck: "The argument against that is that smaller units have smaller losses. It is a tendency amongst the troops that they stick together [bunch up], that when you have one there are others around - you have 12 tanks [in one place], they are hit by fire, and half of them are gone."

"..... a small unit is easier to lead and is more flexible."^{2/} pp.62-63

Mr. Dunnigan: "What was the resistance you got in the German Army to go to smaller units?"

Gen. Balck: "The resistance was that everybody wanted as much as possible because they believe with more they can do more."^{3/} p.64

Gen. DePuy: "When the 11th Panzer Division achieved its most impressive results, it was understrength. Therefore, what in fact happened was that perhaps the best division commander in the German Army was commanding a brigade [sized force], and the regimental commanders were commanding battalions, and the battalion commanders were commanding companies, and the company commanders were commanding two or three tanks at the

most. Now, is that further proof that success depends on quality of leadership and the size of the units being led? Is that a fair proposition?"

Gen. v. Mellenthin: "Right!"

Gen. Balck: "Yes, absolutely!" 4/ pp.68-69

Closely related to the size of units is the question of their composition. There are a number of strong supporters of the idea that battalions should be mixed (tanks and mechanized infantry) from the start, because that is the way they fight. Others favour "pure" companies and battalions to facilitate and simplify training, maintenance and leadership.

Mr. Dunnigan: "General, in 1940 you developed the Kampfgruppe, a unit that had tanks, infantry, pioneers that were needed for that particular mission. You still feel that that is the way to do it?"

Gen. v. Mellenthin: "Sometimes yes, sometimes no - depends on the circumstances."

Mr. Dunnigan: "Do you mean, in some cases the paper organization of the division is the one you go into combat with, with separate battalions of infantry and tanks?"

Gen. Balck: "The organization must be maintained, because it is the basis for the training and the feeding and the command and control of the unit."

Mr. Dunnigan: "In 1945 the German Army did one final reorganization doing in the direction of composite battalions - of tanks and APCs and even antitank units. Do you feel that this was solution, or do you feel that units should be 'pure' at the battalion level?"

Gen. Balck: "I think the latter would be the thing to do. You have to keep one thing in mind, which is repair and maintenance of modern weapons systems, and that can only be done in 'pure units'. The maintenance of the materiel is of paramount importance, and it is not possible to maintain the materiel in one unit where you have a conglomeration of different types of materiel. That is the art of leadership, that you can control the various forces but you still maintain the pureness of the unit."

Mr. Dunnigan: "The German Army in World War II had an armoured reconnaissance battalion which was a mixed unit did that present a lot of maintenance problems, because of that mix?"

Gen. Balck: "Resupply problems." 1/ pp.30-31

The issue remains unresolved in the minds of many, some of whom continue to believe we should be organized the way we fight - that is, cross-attached. The fact remains that all the

principal armies of the world continue to maintain "pure" tank and infantry battalions, crossattaching as necessary for tactical training and for combat.

7. Other Subjects on which the Generals had important and interesting comments

The Location of Command Posts in Retrograde Movement

Gen. Balck:during the withdrawal, many commanders hesitated to shift their staff to the rear and then they got into bad disasters. In my system, the staff would work quietly [in the rear] and the commander would be at the focal point (Schwerpunkt) and exert his moral power."^{2/} p.7

General Balck explained further that the rearward command post should not be situated at some nodal point along the obvious line of advance of the attacking Russians - for example a town on the main road to the rear - but rather should be off to the side in an inconspicuous location. The Russian attack could then sweep by, if necessary, and command and control would not be lost.

The Impact of Tactical Air Forces

Col. Samuel: "How do you view the role of the Air Force - the Luftwaffe - in highly mobile operations?"

Gen, v. Mellenthin: "In my opinion it is a decisive question. The Air Force must assist us to destroy the enemy. For instance on Tuesday, when we made our counterattack [in the simulation]: we can not make the counterattack without assistance from the Air Force. There must be a very close Liaison between the Air Force and division or brigade, [battalion, etc.]."^{1/} p.117

Col. Samuel: "[In the circumstances of today], would it be more valuable for the Air Force to support you in close combat, that is, close air support operations, [or by] interdiction in the rear of the enemy against reserves and support units?"

Colonel Samuels was seeking the General's view on an issue of current interest. There are those who feel that air forces today are most effective in the role of battlefield air interdiction that is, the highest pay-off with the lowest attrition rate.

Gen. v. Mellenthin: "Now, we are fortunately allied with you, and you have a very big Air Force, and we are hopeful that this Air Force will have the strength to assist our tactical attack, in addition to the other [interdiction] mission.

"In the East we were never really dangerously attacked by the [Russian Air Force], but at the Normandy campaign even in Army Group G [in Lorraine], movement stopped completely [in the day time] because of your Air Force. No movement, impossible."

Col. Samuel: "How effective was [the Russian Air Force] againstyour supply units?"

Gen. v. Mellenthin: "Not drastically. We had sometimes heavy losses [when] our troops used roads we had forbidden them to use. The Russian Air Force attacked them and destroyed them, but it was a mistake of our troops."2/ pp.117-118

Russian Guerrilla Operations

General Balck rated highly the value of Russian guerrillas to the Soviet war effort. He preferred that headquarters and service units be located in positions where the security requirements would be reduced that is, in small villages and woods, or even in the open. positions in large towns or cities, and in or near large forests, were especially vulnerable.

Gen. Balck: "I have always forbidden taking up such positions, and pressed my view against strong protests by the units in question. There are no disadvantages from the Service point of view. On the contrary, the guerrillas lost their freedom of movement A Corps which concentrated in a city lost 720 trucks when it suddenly had to be moved. They were completely immobilized [by guerrillas], and one Corps was a total loss. This teaches us also something else, that comprehensive good infantry training for all soldiers and Services is a necessity."1/ p.5

Another example was given, wherein 50 guerrillas massacred over 400 service troops who were not trained or disposed to fight.

The Von Hutier Issue

Perhaps only military historians will be interested, but the discussions led to a somewhat surprising exchange on the nature of evolution of German tactics. British and American historians have long put forth the theory that General von Hutier's infiltration tactics using Stosstruppen (assault troops), first employed with great success against the Russians at Riga in World War I, were the lineal forbearers of the Blitz tactics of World War II. General Balck professed ignorant of this connection.

Mr. Dunnigan: "At the end of World War I, the German Army developed what we call infiltration tactics, Stosstruppen, many energetic officers were attracted to that type of service. Did you find there was any carry-over in that mentality among those officers and troops to your tactics in World War II?"

Mr. Sprey:(Translating in German) "In the U. S. we talk a lot about the infiltration technique of the First World War. By that they mean the breaking in with shock troops to open the enemy position, and then to follow with the other forces. The question is, does the mentality of the shock troop leader have any influence an the tank troops [Leader] or otherwise?"

Gen. Balck: "The last part of the First World War, I was in attack units (Stosstruppen)."

Mr. Sprey: "Was not the so-called Alpen Corps predominantly attackoriented?"

Gen. Balck: "[It was] one of the best attack units, and I never noticed anything of this method of infiltration, we did not use it. We suppressed the enemy fire by strong artillery and then we deployed."

Mr. Sprey: "What here in the States is called 'Von Hutier tactics' is not known in Germany?"

Gen. Balck: "I can only say that I went through practically everything, but that is something that I did not experience."1/ p.59-60

In a separate conversation later, Col. von Usler-Gleichen, the German Army Attaché in Washington, told this reporter that the "Von Hutier" theory seemed to be confined to the British and Americans. He knew of no such ideas in German military doctrine or publications. Given the wide adherence to the theory outside Germany, this may be a fertile field for further research.

SUMMARY COMMENTS

In addition to the great value derived from all the details of the wide-ranging discussions over the period of four days with our distinguished guests, there was an added dimension of enormous importance.

We were reminded in the most vivid and convincing manner that **small forces skilfully** led can win battles against large forces if the small force **is synchronized** and the large force is disorganized. Generals Balck and von Mellenthin made it clear that this is the essence of **successful operations**. Their experience told them that it was not difficult to create such opportunities - that the Russians were peculiarly susceptible to disorganization when confronted with new and unexpected situations. Conversely, they expressed confidence that soldiers of the "West" were inherently superior in fast-breaking situations - more apt to take **individual initiative** - more apt to **adjust quickly to opportunities and cope with surprises**. They said many times, in many ways, that it was the goal of the German "system" to nurture these qualities in their Leaders and even in every soldier. They believed that the basic nature of the German citizen and the tradition of the German Army strongly supported this effort.

Not surprisingly, the wider audience on the last day was deeply impressed. Inevitably the question arose as to whether American generals and American soldiers measured up to the standards implicit in the Balck/ von Mellenthin prescription for success in combat with Russians. General Blanchard, former Commander-in-Chief, U. S. Army Europe and Commander, NATO Central Army Group, was positive in his opinion on this score. He thought the concept of the Auftragstaktik deserved emphasis in U. S. training. He attributed flexibility and initiative to our officers and non-commissioned officers.

No army has found the key to the mass production of either a Balck or a von Mellenthin. This kind of talent is found -not made - although, of course, it is sharpened and directed through doctrine and training. In this respect we must give the German system high marks. In this same respect, the insights into that system and its philosophy that we were given by the German generals is worthy of our most careful thought and attention.