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Report

ARMORED WARFARE IN WORLD WAR II

CONFERENCE FEATURING

F. W. VON MELLENTHIN
GENERALMAJOR A.D., GERMAN ARMY

MAY 10, 1979

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F. W. VON MELLENTHIN
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FOREWORD

At this Conference on Armored Warfare in World War II, Generalmajor a.D. F. W. von Mellenthin, a distinguished German battle tank force tactician, related some of his experiences as a General Staff Officer in the Russian campaign and responded to questions on his World War II experiences and their possible current application. (A biographical résumé of General von Mellenthin is provided on the following page.)

A transcript of General von Mellenthin's talk and the question-and-answer sessions is provided on pages 1 through 70. Only very minor editing was attempted. Undoubtedly some errors have been introduced in transcribing the tape, and apologies are extended for any errors or misquotes.

Owing to the time constraint, General von Mellenthin was able to present only a few selected portions of the prepared text of his talk; however, the entire text, including maps of the battle areas, is presented on pages 71 through 148. An outline map of the overall area, similar to the one used at the Conference, is in a pocket on the inside back cover of this report. There is, of course, some redundancy between the transcript and the prepared text (in particular, the material presented on pages 12 through 27 and that presented on pages 71 through 86), but in order to preserve the sequential organization of events in the prepared text it was decided not to attempt to eliminate the redundancy.

General von Mellenthin also prepared six very brief papers relating his Eastern Front experiences to current applications: (1) Educational Experiences and Ideas; (2) Detailed Answers to Questions Concerning Current Applications, (3) Eastern Front Experiences--Current Applications, (4) German General Staff Experiences and Ideas, (5) German Influence on Soviet Strategy and Tactics, and (6) Observations on the Soviet Army and Air Force. Papers No. 3 and 4 were presented at the Conference. These may be found on pages 36 and 37 and 2 through 6, respectively. The remaining four papers are presented at the end of this document (pages 149 through 168).

Mr. Pierre Sprey (Pierre Sprey, Inc.) served as moderator for the Conference. Panel members included: Mr. John R. Boyd (OASD, Program Analysis and Evaluation), Mr. William S. Lind (Special Assistant to Senator Gary Hart), Mr. Peter McDavitt (Honeywell, Inc.), Major William Rennagel (U. S. Army, CNC&S, Navy War College), and Professor Russel H. S. Stolfi (U. S. Naval Postgraduate School).

For additional information on armored warfare and General von Mellenthin's experiences in World War II, the reader is referred to two books which he has written: Panzer Battles and German Generals of World War II.

DISCLAIMER

The views and conclusions expressed in this document should not necessarily be interpreted as representing the views of the Sponsoring Agency or Battelle's Columbus Laboratories.

Generalmajor a.D. F. W. von Mellenthin

General von Mellenthin was born

He attended the

General von Mellenthin had the distinction of working with some of the most capable officers in the German Army in World War II, including Field Marshal Erich von Manstein and General of Panzer troops Hermann Balck. He also served on the personal staff of Field Marshal Erwin Rommel for over a year in North Africa.

After the war, General von Mellenthin and his family emigrated to [REDACTED] where he was an executive for Lufthansa Airlines until his retirement. In [REDACTED] he has worked on numerous books and articles relating to his wartime experiences. Two of his most popular works are Panzer Battles and German Generals of World War II.

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*An outline map of the overall battle area is provided in the pocket on the inside back cover of this report.

ARMORED WARFARE IN WORLD WAR II

Conference Featuring

Generalmajor a.D. F. W. von Mellenthin

INTRODUCTORY REMARKS

Pierre Sprey: I don't think General von Mellenthin needs much introduction here. As all of you are aware, he has written Panzer Battles and The German Generals, and Panzer Battles is probably one of the two or three most important books on the German experience from the German side in World War II. His experience covers an amazing range from Intelligence Officer for Rommel, Ia (G3) of an infantry division, extensive experience on the Eastern Front as Chief of Staff to one of the finest of all of the German armored tacticians, General Balck, and that was at Corps level, and he finally wound up the war as Chief of Staff to General Harpe in the Ruhr pocket. Just one other comment, for the format of this discussion, General von Mellenthin would prefer to center the discussion around some actual battles, so I propose that our format be that General von Mellenthin select a battle that he thinks is of particular interest to us today, has particular applications in the NATO arena, give us a short description of the battle, and some of the things he thinks are interesting about it, and then we will have the Panel ask questions on that subject and a little later in the discussion we will open it to the audience. General von Mellenthin.

TRANSCRIPT OF TALK AND DISCUSSIONS

von Mellenthin: Thank you very much. Ladies and gentlemen, I am greatly privileged to have the opportunity to speak to this distinguished membership. You must know that the Western European nations can't make it alone, they need the world power of the United States. That is the main point and, therefore, I am so thrilled to talk to you because we all depend on you.

von Mellenthin (cont'd): I will start with the first chapter, "German General Staff Experience".

One hundred seventy years ago, the first German Staff College was founded by Scharnhorst. From 1818 Karl von Clausewitz became the Director of this College for about 10 years. This Staff College was later named *Kriegsakademie* and grew to be well-known within and outside Germany. In 1870 a Naval Academy was built up and, in recent years, an Air Force Academy followed. Today we have got a Leadership School of the *Bundeswehr* in Hamburg where officers of the Army, Air Force, and Navy are being trained together. I stress this point that all three Armed Forces are together.

What kind of General Staff Officer did we want in the past and will we want, as I believe, also in the future? As a basis for the selection of a General Staff Officer, intelligence, knowledge, and experience are telling prerequisites, while strength of character and inner fortitude are decisive factors. I stress this point. We need not intelligent people, but we need personalities with a clear-cut character and strong personalities. So are, to my mind, the development of the following:

- (1) Diligence and precision without losing sight of the all-around concept.
- (2) General, many-sided, and broad thinking without forgetting the importance of details.
- (3) Creative, imaginative, and dynamic thinking without losing contact with reality.
- (4) Push for action and decision without becoming impatient (Rommel became, occasionally, very impatient).
- (5) The confidence of the men in the ranks.
- (6) A certain personal modesty, which is for a General Staff Officer very important. (I will come to this point later.)

Today's officers must rely on books for guidance, for men with practical experience in the last war are becoming rare. Military history forms the basis of all military theory, and from that source a soldier's conduct, in practice, must be derived. As Clausewitz has explained, the best method appears to be for the

von Mellenthin (cont'd): student to undertake a proper investigation of methods adopted in past wars. By this Clausewitz means that one should form carefully considered opinions on methods of command. What actually happens during the battle is not the main point of such study; the General Staff Officer should learn the practical side of warfare from studying the methods of command that have been adopted.

Training of the rising generation of General Staff Officers in war history must take place at the *Kriegsakademie* (War College or Staff College). At this stage, young officers are still particularly receptive and are not burdened with the cases that go with command of a formation of troops. Enough time for military training would be available if:

- (1) Training at the College or Academy lasted for three years as it used to for formation-commander's assistants in the *Reichswehr* time.
- (2) Subjects, such as sociology and political science were left out of the training program and were made optional.
- (3) Intensive courses at universities or high schools were generally omitted except in cases of those few officers particularly gifted in the technology or other specified fields.
- (4) So-called short courses interspersed during the time spent at the Academy were abandoned so as to eliminate, as far as possible, any diversion from the main military branches of study, such as tactics, operational commands, military history, logistics, and staff duties.

Because of this many-faced training, the General Staff Officer can unintentionally run into the danger of considering himself superior to the regimental officer and thus push himself into the limelight. A certain personal modesty is, therefore, a special obligation laid upon the General Staff Officer. He is and remains the assistant of his commanding officer, whom he helps by expressing his considered opinions and by relieving his commander of all staff work.

I do not feel entitled to speak on the German General Staff of today, but in an address to the Leadership School of the *Bundeswehr* in Hamburg, a past Inspector General of the *Bundeswehr*, General de Mazière formulated the following points

von Mellenthin (cont'd): important for today's General Staff Officers:

- (1) Political and military problems are linked together closer than formerly. Training and education of that rising military generation are, therefore, built on the recognition of the primacy of the political leadership. The soldier must always include political considerations in his military estimate of a situation. I here, speak, naturally, of the Chief of the General Staff of an Army Corps, of an Army, and an Army Group. The political leader has always the last decision.
- (2) The *Bundeswehr* is an allied army. It exercises its activities in military forces through fulfilling their task within an alliance. Many German General Staff Officers are given assignments on integrated staffs. The declared German defense policy is to strengthen and maintain the Atlantic Alliance.
- (3) The Western World lives under the military as well as the ideological threat of a militant communism. We must be ready for defense not only with our weapons but also for intellectual discussions with the Communists, for which a historical, political, and citizenship education is of prime importance.
- (4) The development of nuclear weapons, missiles and *Der Hochfrequenztechnik* (high-frequency technology) demand of military leaders a high degree of scientific-technical knowledge. There is no doubt we have to know a lot about this technical knowledge, but I have got the feeling we should not be run by the technical side but we have to control the technical.
- (5) Every phase of combat in which the *Bundeswehr* could be employed as part of NATO would take place on the soil of its own highly populated and industrialized country. Military leadership can, therefore, only be seen in connection with the problems of defense as a whole, requiring close cooperation between military and civil defense.
- (6) In particular, leadership in modern battle will become more and more dependent on the cooperation of the Army, Air Force, and Navy, as a battle will no longer be possible without at least two of the Services taking part. It is, therefore, imperative for the training of today's General Staff Officers that they learn to think within the framework of the armed forces as a whole.

As an end to this little lecture on German General Staff experiences, I would like to add a few words about my own experience as Chief of Staff, especially in conjunction with General Balck.

von Mellenthin (cont'd): When Balck in December of 1942 was in command of the 11th Panzerdivision* during the fighting on the River Chir near Stalingrad, it was my privilege to work with him as Chief of Staff of the 48th Panzerkorps**, a fruitful and most pleasant task. We left him plenty of freedom to lead his tanks, but when occasionally the whole situation spoke against his suggestions, there was also a clear-cut "No" from the Chief of Staff. From the middle of 1943, I was happy to serve under Balck as Chief of Staff first in the 48th Panzerkorps, then in the 4th Panzerarmee***, and later in Army Group G. Between him and myself there existed the ideal cooperation based on unlimited mutual trust. I think we can compare it with a good marriage--a state of affairs which could not have been better between a Commander and his Chief of Staff. Together we reviewed situations, and together we arrived at similar conclusions. We both hailed from the cavalry and had the same views on armored warfare. Balck always arrived at a definite decision, but it did not matter which of our two opinions had won the day.

Balck never interfered in the details of staff work. It was his Chief of Staff who was required to take full responsibility for such work. I was particularly grateful to General Balck who was renowned throughout the Army for his great personal courage, that he allowed his Chief of Staff to visit the front every second or third day. He was then sitting at my desk, and I went to the front line. He thereby enabled me to keep alive the close contact which is so essential between the General Staff and the fighting troops. It is no good if the General Staff Officer is only sitting at his desk and has no feeling for what is going on at the front. He has to be also in the front line.

In conclusion, it seems appropriate to recall that about 100 years ago, Field Marshal von Moltke was known for giving orders sticking to a clear-cut direction only. Within that direction he left freedom of action to his subleaders. Five thousand miles away his contemporary General Robert Edward Lee held the opinion that the mission of the Army leader was only to put his troops into the right direction for the decisive battle, the subleaders should do the rest. Both Moltke and Lee wanted freedom of decision for the subleaders so as to enable them to act independently without losing sight of the total conception.

* Panzerdivision = Armored Division.

** Panzerkorps = Armored Corps.

*** Panzerarmee = Armored Army.

von Mellenthin (cont'd): This morning I had a little discussion with one of my friends and he asked me, 'How was it possible that the German General Staff had such power?' I will give you a little example of this independent decision in the North African campaign. It was November 1941 near Tobruk, Westphal as G3, myself as G2, we were sitting there in the headquarters. Rommel was away for five days on the front line. He had had great success at Sidi Rezegh, he had seen the thing was not completely settled, with the result he gave an order for the Afrikakorps to go over to the pursuit near the Egyptian border and only a few forces were left at Tobruk where part of the 8th Army was within the fortress. Anyhow, as we feared, the pursuit was too early. The development near Tobruk became very dangerous, nearly untenable. Rommel was not there; we sent aircraft to look for him but we could not find him. Things became very hot, and there was no other decision but to call off the offensive from the eastern frontier, call back the Panzerdivisions and give them the order to attack the enemy in the rear near Tobruk. That means G3 cancelled Rommel's order and ordered all troops back from the front line to Tobruk to relieve the situation. And when Rommel came back, first he didn't look very pleased about our decision, but after 10 or 15 minutes of explanation about the situation, he agreed with a smile. This is what I wanted to explain to you, what we German General Staff want. If things are dangerous then even the smallest General Staff Officer must have the courage to make a clear-cut decision. That's my little story about the Germany General Staff. If you have any questions?

Pierre Sprey: I have a question on this subject of War College training. I notice, General, that you are a strong advocate of extensive study of military history, and I am interested to know how military history was taught at the *Kriegsakademie*. Was it taught as a subject that was settled, that is, there was a single view of each battle that you studied, or did you encourage controversy among the students and encourage people to take different views of major historical engagements?

von Mellenthin: We had history as a completely separate important subject, and during our discussions we studied mainly from the First World War the battles of interest, and here we had different opinions. We were asked, 'What would you do in this position?' And then we had arguments against each other, and at the end the teacher came to a clear-cut conclusion.

Pierre Sprey: Did each teacher always come to the same conclusion, or was each teacher given the independence to arrive at his own conclusions, possibly differing from other instructors at the *Kriegsakademie*?

von Mellenthin: You know, we had only one history teacher at the time. This makes things easier.

Pierre Sprey: Do we have any other questions?

William Rennagel: General, we've had some debates on Clausewitz and Jomini within some groups around here and the impact of both of these scholars upon the German General Staff. One could suggest a very fruitful course of pursuing studying operations would be to play Jomini off against Clausewitz. What was the focus within the Staff College between Jomini and Clausewitz?

von Mellenthin: You know, I must tell you that we didn't study very much Clausewitz and other people. We went more into practical historical examples, and learned from these lessons.

Russel Stolfi: I had talked in the recent past to General von Mellenthin and asked him what he thought was the single most important characteristics for a military officer, a good commander, and, especially, a General Staff Officer. And the answer that he gave, that's kind of part of the discussion that we have now, is that he felt that the single most important characteristic that the Officer should have is something called 'character'. And then I asked the General to elaborate on what he meant by character, and he said the capacity to make independent decisions. Now, as concerns some practical application of something like that, at the present time, there is an Army Command and Staff College, Marine Corps Command and Staff College, and so on, and there's a tendency for a kind of group approach to develop relative to answering questions and problems, etc. I don't know how that jibes with this business of independent decision-making, but General let me ask the question. Do you recall anything specific at the *Kriegsakademie*, almost in the sense of a course, where it was emphasized--this business of making independent decisions? Did that kind of pervade everything, or was there actually part of the training that you got that specifically emphasized independent decision-making?

von Mellenthin: I would say it was part of our training to learn to make independent decisions, because as we have seen in the North African campaign, the Commander of the Army was gone, there had to be made a decision, you can't wait until the Commander is back--then the battle is lost, therefore you have to make an independent decision even as a lower General Staff Officer.

John Boyd: Would you bring out--elaborate a little bit more--the relationship between the Chief of Staff and the Commander in your organization in terms of how he can arrive at independent decisions? I would also like you to bring out to the people, relative to the Panzerdivision, exactly how many Staff Officers that you have in a Panzerdivision.

von Mellenthin: To reply to the second question first, we had in a Panzerdivision about 12 staff officers, that's all. And you know, in my opinion, the main thing in the war is simplicity. When you have too many officers around you to occupy them, then it keeps you away from your main thing to make clear-cut decisions, then you have only to think, how can I occupy my 50 or 60 officers instead of 12?

Pierre Sprey: The question from the audience was: 'How many systems analysts did you have?'

von Mellenthin: Nil.

John Boyd: Would you elaborate a little bit--take the first part of the question relative to the relationship between the Commander and the Chief of Staff, and how it was not only in the Panzerdivision, but as it also was in the German Army--the Chief of Staff function relative to the Commander of the organization concerned.

von Mellenthin: As I tried to explain before, my cooperation with General Balck--it's very important that the personnel office put together the right men, that means the Army Commander and the Chief of Staff must fit together. It's so important, otherwise it's no good. To give you from our side an example of Stalingrad. There we had two officers very similar: General Paulus and his Chief of Staff, General Schmidt. They both were very obedient, they had the order from Hitler to hold out in Stalingrad, not to break out, and both men came to the same conclusion. If Paulus would have had another Chief of Staff, if I

von Mellenthin: (cont'd): may say, myself, I would definitely have convinced him to break out. That is the mission of the General Staff Officer and the Commander that they have to come to the same conclusion by first fighting against each other, making clear-cut arguments, right or wrong, but, and I say but, at the end, there is only one decision, the decision of the Commander--nobody else. The Chief of Staff then executes properly all of the instructions given by the Commander, but before this there was quite a serious gulf between them--what is the right solution?--and for this I believe they come together and at the end must be the decision of the Commander, nothing else.

John Boyd: You would say then there was a very strong tension between the Commander and the Chief of Staff, but we would call it a creative tension, hopefully.

von Mellenthin: You know, I can't say it with myself and Balck. There was never a great tension. All right, we had sometimes different opinions, but at the end of these opinions we were close together again.

Pierre Sprey: Let me just add one footnote to what the General has said for those of you in the audience who haven't followed the role of Chief of Staff in German organization. It's quite different than in our Army, and it includes both Deputy Commander, Chief of Staff, in our sense, that is, chief of the office work, and also Chief of Operations--all those positions are rolled into one in the German concept of Chief of Staff*.

Peter McDavitt: You seem to have studied the Soviet way of doing things, would you care to make any comments at this time on the Soviets--how they work between their Division Commander and the Chief of Staff?

von Mellenthin: I must disappoint you. I have no further contact with the Communist side and can't tell you exactly how the position is but, I will, at the end of the lecture, give you a little speech on the influence of the German tactics on the Soviet Army. I will give you a picture about this. There is no doubt that the Russian leadership by the end of the war had learned a lot from us, and at the end of the war Zhukov, Sofnovski, etc., were of high development, very good, whereas, the middle and lower unit commanders were much more primitive and simple and not as flexible as it should be--fortunately.

*This is at the Division level; at the Corps level and above there is both a Chief of Staff and a Chief of Operations.

Russel Stolfi: Pierre, I think maybe one more comment that might be interesting for the people in the audience and maybe get us into even a tactical example, or something. Talking about independent decision-making again, when General von Mellenthin was Chief of Staff of the 48th Panzerkorps, there was an occasion that he began to allude to, where sometimes it was necessary, even with a strong Commander, like the Commander of the 11th Panzerdivision, like Balck for the Chief of Staff, as it turned out, independently to intervene and tell him to do something decisively. On one occasion, in the Chir River battles (the Chir River, now, is as far as you can see over there, close to Stalingrad, where the red line is on the map), there was an occasion when the Corps Commander, von Knobelsdorff, was gone and General von Mellenthin, independently, as Chief of Staff, had to make a decisive decision relative to the armored division. Do you remember that? Would you like to comment on it?

von Mellenthin: I can't remember at the moment which place it was, but it very often happened, the Commander of my Corps was somewhere on the front line, and Balck wanted to attack one bridgehead, and on the other side, the Russians had broken through on the right flank and, therefore, I had to tell him no further attack on the bridgehead, you go ahead and destroy and defeat the enemy that has broken through, which was more important.

You know, in spite of all independent decisions, the main thing in our military role remains discipline, and give the staff leaders as much freedom as you can, but when things are broken on one side, then you give the clear-cut order, "Attack this man". There's no doubt about it.

Hal Aaron: I seem to get a lesson learned from what the General says, that you maintain the independence of the General Staff back at the headquarters by letting the Commander run around the battlefield without communications. I think you probably hit a very important point. We have a tendency, too often, for our commanders to have too much communication and too much control. Maybe it might be a good idea sometimes if we take them out of communication.

Pierre Sprey: General, do you have a comment on that?

von Mellenthin: Although Rommel's going to the front was very much his strong point, he sometimes exaggerated this, because it is definitely not the right thing for a Commander of an independent army in North Africa to stay away from the communications from the head office for several days. That's definitely not right.

Pierre Sprey: Let me just add one comment to that, on just that subject. General Balck in a recent interview commented that Guderian's great contribution, perhaps even greater than the normal contributions we read about, was his contribution in the area of signals, and that is that he organized the Armored Division in such a way that the Commander could command from anywhere within the Division--that he always had the communications so that he could command from any point within the Division wherever there was an emergency. And clearly the organization was that he could communicate directly with his Chief of Staff at the headquarters, and the Chief of Staff would then execute the proper orders while the Commander could be right at the point of main action.

Bill Lind: We notice when we look at German operations in World War II, that the German forces were marked by an ability to make tactical decisions very quickly and that they appeared always to make the decision on the lowest possible level of command. Was this a basic principle of the German command system always to try to make the decision at the lowest possible level so that it could be made as quickly as possible?

von Mellenthin: Yes, you are right, this was a principle in our operations to make the decision as low as possible.

Kenneth Estes: Can you describe, General, the role of intelligence in the decision-making process--in other words, the role of the G2 in formulating and bringing in enough information for a decision? How did you guard against a tendency to delay the decision too long, attempting to get more information that was slow in coming in? What kind of procedure do you have to guard against being too late in your decision-making--always seeking more and more intelligence so that there is a bigger and bigger picture?

Pierre Sprey: Let me repeat that. The question is from Kenneth Estes and he wants to know how in the German command system the tendency to always delay in order to get more intelligence on which to base decisions--how that tendency was overcome.

von Mellenthin: That tendency was overcome partly by the Commanders being very much in the front line. You can't command tank units from the back. You have to command tank units from the front line, and, therefore, it was the rule that the Commander of a division was at least with the Commander of a tank battalion, etc., so that he could see the things very close, and, therefore, he got the information very close and could act very quickly, being near to the front line.

Pierre Sprey: I propose we go on and, General, that you select one of the battles on the Eastern Front that you would like to talk about and give a little introduction and then we will ask questions.

von Mellenthin: First, I will give you a short introduction on our front near Stalingrad. To give a better understanding about the position in which I had to act as Chief of Staff of the 48th Panzerkorps from the end of November 1942, I want to give you a short introduction.

Hitler's principal intentions for the summer offensive of '42 were the capture of Stalingrad and of the Caucasus. At first glance, these objectives had considerable appeal. If the German Army could cut Russia's main north-south line of communications by crossing the Volga near Stalingrad and, if, simultaneously, the production of the oil fields in the Caucasus could be harnessed to the German war effort, then the future outcome of the war would be profoundly affected thereby.

The first objective, Stalingrad, lay nearly 300 miles beyond the front line that existed in the Spring of '42. The Caucasus was over 350 miles distant. Nor were these objectives close to one another. Being some 350 miles apart, the two operations must diverge.

There were not sufficient German forces at present available to capture two such remote and distant objectives. It was suggested to demand fresh divisions from Germany's allies: Rumania, Hungary, and Italy. This was the first fatal decision,

von Mellenthin (cont'd): because these non-German soldiers were to be massed in homogeneous corps or even armies of one nationality, fighting at vast distances from their homelands. Ill-equipped with no up-to-date arms and badly commanded, these troops were employed along the River Don to protect the long flanks of our forces fighting at Stalingrad and the Caucasus. Professor Stolfi can show you [on the map].

Russel Stolfi: Stalingrad, of course, here on the Volga River, and this long flank that the General is talking about goes from Voronezh down like so to Stalingrad, and this long area here, this enormously long flank that opened up with the Germans concentrating at Stalingrad, and then the other forces down in the Caucasus. These German forces were so large that there wasn't anything left over to take this exposed flank, so that we have, for example, an Italian army that eventually went in in this particular area, and then we have a Rumanian army down in here, and another Rumanian army, as it turned out, just south of Stalingrad as the Germans ran short of forces. So what the General is saying is, there was a desperately exposed flank that opened up along the Don River here where inferior allied troops, in the sense, especially, of their equipment and their leadership were set up--the Don River here.

von Mellenthin: If I may shift for a moment to our days, we had not very good experiences with our allied forces during World War II. I am thinking of North Africa with our Italian friends, but you can't blame them, because I remember they had terrible equipment. The tanks were completely inferior. Our artillery had a range of 12 kilometers--they were only able to fire on six or seven kilometers, and so on. Our allied forces of today are also very different, and NATO should think about it--to get at least the same weapons and equipment, the same organization, and so on, for these armies, to try to get a standardized whole army of NATO, otherwise we will have the disappointments today as we had at Stalingrad.

In late September, although our first and principal objectives had almost been obtained, no further progress was made in the Caucasus, and in Stalingrad the Russians began to put up desperate resistance. As a scapegoat, the Chief of the General Staff, General Halder, was dismissed together with the Commander of the Caucasus Army Group A, Field Marshal List. This is always the same when things go wrong, a scapegoat will be found and sent home.

von Mellenthin (cont'd): Halder's successor, General Zeitzler, made three points especially clear to Hitler, when he took over as Chief of Staff:

- (1) Owing to the summer offensive, the territory to be occupied in the East no longer corresponded to the size of the occupying army. There were too few soldiers for too much ground. Unless this were adjusted, a catastrophe must occur.
- (2) The most perilous sector of the Eastern Front was undoubtedly the long, thinly held flank, stretching along the Don from Stalingrad to the right boundary of the Army Group Center. Furthermore, this sector was held by the weakest and least reliable of our troops: Rumanians, Italians, and Hungarians. This created an enormous danger which must be eliminated. These were all suggestions from Zeitzler to Hitler.
- (3) The Russians were both better trained and better led in '42 than they had been in '41. This fact should be realized. Greater caution on our part was essential.

Zeitzler succeeded in making Hitler aware of the danger to the left flank of Army Group B; however, his suggestion to withdraw the Stalingrad front westward, thus shortening the endangered flank and freeing a large number of divisions as a *masse de manoeuvre* behind a strong shortened front was bluntly refused by Hitler. Professor Stolfi can show you the enormous saving on the map.

Russel Stolfi: What the General is suggesting is that with the Don front sticking out all the way here to Stalingrad, especially when we get a kind of a wedge coming out like this, that instead of having forces all the way along like this, if the forces were moved back, let's say straight from Voronezh south down to the Donetz River, there would be an enormous savings, in other words, as I go along here, this distance is enormously longer than the distance like so, especially when this comes down with the Caucasian forces, and so on. So the idea would be, enormous savings could be attained by moving the forces back from this region over to here. And then the General used a nice old French term, *masse de manoeuvre*, perhaps, of some of the élite mobile units with the 6th Army could have been set up perhaps much more comfortably to defend this much shorter front. I think that's what he has in mind, and that certainly would make sense. Something that is a little distracting is, as you move farther

Stolfi (cont'd): back here, you get closer and closer to this enormously significant bottleneck as concerns all of the forces sticking out here, but the German *masse de manoeuvre* probably comfortably could have handled that relatively small space there and kept the Soviets off.

von Mellenthin: Thank you very much.

However, his suggestion to withdraw the Stalingrad front westward, thus shortening the endangered flank and freeing a large number of divisions as a *masse de manoeuvre* was refused by Hitler. He had recently said on the radio to the German nation, "You may rest assured that nobody will ever drive us away from Stalingrad". You know, as I said in the beginning, the political leader has the last and the first say in all of these decisions, but during the war he should keep away from political statements which bring an army to catastrophe.

As early as August '42 the German General Staff had warned Hitler that the 400-kilometer-long flank on the Don would be untenable, especially in wintertime, only halted by the weak allied forces. At the end of October, Paulus, Commander of Stalingrad Army, informed that the Russians were deploying strong forces on the flanks of the 6th Army. Hitler was kept fully informed, but only half-hearted measures were ordered to reinforce the flanks. Only the 48th Panzerkorps, consisting of one weak German Panzerdivision and a Rumanian Panzerdivision unable to match the Russian T34 tanks, was put in behind the 3rd Rumanian Army. To these were added a few blocking units, some Flak, and some Army artillery.

At midnight on 19 November, some 3,500 Soviet guns and mortars opened a barrage on the positions held by the Rumanian Armies on the northern and southern flanks of Paulus' 6th Army. At 8 o'clock the next morning, strong Russian units attacked in accordance with a plan shrewdly devised by Marshal Zhukov.

In the beginning the Rumanians defended themselves gallantly, but were overwhelmed by superior strength. Panic crept in, and then deteriorated into headlong flight. General Paulus threw all available units of the 6th Army against the Soviet eastern flank, but he was unable to prevent the junction at Kalatsch, on the Don, of Russian shock troops thrown in from north and south.

Russel Stolfi: What we have up here is the German 6th Army rather badly concentrated in and around what's Volgorad on the map now, it was formerly Stalingrad, and then the Rumanian Army, the 3rd Army, that the General mentioned, holding over here and a Rumanian Army to the south. The Soviets did not attack the 6th Army at all in the attack to encircle the 6th Army. They attacked to the north, the Rumanians here, and to the south, the Rumanians here. They came together--this map has got a kind of connective joint here--but at this particular location right here is where Kalatsch is. Well behind the 6th Army in here, back in here, is where the Soviets came together, leaving a fairly large pocket to begin with, going almost directly to the west from Stalingrad. So we have the collapse of the Rumanians here, the collapse of the Rumanians here, and the Soviets linking up about right back here at Kalatsch, closely on the Don River. In the Don River there's a huge bend that comes around here--the Don River comes fairly close to a rather large bend with the Volga River here. So we have the 6th Army now in a pocket in this particular location with the collapse of the Rumanians.

von Mellenthin: The 6th Army was completely surrounded. The curtain was rising on the Tragedy of Stalingrad. Paulus and his Chief of Staff, General Schmidt, failed to realize the deadly danger of the encirclement of the 6th Army until 21 November. They came to the same conclusion: that to avoid encirclement, they should break out to the southwest after regrouping. But on the same evening, orders were received from Hitler to hold their existing positions. Paulus and his Chief of Staff obeyed orders. I think that I, myself, accustomed to independent decisions by Rommel and Balck, would have advised Paulus urgently to break out even after he had received the order. The Chief of the Army General Staff, the Commander of the Army Group B, came to the same conclusion, that the 6th Army should withdraw into a position within the bend bounded by the Don and Chir Rivers.

On 23 November, General Zeitzler did his utmost to get Hitler to agree to a withdrawal into the Don bend, as a last resort to save the 6th Army. On the same day Paulus was urged by the Generals under his command to abandon Stalingrad forthwith and break out to the southwest. On 24 November, Manstein, now Commander of Army Group Don, took over the Stalingrad front. He described the

von Mellenthin (cont'd): actual situation in his book, Verlorene Siege:

'Hitler had nailed down the 6th Army in Stalingrad, when a chance still remained that they could have fought their way out. Without going into details about the course of the first few days of the Soviet offensive, one may say, that the encirclement of the 6th Army could have been prevented only by challenging the enemy breakthrough at the very start, either to the west across the Don or east of the river towards the southwest. Orders for this were the responsibility of Supreme Headquarters, but Paulus should have taken things into his own hands and retreated from Stalingrad.'

That was the opinion of Manstein.

On 27 November '42, I received orders to report to the Chief of the Army General Staff, General Zeitzler, in East Prussia. Zeitzler informed me of my appointment as Chief of Staff of the 48th Panzerkorps, and gave me his appreciation of the situation around Stalingrad. It was my impression, that Zeitzler did not think it would be possible to relieve the 6th Army and that Paulus' only chance was to break out. We now know that he gave this advice to Hitler, but it was summarily rejected by the Führer who accepted Goering's assurance that he could supply the 6th Army by air.

Gentlemen, these were about 350,000 men and our own other troops were about 200 to 300 miles away from there, and this, in my opinion, was a criminal suggestion from Goering as Chief of the Air Force to tell Hitler, 'I can guarantee you, I will supply the 6th Army'. It was impossible!!

The large situation map in the operation room was not pleasant to look at. I tried to find the location of my 48th Panzerkorps, but there were so many arrows showing breakthroughs and encirclements. In fact, on the 27th of November the 48th Panzerkorps was itself encircled in a so-called 'small cauldron' to the north-west of Kalatsch.

von Mellenthin (cont'd): On the morning of the 28th I set off by air for Rostov to the newly formed headquarters of Army Group Don, covering 1,500 miles. That evening I reported to the newly appointed Commander of Army Group, Field Marshal von Manstein, who passed me on to his G3, Colonel Busse. Here I obtained new information to supplement what I had learned from the Army headquarters.

The 6th Army, with about 20 Divisions was encircled by approximately 60 Russian Divisions. The Rumanian 4th Army between Elista and Stalingrad had been crushed by the Russian advance from the Volga and could no longer be regarded as a fighting force. But there was a thin screen of elements of the 4th Panzerarmee on a line extending from Elista to Kotelnikovski. The screen had the task of covering the rearward communications of Army Group A. The latter Army Group was fighting in the Caucasus, and its rearward communications ran through Rostov, as mentioned by Professor Stolfi. The first reinforcements for the 4th Panzerarmee were already enroute from the Caucasus front.

It appeared that the main body of the enemy east of the Don was still facing the 6th Army. This had made it possible for Luftwaffe formations and rear-services personnel to build up defensive positions west of the Don bend along the Chir. The Rumanian 3rd Army had been rushing back to the west. The retreat was halted and some line of resistance was established in the Oblivskaya area as far north as Veshenskaya on the Don (see Map 1, page 76). There the Rumanians joined with the east wing of the Italian 8th Army, not yet attacked by the Russians. The 48th Panzerkorps with its 13th Panzerdivision and its weak Rumanian Panzerdivision had fought its way out of encirclement and had taken up positions on the River Chir west of Petrovka. Army Group Don was assembling forces on both sides of Kotelnikovski. These reinforcements came mainly from the Caucasus front; they were to strengthen Hoth's 4th Panzerarmee and enable him to relieve Stalingrad. When the situation allowed, the 48th Panzerkorps was to move south of the Don and Support the 4th Panzerarmee in its fateful counterattack.

Russel Stolfi: Why don't we take a break for just a moment, but let me show you what has finally come here. We've got a situation that's developing--there might be some questions for some kind of a NATO correlation of a large NATO force cut off, for example. But what we've got is, the General's 48th Panzerkorps,

Stolfi (cont'd): the Don River bend comes in here, the 48th Panzerkorps had moved north of the Don River, and the General just described, it has moved across the Don River into this location. And in this location right here on the Chir River is where the General beings all of the actions that he fights in in Russia in the Second World War. In other words, we're right about here on the map. The 48th Panzerkorps has gone into position. It starts with the weak 13th Panzer-division and this Rumanian Armored Division. In a short time General Balck will show up with the 11th Panzerdivision, and when we come back from the break, what we've got is the beginning of the action now in the Soviet Union. Something that you might think about is the potential for a NATO force--a large NATO force--having been encircled and maybe some kind of a principle involved in what might happen if a NATO force gets itself into a position like that--a quick breakout, staying in position in a hedgehog, or something like that. So why don't we stop at this time. We're starting right here on the campaign.

Pierre Sprey: General von Mellenthin will pick up his account of the Chir River battles again at the place where we left off, which was just when the 48th Panzerkorps was getting ready to engage along the Chir River.

von Mellenthin: On the 6th of December, the 336th Infantry Division took up positions on the Chir between Nizhna Chirskaya and Surovikino, and that day General Balck, Commander of the 11th Panzerdivision, arrived at Nizhna Chirskaya to reconnoiter the sector where his Division was to cross the Don to cooperate with Hoth's 4th Panzerarmee to relieve Stalingrad. But we were not destined to play any part in the attempt to relieve Stalingrad, although my Corps was nearest to Stalingrad. We were only about 20 to 25 kilometers away from the front--from the Stalingrad front. On the 7th of December, the Russians' 1st Armored Corps forced its way over the Chir on the left flank of the 336th Division and swept forward to the settlement of Sowchos* 79 far in the rear of our defensive position on the river bank. We, the 48th Panzerkorps, ordered Balck to attack the Russian armored on the move with his 11th Panzerdivision and restore the situation. Short and sweet, that's all that we gave as an order. The units of the 11th Panzerdivision were still making their way up from Rostov. On the afternoon of 7 December, Panzer Regiment 15 engaged large Russian tank forces around State Farm 79 and checked their further advance.

*Sowchos = State Farm.

von Mellenthin (cont'd): As a first step, General Balck set up his battle headquarters alongside that of the 336th Division at Verchne Solonovski; this made for the closest cooperation between the two Divisions. It is very important that a tank division that has to assist an infantry division should be with the headquarters as close as possible to the infantry division. The 336th Division wanted Balck to make a frontal attack on State Farm 79 so as to relieve their critical position with a minimum of delay. Balck protested that the terrain was unsuitable for armor and that, in any case, a frontal attack would merely push the enemy back and not lead to his destruction. You know, it is a fatal sin of every tank unit to attack in front. It always has to try to get the flank or even the rear of the enemy. He decided to make his main effort along the heights west and north of the Farm, where tanks could move easily, and throw his Panzers across the Russian rear (see Map 2, page 79). The decisive thrust was to be made by Panzer Regiment 15 supported by Panzergrenadier Regiment 111, while Panzergrenadier Regiment 110 was to deliver a holding attack from the southwest. Balck stationed his antiaircraft guns and engineer battalion to the south of the Farm to prevent the Russians bursting out in that direction. It means a small encirclement. The artillery of the 336th Division was to cooperate on the northeastern flank.

On the night of 7/8 December, the 11th Panzerdivision regrouped in accordance with Balck's orders and the units moved into their assembly area. When they attacked at dawn on 8 December this hit the Russians at the very moment when they were about to advance against the rear of the 336th Division, in the confident belief that the Germans were at their mercy. Panzer Regiment 15 bumped a long column of Russian motorized infantry coming from the north and took them completely by surprise; lorry after lorry went up in flames as the Panzers charged through the column throwing the Russians into the wildest panic. The column was destroyed and Balck's Panzer Regiment then advanced into the rear of the Russian armor at State Farm with Panzergrenadiers and artillery in close support. The Russians fought bravely, but their tanks were caught in a circle of fire from which they vainly attempted to escape. When the short winter day drew to a close, the Russian 1st Armored Corps had been completely bowled over and 53 of its tanks were knocked out.

von Mellenthin (cont'd): Between the 9th and 13th of December, Balck was continually engaged in clearing up Russian bridgeheads across the Chir. The Luftwaffe Field Division took over a sector on the left flank of the 336th Infantry Division, and these two infantry divisions did their best to hold the line of the river along the 48th Panzerkorps front between Oblivskaya and Nizhna Chirskaya--about 40 kilometers wide.

The evening of the 11th of December brought this message to Balck: 'Enemy broken through at Lissinski and Nizhna Kalinovski'. The Commander of the 11th Panzerdivision decided to beat the enemy at Lissinskiy first. After a night march, the Panzer Regiment arrived near Lissinski at dawn and liquidated the Russian forces that had broken through. After destroying the Russians at Lissinskiy on the 12th of December, the 11th Panzerdivision marched northwest, and that very afternoon, having covered a distance of 15 miles, the Division cut in the Russian Bridgehead at Nizhna Kalinovski and compressed it considerably.

At dawn on the 13th of December when the Division was about to launch its final attack at Nizhna Kalinovski, it was hit on the right flank by a strong Russian attack which produced a temporary crisis. One battalion was surrounded. The 11th Panzerdivision discontinued its assault on the bridgehead and turned against the attack. The encircled battalion was freed and the battle ended with an indubitable German defensive success.

On the 10th of December the 4th Panzerarmee launched its attack to relieve Stalingrad. In spite of the critical situation on the Chir, the 48th Panzerkorps was called upon to play its part in this counteroffensive. Unfortunately, our bridgehead across the Don had been lost under the impact of continuous Russian attack and it was necessary to regain it before we could fulfill our role and join hands with Hoth's 4th Panzerarmee. All was quiet on the 14th of December, and on the 15th the 11th Panzerdivision withdrew from its position covering the Russian bridgehead at Kalinovski.

By the 16th of December Hoth's advance guard had reached the banks of the Aksay River, less than 40 miles from the nearest troops of the 6th Army, and we arranged for the 11th Panzerdivision to fight its way across the Don on the 17th and advance southeast to support Hoth's left flank. At this critical point, the Russian

von Mellenthin (cont'd): command showed strategic insight of the highest order. Marshal Zhukov was commanding the armies on the Volga-Don front with General Vassilevskiy as his Chief of Staff. Instead of concentrating their reserves to meet Hoth's thrusts, they unleashed a new offensive on a massive scale against the unfortunate Italian 8th Army on the middle Don. They extended their attacks to include the sector of Army Abteilung Hollidt, which had replaced the Rumanian 3rd Army on our left flank, and the position of 48th Panzerkorps on the River Don. The crisis on our own front and the collapse of the Italians not only forced the cancellation of the 11th Panzer's attack across the Don but compelled Manstein to draw heavily on Hoth's Army in order to build up a new front to cover Rostov. If you could show the meaning of Rostov for both Army groups--the Army Group Don and the Army Group Caucasus. Rostov was fatal for us. If we would have lost Rostov we would have had a much greater Stalingrad.

On the 17th of December a violent Russian attack broke through the positions of the 336th Division about 6 miles north of Nizhna Chirskaya. There was nothing for it but to commit the 11th Panzerdivision which drove the Russians back to the river bank. On the 18th of December I rang up Balck and told him about yet another deep Russian penetration from the Nizhna Kalinovski bridgehead 12 miles to the northwest. A motorized corps had broken through on a wide front, and the resistance of parts of the Luftwaffen Field Division had dissolved. Balck protested that he would prefer to eliminate the enemy on the front of the 336th Division before doing the next order. I replied, 'Sir, this time it is a bit more than ticklish. The 11th Panzerdivision must move at once, every second counts'. Balck came back: 'O.K., we will do it'. General Balck decided to set off immediately, march through the night, and fall on the enemy at dawn, at the very moment when the Russians would be preparing to move. For this purpose, Panzergrenadier Regiment 110 was to take up a frontal blocking position, Panzer Regiment 15 was to attack the enemy's eastern flank, and Panzer Regiment 111 was to follow in the right rear to protect the flank and to be handy as a reserve (see Map 3, page 82).

By 5 o'clock on the 19th of December all preliminary moves had been carried out. At first light the advance elements of Panzer Regiment 15 saw strong Russian tank units fully deployed and moving southward. As the approach route of the

von Mellenthin (cont'd): Panzer Regiment had concealed its advance, the 25 tanks remaining to the regiment--I repeat, we had only 25 tanks at this time--the 25 tanks remaining followed the Russian armor--behind the Russian armor-- and in a few minutes had knocked out 42 Russian tanks before the latter realized that the tanks moving behind them as a second wave were German and not their own. The dominating Height 148.8 was captured. On the other side of this height another line of tanks was seen moving in a similar way to the first one. Once again, the German tanks, brilliantly led by Captain Lestmann attacked the Russians from behind and destroyed them before they had time to realize what was happening. Literally a case of being kicked in the pants. Thus, 25 German tanks destroyed 65 Russian tanks in the shortest possible time and without any loss to themselves. This broke the back of the Russian attack. Their remaining troops fled before the Panzers without offering any serious resistance.

Russel Stolfi: Let me make a comment that I think you will appreciate and find interesting. Several years ago, I was overseas in Israel and was talking to an Israeli General whose name is Muran. Muran was to the intellectuals what might be called genius, who along with General Tal and some others in the 1960's in Israel set up the present Israeli Armored Force--Muran being at that time the Chief of Staff of the Armored Force. I discussed at some considerable length, General von Mellenthin and his book, Panzer Battles, with Muran, and Muran made the astounding statement that, to a significant degree, that is to say, something more than point 5, let's say plus point 5.1, the concept, which is at least well known among some people of the Israelis in fighting, at least when they have a blitz going themselves 24 hours a day, was based on the impact of General von Mellenthin's book, specifically the passages that he just is recounting to you of the Germans. I don't know as you were following this if you realized that they were fighting 24 hours a day, that is to say, they were moving all of the time, moving at night, fighting in the daytime, moving at night, fighting in the daytime. Muran read those passages relative to the battle on the Chir River, and from that said: 'Well, I guess we Israelis are going to try to do the same thing, or do as well'. And the technique and the doctrine that they have established of fighting 24 hours a day has its intellectual roots, essentially, in that passage of several basic pages in General von Mellenthin's book. Now,

Stolfi (cont'd): a question you might ask, and maybe some of you are interested in asking, or if the General could comment, is, 'When did the people find any time to sleep?'

von Mellenthin: I must tell you, I can't tell you when we actually slept, because there was not much time left for sleeping. I think that the tank crews, there were four men in the tank, and at night when they were driving to the new battlefield, three men could sleep and one man had to drive. They had to relieve each other during the night driving. I think that's the only possibility when we had a chance to sleep for a few hours.

Russel Stolfi: Question? Go ahead.

Chuck Myers: That's a very important point, and I'm a little bit worried about the way you said what you said about fighting 24 hours a day. There's a very significant difference between moving and fighting, and I've been searching for examples of cases in history when significant attacks have been made at night and I don't seem to be able to find any. There's a lot of free movement. If I'm wrong, I want you to straighten that out.

Russel Stolfi: No, you're not wrong. Now I thought that I had mentioned, and I had not exactly corrected myself, I had said, 'fighting 24 hours a day', but as I think that the General was discussing, and as I had meant to indicate there was 24 hours of movement. Now, at night, in principle, the movement was made, as was pointed out, for example, in the 'kick in the pants', the attack was going in in daylight--early morning.

Chuck Myers: At what rate were they able to move at night? How far did they move during the night in preparation for that morning attack?

von Mellenthin: The distance was different, but normally moving from one bridgehead to another battlefield, it was about 8 to 10 kilometers, roughly.

Russel Stolfi: Eight to ten kilometers is not very long, but at night in the middle of the Soviet Union, in combat, with tired people that's a real tough move, you know. It probably took them most of the night to rearrange, change direction, issue ammunition, do various things like that. With the Israeli

Stolfi (cont'd): blitz, for example, in '67 it was a 60-hour blitz and they literally went 24 hours a day, although there, again, it was probably mostly movement at night, although there was one big tank battle south of El Arish, as it turned out, that took place at night.

von Mellenthin: Before concluding this account of the battles on the Chir, I must pay tribute to General Balck, a born leader of armor. Throughout the fighting his (Panzer) division acted as a fire brigade behind the two infantry divisions to quell one dangerous conflagration after another, when the infantry found it impossible to deal with the larger Russian bridgeheads, Balck came tearing down on the enemy with the whole weight of his armor in accordance with Guderian's old maxim: '*Schwerpunkt*', not stinting, but stunning (*Nicht kleckern sondern klotzen*). His brilliant achievements were the fruit of exemplary cooperation with the two infantry divisions and the headquarters of the 48th Panzerkorps. Balck never left a single tank in direct support of the infantry. Mobile tactics of this kind retrieved dangerous situations on numerous occasions and inflicted huge losses on the enemy. During this 17-day period, more than 700 tanks were knocked out in the sector of the 48th Panzerkorps. I, the newcomer, from the desert war, saw and understood that the Russian masses of men and materiel could be successfully fought by surprise counterattacks with concentrated armor. For weeks on end, the 11th Panzerdivision moved by night, and before dawn was at the very spot where the enemy was weakest waiting to attack him an hour before he was ready to move. Such tactics called for unheard of efforts but saved lives as the attack proper cost very few casualties, thanks to the Russians having been taken completely by surprise. The axiom of the 11th Panzer was 'night marches are lifesavers'. It is true, however, that the question of when the men of the 11th Panzer ever got any sleep was never clearly answered.

Orders were exclusively verbal within the Panzerdivision. Balck made his decision for the next day during the evening and he gave the necessary orders verbally to his regimental commanders on the battlefield; then he returned to his main headquarters and discussed his intention with the Chief of Staff of the 48th Panzerkorps over the phone. If approval was obtained, the regiments were sent a wireless message: 'No change', and all the moves were carried out according

von Mellenthin (cont'd): to the plan. If there were fundamental changes, the Division Commander visited all of his regiments during the night and gave the necessary orders, again verbally. Divisional operations were conducted from the forward position on the battlefield. The Divisional Commander had his place with the group which was to make the main effort (*Schwerpunkt*). He visited the regiments several times a day. The divisional headquarters was somewhat further back and did not change its location during operations. There, information was collected and collated, supplies were handled, and reinforcements sent on their way.

In conclusion of this chapter, I am giving my first impressions of Russian tactics as emerged during the fighting on the Chir. Practically every Russian attack was preceded by large-scale infiltrations--by an 'oozing through' of small units and individual men. In this kind of warfare--the infiltration--the Russians have not yet found their masters. However much the outlying areas were kept under observation, the Russians were suddenly there in the very midst of our position and nobody had seen them come, nor did anybody know when they had come. In the least likely places, where the going was incredibly difficult, there they were, dug in, and all in considerable strength. True, it was not difficult for individual men to seep through, considering that our lines were but thinly manned and strong points few and far between and every division sector was usually more than 12 miles broad. But the amazing fact was that in spite of everybody being alert and wide awake through the whole night, the next morning entire Russian units were sure to be found far behind our front line, complete with equipment and ammunition, and well dug in. These infiltrations were carried out with incredible skill, almost noiselessly and without a shot being fired. There is only one remedy against them: strongly manned lines, well organized in depth and continuously patrolled by men wide awake and alert, and--the most important of all--sufficient local reserves ready at a moment's notice to go into action and throw the intruders out. Another characteristically Russian principle is the forming of bridgeheads everywhere and at any time to serve as bases for later advances. Bridgeheads in the hands of Russians are a grave danger, indeed. It is quite wrong to postpone their elimination. Russian bridgeheads, however small and harmless they may appear are bound to grow into formidable danger points in a very brief time and

von Mellenthin (cont'd): soon become insuperable strong points. A Russian bridgehead occupied by a company in the evening is sure to be occupied by at least a regiment the following morning, and during the night will become a formidable fortress well equipped with heavy weapons and everything necessary to make it almost impregnable. No artillery fire, however violent and well concentrated, will wipe out a Russian bridgehead, which has grown overnight. Nothing less than a well-planned attack will avail. There is only one sure remedy which must become a principle: If a bridgehead is forming or an advanced position is being established by the Russians, attack, attack at once, attack strongly. Hesitation will always be fatal. A delay of an hour may mean frustration, a delay of a few hours does mean frustration, a delay of a day may mean a major catastrophe. Resolute, energetic, and immediate action means success.

Russian tactics are a queer mixture; in spite of their brilliance at infiltration and their exceptional mastery of field fortifications, the rigidity of Russian attacks was almost proverbial. The foolish repetition of attacks at the same spot, the rigidity of Russian artillery fire, and the selection of the terrain for the attack, betrayed a total lack of imagination and mental mobility. Our Wireless Intercept Service heard many times the frantic question: 'What are we to do now?' Only a few commanders of lower formations showed independent judgment when faced with unforeseen situations. On many occasions a successful attack, a breakthrough, or an accomplished encirclement was not exploited, simply because nobody saw it.

The Russian tank crews, particularly in the Motorized Corps, had hardly any training. This shortcoming was one of the essential reasons for the German victory on the 19th of December, when we came behind the Russian tanks. There was one exception to the general Russian clumsiness--the rapid and frequent exchange of units in the front line. Once a division was badly mauled, it disappeared overnight and reappeared fresh and strong at some other place a few days afterwards.

I think that is all I wanted to say about the Chir operation.

Pierre Sprey: Just to follow up on the point that Mr. Myers raised about moving at night and fighting during the day, General, let me ask you about the Russian side of that. You were talking about what masters of night infiltration the Russians were. Did you experience any night attacks, that is, did the Russians actually fight at night, or did they restrict themselves mostly to infiltration?

von Mellenthin: As a matter of fact, the Russians did not like night attacks. They preferred to march during the night and to infiltrate during the night, but fighting--the reason was because they could not rely on their soldiers at night. They were not independent fighting men, because they were a mass conducted by company leaders, and so on, but you could not rely on them at night alone.

Bill Lind: General, in the counterattacks you discussed, you emphasized how the attempt was always made to hit the Russian penetration in the flank or in the rear. In your view, what was the decisive point in the counterattack? Was it the destruction that was inflicted on the enemy by firepower or was it the disorganization and disruption of his cohesion that was caused by appearing suddenly from an unexpected direction?

von Mellenthin: The main point was to destroy the enemy. The Russian does not like to be attacked by surprise--then he panics. As soon as you have got a normal attack, well prepared, and he has the opportunity to dig in, and so on, you have no chance. The only chance you have with the Russian units is to attack them not from the front line but from the rear or from the flank, therefore, our aim was to attack the enemy by surprise and destroy him.

Bill Lind: Would you then say that the destruction was in effect a *denouement* in the tactical action, but that the actual decision, the point where he came apart, was where he was surprised?

von Mellenthin: The actual decision was to get him by surprise and destroy him.

Peter McDavitt: The one thing that is new is the ability we have now to lay both antitank and antipersonnel minefields at points on the battlefield, and had you had the option to use minefields that could be delivered by artillery,

McDavitt (cont'd): how would you have used them to best advantage to avoid these night penetrations, as opposed to when you are thinly spread out--can you cover flanks and cover openings with minefields?

von Mellenthin: At our position near Stalingrad, there were such confused positions. We didn't have mines at this time, but they would have helped us a lot. There is no doubt that we would have had a strong opposition with the aid of minefields. That would have been ideal, but we didn't have them at this time.

Bill Rennagel: Sir, you talked about achieving surprise and concentrating on the flank or in the rear against weakness. How did you acquire the necessary intelligence and then disseminate that down to your tactical commanders?

von Mellenthin: Our reconnaissance was done by the front line--the tank battalions in the front line, Panzergrenadiers--and Balck got the information together and made his decisions accordingly. But we didn't wait long, the reconnaissance had to be got quickly, very quickly, otherwise we would have lost our surprise.

David Keener: I'd like to follow up on the question that Bill Lind asked a few minutes ago, and that was 'What was the effective instrument of defeat--disruption or destruction of an enemy unit?' Now, you mentioned that destruction was the ultimate objective. The question is, is that because the Russians were very good at reorganizing and refitting? Could a broken unit, in your experience, be reformed and made effective very quickly by the Russians? Was that a Russian quality?

von Mellenthin: There is no doubt that the Russians succeeded in reorganizing their divisions and groups very quickly, and the only hope for us was not to disrupt them, but to destroy them. That was our only hope.

Tom Romanko: Sir, I was wondering about the attacks and whether or not the Soviets at that particular point in history used a great deal of mines, and if that was a factor in defining their flanks or their front. In the reconnaissance, could you find the heavier minefields or any minefields, and thereby define the flanks, or did you have to find the actual position?

von Mellenthin: You know, you are talking, in my opinion, about a situation where you have got a static defense line, but at Stalingrad there was no static defense line--there was movement, a mobile defense point without any mines and these things, because it was '*ein Bewegungskrieg*'--it was a war of movement. Therefore, at the static point you are quite right, there you have got mines in front of you and also to protect your flanks, but in mobile warfare, you haven't got them.

Russel Stolfi: It really wasn't probably until--you know, this was a terrifically mobile phase that both sides were going through. The biggest minefields that were laid on the Eastern Front were laid by the Soviets later, as it turned out, before July of 1943, in the defensive preparations for the Kursk battles. At that time, during the summer of 1943, they laid approximately 450,000 mines for the defense of Kursk. Now, that was the culmination and the most mines laid in any single operation on the Eastern Front, but as the General said, that was very much a static defensive position, of course, that the Soviets had set in. Now those minefields, of course, gave the Germans fits during the Kursk battle.

Bill Lind: We see in the defense of the Don, what we might see as an analogy to NATO forward defense, that is to say, the corps far forward trying to hold a line without much in reserve. Could you comment on what lessons you would see from those battles that might be applied to that forward defense situation in NATO today?

von Mellenthin: You know, my consequences for the future NATO are: avoid by all means a static defense line, because a static defense line has got terrible weakness and, as a matter of fact, can be broken through everywhere. The only thing, in my opinion, is mobile defense line. That means that you do not hold by all means one spot but be pragmatic, flexible--go a few kilometers further back and from this little vista of only a few miles then comes a counterattack by tanks and units with independent leaders. That is important--you can't wait until the division makes an order. You have company or battalion leaders to make up their minds themselves. Have always resolved, you can't secure a front line all over, but you must have tactical reserves behind you who are able to counterattack immediately.

John Boyd: General, on your comments relative to the destruction of the forces, are you talking about every element or are you talking about their organic whole? Are you taking any prisoners or are you destroying them as individuals, annihilating them, killing them? I am talking about whether you are talking about your battle of the Chir or are you talking about your operations in general.

von Mellenthin: I am talking about the battle of the Chir. That means that . . .

John Boyd: I'm referring to your notion, destruction of the forces.

von Mellenthin: You know, you will see it when I describe our battles at Zhitomir, and so on. You see, always the aim of our tank corps was not to destroy the single man, but to destroy the whole unit.

* * *

Pierre Sprey: When we broke for lunch, there was a whole stack of questions waiting to be answered, and I propose we simply go right back to those questions. We were just on the subject of some applications of these Chir River battles and their tactics to the NATO situation. So let's go right back to that subject.

Kenneth Estes: You talked, General, about the various night movements in this process of counterattacks in a two-week period by the 11th Division. My question is who did the traffic control and the route reconnaissance that was necessary for all of these regiments and battalions to be moving around? Was this left to the battalions themselves to find their own way or were there other units that somehow carried out this function of guiding them to their appropriate positions in the night?

von Mellenthin: We had at every division a so-called Police Traffic Company which was responsible for leading the troops to the various places. It was their responsibility.

Pierre Sprey: And you provided that division-level unit to the regiments when they needed it?

von Mellenthin: Yes, when they needed it.

Pierre Sprey: Let me add one comment to that. At this time on the Russian front, the armored reconnaissance units were in the process of being dissolved. If you will recall in the campaign into France, they were extremely important in greatly speeding up movement. At this point in the Russian campaign, they were starting to run out of vehicles. They weren't being dissolved because they weren't useful, and this came out very clearly in the interviews with General Balck, too. They were being dissolved because of total lack of production of their equipment, and since there was no equipment with which to fit them out--no more armored cars or light tanks, or whatever they were using. Many of the commanders on the Eastern Front just kind of let the units run down, or just eliminated them and then provided for the same function for their reconnaissance and their armored reconnaissance, just on an *ad hoc* basis, just out of their own resources. But it was not because of a lack of belief in the usefulness of armored reconnaissance, but simply because they weren't being resupplied with the necessary equipment.

Bill Lind: If I can follow up with a couple of questions on reconnaissance. In the German system, as I understand it, you tried to have the main units be very responsive to the results of reconnaissance. Now, you described when you were working for General Balck your system where he would issue orders in the evening for the next day. Would you often get or attempt to get reconnaissance reports that would, say, come in the next morning, that would indicate a change in the situation, and if that happened, what would you do?

von Mellenthin: If there had been drastic changes in the position, certainly the commanders of regiments, and so on, would have been informed by radio or by direct contact. Telephone communications were not normal. We had no wire because we hadn't time for this in the mobile warfare.

Bill Lind: Would the reconnaissance reports have come in to General Balck and then the orders gone out, or would, for example, a battalion or even a regiment have found through its own reconnaissance certain opportunities and automatically taken advantage of those, and then, perhaps, told General Balck. so he could send still further forces in behind them?

von Mellenthin: Definitely, every troop would react immediately on the reconnaissance events, but they had to report it back to Balck.

Bill Lind: But they would not wait for orders?

von Mellenthin: No, they would react immediately.

Russel Stolfi: Something that I think would be worth while considering, and maybe now that we have a definite historical case which exists, which is a set of defensive battles on the Chir River. Behind that river the Germans, specifically, the 48th Panzerkorps, had two infantry divisions and an armored division and had a general, almost philosophical way in which they could have approached defending that line. They could have taken each one of those divisions and concentrated all of the resources forward on a single line and hoped to hold the Soviets in some ways, and yet, as I recall, that in the Chir River battles, the Germans did not go into a linear defense with all of the forces on the Chir River. Now, they selected another form of defense and, perhaps, that can be described as concerns some kind of general principle involved, where the less mobile forces were put in a fairly thin, strong-point line, but there was a decisive mobile force which was kept back, which was probably roughly half the strength of the entire force. So if there were a front, instead of all the forces being on line, probably not more than half of the forces were on line, and at least the other half were back. Now, perhaps, General von Mellenthin can dilate in some detail why that kind of a defense was used rather than a pure linear defense.

von Mellenthin: We had a front line of about 40 kilometers and we couldn't have the whole line defended by all troops, therefore, we had to have at least the 11th Panzerdivision back of all of them to danger positions--where the danger was coming--either on the left side, in the middle, or on the right side--and we always concentrated the tank divisions together. We didn't put three tanks on the left side, 20 tanks in the middle, and 15 on the right side. We kept them together and put them in one stroke at the danger point.

Russel Stolfi: Let me just pursue this slightly further. What do you think would have happened or might have happened, if you had taken the 11th Panzerdivision and stuck it up on the line someplace? What do you sense would have happened if you had stuck it on the line in some kind of a linear array?

von Mellenthin: There is no doubt for me, the Russians would have broken through our line and would have gone to Rostov.

Pierre Sprey: Excuse me, General, if I could follow up just a little on that. Could you possibly describe for us what you mean by a line. We have many different conceptions. Some would think of it as a strong point where the decision in the case of a breakthrough attack is attempted on the line itself, preventing a penetration, and others would see it as a much looser formation having very different functions. Could you, perhaps, tell us what a line was under those circumstances, what its function was, and where the decision was expected in the event of a breakthrough attack?

von Mellenthin: You know, in the defense it's the same as in the attack, you must have in your defense also a *Schwerpunkt*, that means a place where you think there is the most dangerous point for the enemy to come through. At this place you have to concentrate all of your artillery fire, all of your antitank guns, and so on. A defense without a *Schwerpunkt* is like a man without a character. You have to be clear-cut in your decisions--where is the danger point, where is the danger?--and there you put most of your forces. You have to put all of your artillery fire, and so on, on this one spot.

Pierre Sprey: But that spot is not necessarily all the way forward. That spot may be further back.

von Mellenthin: Yes.

Chuck Myers: Let me follow up on that. Yesterday some comments came up and we had some discussion with you regarding defense and, let's say, countermoves or counterattacks, where I was left with the impression--correct me if I'm wrong--that maybe we shouldn't think of defense in a pure sense--whether you're talking about linear, whether you're talking about mobile, whether you're talking about active--maybe we should start thinking in terms of countermoves or counterattacks being more representative of a defense profile. Would you care to comment on that please?

von Mellenthin: You know, in such a huge area you can't defend everything, therefore, it is better to have a thin line and have parts or most of your troops behind

von Mellenthin (cont'd): to be in the position to counterattack where the danger is coming, because the area is too big to concentrate, you have only a thin line in front, and behind you have forces able to counterattack, if necessary.

Bill Lind: General, in the lexicon of the *Wehrmacht* there were three different words for what we have called "counterattack": *Gegenangriff*, *Gegenschlag*, or counterstroke, and *Gegenstoss*, or counterpunch. Could you describe to us the differences between these three?

von Mellenthin: The last one, *Gegenstoss*, is done by forces of a battalion or a regiment, that is number 1. *Gegenschlag* is a little bit stronger in the area of a battalion and regiment, and counterattack (*Gegenangriff*) is done by the division by at least one regiment with additional tanks.

Bill Lind: Which of these three things are most important tactically in your battles on the Chir? Was it generally *Gegenangriff* you were launching, or were you thinking more in terms usually of *Gegenstoss* and *Gegenschlag*?

von Mellenthin: The main fire brigade for us was the 11th Panzerdivision who we used for *Gegenangriff*.

Bill Lind: In the American concept of counterattack, counterattack is thought of as having as its main purpose restoring a terrain situation where the opponent has seized some terrain, and you are trying to push him back out of it, very often by counterattacking frontally, and the object is to restore the line. Was that the German concept of counterattack also, or did you have a different objective?

von Mellenthin: Yes, it was the same. The purpose was to regain our front line which was lost.

Bill Lind: And that was equally true with *Gegenschlag* as with *Gegenstoss*.

Pierre Sprey: I think in yesterday's conversations, some other interesting points came up that bear on the NATO questions and the forward defense question. We were talking about the fact that there's a limited amount of room for withdrawals, particularly, withdrawals at the strategic level, because of the narrow depth of Germany. And the General was talking about, well, if you don't have enough room in back, you know there's quite a lot of room in front, and if you would care to address that, General.

von Mellenthin: Here, I come to our Eastern Front experience applications. I will give a short basic presentation. In the beginning I have to stress that in comparing the Eastern Front experiences of World War II with possible situations of a Warsaw Pact aggression against NATO Forces in Middle Europe, the following points should be considered: (a) The whole situation is basically different, although single experiences from World War II can be applied as principles today. (b) Why is the whole situation basically different? The geographical conditions today: There is no space available. The frontier of the Warsaw Pact area is only approximately 100 miles away from the Rhine. In World War II, Manstein could generously withdraw his troops from the Caucasus and Stalingrad area of a few hundred miles according to plan and launch a great successful counteroffensive in the Kharkov area. NATO cannot afford to give up space on a large scale.

Today, the war has to be conducted in our own country. Psychological and other imponderable substances have to be put into account; they did not matter in the years 1942/1944. Today we have a densely populated and highly industrialized area which will become the field of battle; there is no space for a generous free tank battle. The defense plan of the NATO strategy is based on those principles: conventional, tactical nuclear, strategic nuclear. The conception of the NATO Plan can only function if all three elements are included. It is not possible to have only an isolated plan for conventional defensive warfare. This is a new factor and represents, in comparison with World War II, a new category of military planning. On the other hand, the nuclear element of the strategy--even the start of the smallest tactical nuclear weapon--depends on special political decisions. For this reason, the military leadership is compelled to provide time for the political leadership to make their decision. Also, for this reason, it is not possible to plan withdrawals on a large scale, which could influence political decisions too quickly.

With regard to the lack of space in the depth of our operations, we should consider that the area of France is not at disposal *à priori*. We need for this important point also a political decision. But even then a well-prepared logistical supply basis is missing in the area. (c) On the other hand, there are

von Mellenthin (cont'd): tactical lessons, which can unhesitantly be taken over from our experiences of World War II, for instance:

- The knowledge that inferiority of the defense can be compensated to a great extent by flexible leadership and high mobility of the troops.
- The necessity that every unit--from platoon to brigade--has to think and act in the conception of the task of next higher unit.
- The experience that the attack of superior armored forces can be slowed down and split by mobile defense and energetic counterthrusts of even smaller tank units.
- The necessity to have reserves at disposal for counter-attacks. In order to have reserves available for Central Europe, an early political decision is necessary for getting such reserves in time (especially from the United States, the United Kingdom, and Canada).

I am now coming to detailed questions of current applications, but before I come to the first reply of the current applications, I would like to finish our situation at Stalingrad. [Time did not permit General von Mellenthin to present the detailed questions of current applications to NATO at the Conference; however, these are presented on pages 151 through 153.]

_____: * Before you do that, may I raise a point here that was touched on earlier relative to reconnaissance and intelligence? Yesterday, I don't remember who raised the question, it might have been you, Pierre, the question was raised, and I think it is informative for this audience, regarding your best means of intelligence and how you could react to it. Remember, we talked about various means of intelligence and reconnaissance? I think it would be very informative for these people here today to bring out, because we were talking about that earlier.

von Mellenthin: You know, here I am speaking as a former G2. I was G2 with Rommel for quite a time, and there my best information I got from the radio--radio intercept. I remember, we had in 1941 to withdraw from Tobruk about 500 miles to the west in the area of Agedabia, and at Agedabia I got the picture by my *Horch*** company, that told me that the whole enemy strength had been dispersed from the Egyptian frontier over Tobruk to Cyrenaica to Agedabia.

*Blank indicates speaker was not identified.

**Radio Intercept Company.

von Mellenthin (cont'd): the picture was that in front of us we had only two divisions of the Eighth Army. I showed this picture to Rommel, and he immediately reacted that is our best chance to counterattack, because three or four weeks later the whole weight of the Eighth Army was against us, but now at this time in the Spring of 1942, there was a chance to counterattack, and Rommel immediately after I gave him this picture reacted and said let's make a counterattack, and let's at least recapture the Cyrenaica. And he was very successful. We captured Benghazi and then we went up to the Ghaza position. It only shows you how important such G2 reports to the Army leader can be.

Pierre Sprey: On that subject, I'd like to ask whether you found there was a great difference in the quality of the radio intercept units that you had in Africa versus the quality of the radio intercept companies that you had in Russia?

von Mellenthin: Fortunately, for us, there was not much difference. I could give Rommel an exact picture of the enemy position thanks to our radio information, and in Russia--I will tell you later about my experience in Russia. We also in Russia got very good clear-cut information.

Pierre Sprey: And one other question on that subject. Since you served under some of the most important commanders in the German Army, as Chief of Staff, could you give us an impression of the difference between them in their use of radio intelligence? Did Rommel use radio intelligence in just the same way as Balck or as Model, or was there a great difference in the way they employed this information?

von Mellenthin: I had to be very, very exact and careful with Rommel, because Rommel reacted sometimes too fast, therefore, I had to be very, very careful that I gave him the right picture, whereas Balck and Model were more moderate and thought it over and didn't react so quickly.

Fred Bunn: What was the nature of the radio information that you got?

von Mellenthin: Firstly, the exact position of the headquarters of divisions, corps, and army. That is number one, number two, occasionally information about movement--about units from A to B, and so on. But before a great attack, there was complete silence, and we couldn't get any information.

Bill Lind: General, in the decisions made by Rommel and by Balck, how much of their decision was based on a very, I would say, mechanical use of the intelligence data, compared to how much on the basis of a larger picture of war and sort of an intuition--*Spitzengefühl*?

von Mellenthin: It depends on the the position of the battle. Before a battle or attack was started, we had time to get very accurate pictures from our various reconnaissance units--Air Force, ground forces, and so on. This was quite an exact picture we got, therefore, our commanders, Balck or Rommel, had time to get this picture. Whereas in a battle, especially in the desert--in the desert a tank battle is like a battle of warships. You don't have much time in desert warfare and there you had to react immediately on either Air Force information or reconnaissance information. That means, before a battle you could get a detailed picture; after the battle had started, then you had to act according to signal information from the air or from the ground or from the wireless.

_____: One last reference directed to the Chir River--in reference to antitank weapons, in this case. You were talking about the thin line that holds the forward positions in your mobile defense game. Hypothetically, should that thin line have very much in the way of antitank guns--today antitank missiles--or should they have only something sufficient to defend themselves. My interest here is, do you depend upon--should the front line have enough antitank weapons to attrit the forces as they break through, or should antitank weapons also be held in reserve just as your more mobile weapons, the tanks, are also held in reserve?

von Mellenthin: I would say definitely, both ways. You must always have something in reserve--tanks or antitanks--to put it into the danger spot. I would say both ways are necessary.

_____: The front line troops must also have antitank guns.

von Mellenthin: Yes.

Pierre Sprey: I think on that, let me just add a couple of amplifying points. One is that you have to remember that in the German Army organization, antitank

Sprey (cont'd): was not some subdivision of the infantry, it was a separate combat arm, and a Panzerdivision, you know, consisted of armor, infantry, anti-tank as a separate arm, and, of course, artillery. A very different concept in our Army, and so because of that idea of balancing all of those arms, or combining all of those arms, you would very normally, obviously, have antitank also in reserve. If you had the others in reserve, you'd have antitank too.

Russel Stolfi: The question, perhaps, we could clarify by saying if there were a scarcity of antitank weapons, which would be the higher priority--to have some in reserve or to have them spread out along the front line?

von Mellenthin: Definitely, to have them in reserve, not to disperse them.

Pierre Sprey: Let me make one other comment in line with this idea of antitank as a separate arm, and that is, under no circumstances can you equate today's antitank missiles as constituting such a separate arm in the same sense that straightforward antitank guns, most of which were towed, constituted an arm in the German army. If you stop and think about it, you'll see that with the very slow rate of fire of the current antitank missiles, they couldn't possibly do the same thing as antitank guns did in that tactical scheme.

Russel Stolfi: Pierre, I think maybe I can make a suggestion that may be helpful, although it may be jumping out of a certain sequence, but General von Mellenthin, when you moved back to the Zhitomir area and then further to the west on the other side of Tarnopol, where you had the Eighth Panzerdivision that you took over at one time, you had a major, very heavy defensive battle in 1944, where you did a lot of planning, specifically on these pack or these antitank fronts. Now, is it possible that you can remember some of the details in the antitank fronts that you set up, specifically, I recall in your book you talked in great detail about the antitank defenses and how Balck made the decision to attempt to take those antitank resources and keep a lot of them back. Do you remember some of those details?

von Mellenthin: Yes, definitely we engaged only, I would say, only one-third of our antitanks and kept two-thirds in reserve to put them in where there was a breakthrough.

Russel Stolfi: Do you remember a concept of organizing antitank guns, not just in a sense of either a section of guns with two guns, but actually groups of, maybe, 10, 12, 15, 30 guns operating together?

von Mellenthin: Yes, as I remember, we had always grouped together not under 10, about 15 to 20 antitank guns.

Russel Stolfi: That's a most interesting concept. In other words, the fighting had got so tough by that time, there were so many Soviet tanks, that to survive you didn't put out a 180 tank gun or a section of two guns, one supporting the other, or something like that, to survive, you'd operate in groups, as the General said, perhaps 15 or 20 antitank guns in a mass or some kind of a bloc, and hopefully, they could survive, as well as taking those blocs of guns like that, and keeping them back someplace where the defensive *Schwerpunkt* was.

Peter McDavitt: What rule of thumb was used to disengage in these mobile operations, in other words, it's one thing to have enough force there, but at what point--what rule of thumb did the commanders use to know when to pull back and try to reform or regroup?

von Mellenthin: That is a difficult question. It depends on the position, but on the Chir River we definitely had the mission to keep our line, and if part of the line was lost, we had to regain it--not to give up, to regain.

Russel Stolfi: General, from your experience, which is preferable from the defenders' standpoint--a situation where you must hold the line or a situation where you can be flexible and focus more on destroying the enemy's forces?

von Mellenthin: Definitely, we had bad experiences with our stubborn holding of lines. Our High Command, Hitler, did not give in one step and sacrificed division after division for this purpose, which is stupid nonsense. The only answer is a flexible defense--the only answer.

Bill Lind: In that context, referring to your remarks about NATO, because of the lack of depth, some argue that we cannot undertake great counterattacks, but do you feel it is necessary to take up a defense where you only stand in front of the opponent's attacks, or would you think there would be enough depth if not for *Gegenangriff*, for *Gegenschlag* and *Gegenstoss* tactics?

von Mellenthin: You know, I definitely feel that in the NATO case, a flexible defense is necessary, but a counterattack has to follow up to regain the area lost.

Russel Stolfi: But you would not feel that the depth is so shallow that you should just stand in front of the opposing attacks?

von Mellenthin: No, on the contrary. You know, it is our advantage when we bring the Russian out of concept, when we confuse him. The Russian does not-- he is a stubborn man--he does not like new positions. When we lose a few kilometers, then he does not know what to do and we have the possibility to regain the upper hand by attacking his flanks and regaining the position. That means flexibility--flexibility for every leader, or for every subleader--flexibility, mobile defense.

Andrew Hamilton: What role does mass play in all of this, that is, given the objective of restoring the line through a counterattack, did you ever think in terms of ratios of forces or guns? How did you determine the requirements to make a successful counterattack?

von Mellenthin: You know, nobody should wait. It should start with the top leader, the platoon leader who has got a small area and has control and if he sees there is something wrong, he has to have his last move counterattack, with the last move. It depends, higher formations have to wait a little bit to collect and to have an attractive counterattack.

Peter McDavitt: In that connection, though, General, what constitutes sufficient mass to make an attractive counterattack? Obviously it is relative to the situation, but did you have rules of thumb for making those decisions?

von Mellenthin: You must know that we fought in Russia, one German infantry man against nine Russians. There we were quite balanced, we were all right. As it became a little bit more, 20 against 1, then we couldn't do it. But it is also a matter of the leader of the group who is attacking. He must have a feeling "Now I can do it", or "I must wait for my regiment to make contact". What I try to express always and ever again, make the subleaders independent leaders, so that they can make their own decisions, the Company leader, the Battalion leader, and so on.

_____: General, would it be wrong to draw a conclusion, listening to these comments on the defense where you have a very strong emphasis on the counter-attack or the countermove, whichever level it may be at, why, I am left with the distinct impression that when you talk about a line, you are tying in the countermoves relative to that position or line, as it may be, that in a sense that line is nothing more than a trip wire in order to lay in your counter-attack, or counterstroke, whatever it may be, or combinations thereof. Would that be a correct or incorrect impression?

von Mellenthin: Definitely the line is not the important thing. The important thing is the area. You are not someone bound to a line.

_____: So in that sense, that wouldn't bother you to say that the line, in a sense, acts as a trip wire in order to make the countermove? Would that be appropriate?

von Mellenthin: That is right.

_____: Just deducing from what you are saying, sir, you keep saying over and over and over again, regardless of what our analysts say in our attempt to quantify things down, we have all kinds of rules of thumb. If they lose more than 50 percent of their forces, they will probably stop the attack. If the force ratio is 5 to 1 or 7 to 1, they will probably be expected to attack, and if it . . . It seems to me that what you have been saying the whole time is that having the people along the seam with the smarts and brains to recognize leadership and take advantage of whatever the situation is, is a hell of a lot more important than any analysis.

von Mellenthin: Exactly.

_____: The next thing I wanted to talk about was the air situation. When you talked about the impact that air had either in Africa or in the Stalingrad area, particularly with respect to the amount of disruption, if there was any, on the movements that you were able to make . . .

von Mellenthin: To start with the last question, the Russian Air Force more or less never interfered during our night movements. During the day, they, especially at Kursk and later at the Dnieper, they could disturb us. But they never made a decisive impression on us--the Air Force. I may say, in a modest way of the German Air Force--the German Air Force was of great assistance to us, especially at the Kursk battle, but also here, in contrast to the Normandy battle, where the Allied Air Force was the decisive factor, on the Russian front, the Air Forces, both Air Forces, didn't have great influence.

Russel Stolfi: Let me perhaps make a quick comment that might be helpful here because I have heard the General say it several times, and I think that maybe there is something important here for his impression for you. At the Kursk battles, the Air Force was important, the Luftwaffe was important, and the Red Air Force was important in reverse. Now, what did you buy or what did you get from the Air Force? Did you get some kind of interdiction behind the front that you felt gave you some kind of a tangible advantage, or did you buy from the Air Force some kind of close air support where you could see tanks being catastrophically destroyed in front of you? What do you think was the effective--what with the Air Force impressed you the most?

von Mellenthin: The most we were impressed by the attack of the Stukas against the Russian tanks, at Kursk. They had not a decisive, but an important influence on our battle at Kursk. The Stuka attacking tanks brought a great relief for the Army.

Pierre Sprey: Did you have experience in directly coordinating these attacks of the Stuka?

von Mellenthin: I hadn't myself, but we had at every division a so-called *Flivo**, that means the Air Force Liaison Officer, who had the responsibility

**Flugzeug Verbindungs Offizier.*

von Mellenthin (cont'd): to keep the Air Force and the Army informed about what was going on. Of course, we had a very good relation, and I am of the opinion a *Flivo*, an Air Liaison Officer, must be a pilot who knows about the Army. He must be well informed about the movement and so on, of the Army, the Air Liaison Officer.

_____: If you had your choice, of being attacked when you were making those moves that you said were so important to your effectiveness, the moves that you were making in the night, that were so important to your effectiveness in the daytime, would you rather the Russians had attacked you during--could they have caused you more trouble attacking you at nights when you were making those moves than, say, after you had made a breakthrough and used air to attack the flanks? What would have been worse for you? What would have hurt you more?

von Mellenthin: I would say the air attack at night.

Russel Stolfi: General, what did you hope that the Stukas would do for you? Was it merely a matter of their destroying a certain number of enemy tanks, or were you seeking that they would create for you certain opportunities for movement?

von Mellenthin: I would prefer that they created for me certain movements so that I could do certain movements.

Pierre Sprey: Did they create such opportunities for you?

von Mellenthin: I can't remember.

Pierre Sprey: One of the things you have to remember is the number of airplanes that we are talking about here. There were on the entire Eastern Front only two squadrons with Stukas that were capable of killing tanks. Only two squadrons of JU-87G's that actually had the 37-mm antitank cannon mounted. So, when you look at what an ocean the Eastern Front was, you can see that was hardly a noticeable drop in the bucket.

von Mellenthin: Anyhow, we had to conduct the war as a poor man. We had not much.

_____ : We have the same problem.

_____ : Except we do it with a lot of money.

_____ : Then we're still poor men.

Pierre Sprey: Yes, General Casey.

General Casey: Did you ever suffer a night attack by enemy air?

von Mellenthin: No. Their night bombers operated singly.

General Casey: Thank you, General. I was wondering what your thoughts would be on helicopters with semisophisticated missiles like the TOW or with an anti-tank gun operating at night? Have you thought about that, sir?

von Mellenthin: I hope I have understood you correctly. You mean the use of helicopter formations?

General Casey: At night.

von Mellenthin: At night, I don't think much about them, but I am convinced that in the future, helicopter formations will belong, at least to our tank corps. We must have in every tank corps, say, at least one helicopter battalion to be directed against masses of Russian tanks.

Pierre Sprey: I think it is a good time to take a break now.

Pierre Sprey: We had a few questions left unanswered just when we broke up for the break. Why don't we pick up with those questions.

Jerry Balda: Sir, in view of the amount of movement the German forces did, what percentage of your losses were due to equipment malfunction rather than combat damage, and what were the best procedures that you used to put that equipment back into the battle?

von Mellenthin: We had our installations companies just next to the Panzerkorps, and so on, and the trucks or tanks which were out of order could be repaired at night. The next morning they were available. It was very handy. And I would say the major losses were about 10 percent, not more.

Pierre Sprey: That is 10 percent of all your losses were due to mechanical failures?

von Mellenthin: Yes.

Russel Stolfi: Excuse me, General, if I can ask, perhaps a somewhat complex question. The Russians clearly had the advantage over you in mass. They had many more troops, tanks, etc., as they will have in relation to NATO. Do you feel that your advantages that enabled you often to defeat their numerically superior forces were a factor of the firepower advantages from being on the defense, from being able to shoot from defilade positions behind hills and so forth, or do you feel that your main advantage was one of tempo, that you were able to maintain a higher tempo than they could adjust to?

von Mellenthin: I would reply very short: our advantage was the personalities of our leaders and underleaders in comparison with the Russians. That was our advantage, and in my modest opinion that is the same advantage we have got today on the Western side.

Bill Rennagel: General, in mobile operations in maintaining a fast tempo, how does one . . . well, you talked a little bit about command and control, but more importantly, what are the coordination mechanisms that the staff and commander have to resolve to keep the *Schwerpunkt* going in the direction and to the objectives that you want? Can you sort of just generalize about those kinds of control mechanisms?

von Mellenthin: You know, in a tank division there are no written orders. There are only verbal orders and the commander of the division can have assistant officers with radio connection to him at the place of the various regiments which inform him about the movement. This keeps him informed, by radio.

Pierre Sprey: I would like to add a question to that. What would be your impression of the effect on operations and the effect on the speed of your divisions and the mobility of your divisions if you had to transmit all your orders by teletype--perhaps via a computer?

von Mellenthin: Forget about it.

Steven Canby: Today, a lot of the questions have been on the theme of command and control and, particularly, the command and control of the Panzerdivision. In today's world, of course, we are talking about lots fancier command and control, but we also have a lot of jamming these days, too. I guess my two-point question is, what is the effect of jamming? For instance, you always have your commanders up near the front observing the front. What would happen if the German radio system was completely blanked out so that you couldn't communicate by radio? How would that slow down the whole operation of the Panzer system?

von Mellenthin: You know, there I would take a commander aircraft--have connection with a commander aircraft. I remember Rommel was leading quite a lot of this movement through an aircraft, we called it *Storch*. I don't know if you understand what I mean. Anyway, he was flying over in his *Storch*, came down, and told the people what to do, and went away.

Steven Canby: But what about within say a brigade or division? You always mention that each of the subleaders is supposed to be independent, but if the leaders couldn't communicate to each other by the radio, would the system break down or could it still function?

von Mellenthin: Then the subleader must be educated as an independent leader and must act on his own. He must not wait for any order from higher up, but has to do it on his own, if there is no order.

Steven Canby: Then the other question I wanted to ask was, the effect of all this. Right now we are talking about, say, in the long-term defense program, we are talking about buying a lot of communications equipment in NATO and we are talking about fusion centers where all this information is brought back into higher commanders. How does that affect the operation of the German system in World War II or as practiced today? Is this communications useful to how the commander operates, or not?

von Mellenthin: I am not quite well enough informed on today's communications system, but I can only say one thing. In a difficult position, simplicity is important. As simple as possible on the communication method--not complicated, then you are lost.

Major Janay: I would like you to comment, sir, if you would, on training and, in particular, your equipment in cold-weather operations. In studying the experiences of the German campaigns in Russia, it looks like you have really learned the hard way. Could you please talk about that?

von Mellenthin: You know, the first thing is that every soldier has to get along with every climate. We, as soldiers, were not asked what about the climate at Stalingrad with 30 and 40 degrees (Centigrade) below freezing. That is the first thing. The soldier has to overcome these difficulties. It doesn't matter what has happened. But it is vital for the administration to provide the equipment for these things. For North Africa we had to have lighter material; for the struggle in Russia we got, unfortunately much too late, our so-called winter equipment--much too late. During the first winter our troops had to fight in their normal dress which was completely insufficient. Therefore, it is a request not to the soldier but to the administration that the administration in time sends you the proper equipment--desert, winter cold, and so on.

Russel Stolfi: Pierre, could I make maybe one comment? I will only take a moment. Somebody had asked this question also, General, and I will keep it as simple as I can, and it is actually rather straightforward. You have emphasized here several times the importance of independent leadership and the ability to make independent decisions. Now, you made the statement a little while ago that you feel that that still is an advantage for us in the West, that our junior leaders can still make independent decisions. Now, I'll just make a comment. I don't know that that still necessarily holds for any one of a number of reasons. I think we talk about that, but whether, in fact, we do concentrate, for example, on attempting to extract independent decisions, I am not sure. Now, let me make this comment, or ask this question. With the kind of glut of sensors and detail that is appearing on the battlefield today, where, literally, let's say, a platoon leader, has all kinds of information coming in, wouldn't you sense that his ability and the abilities of other people to make independent decisions with all of that information coming in, there may almost be a philosophical situation where it is very difficult to do that. Now, what can be done somehow or other to maintain the junior leader's capability for making independent decisions?

von Mellenthin: You know, in my opinion that is the strength of the Western forces, that they have capable subleaders who can make up their minds in an intelligent, individual manner. Therefore, we should train our subleaders to act accordingly.

_____: Generally, it pays if you have a doctrine that is going to allow independent leadership. Is that right?

von Mellenthin: Vital here is that every leader--it doesn't matter if he is a platoon leader or the army leader--must act according to the mission he has got. The mission must be clear for the army leader to attack Kharkov, or the platoon to attack Height Number so and so. How he does it is his own decision. He can attack--the platoon leader--can attack the hill frontally, from the left, or from the right. That is his matter, but he has to capture the Height. That, I understand is the mission.

Russel Stolfi: General, we spoke earlier about the importance of military history in creating a sufficient understanding of military theory. Unfortunately, in the United States today we do not teach military history to any great degree in our military schools--*Kriegsakademie* or anywhere else. Would you be confident that junior officers and field-grade officers could make good independent decisions if they did not have a background in military history?

von Mellenthin: I must admit that it is a pity that you don't lecture war history. It is a pity because it, in my opinion, is one of the best means to develop good leadership and, therefore, a man with common sense--and I have got the feeling that we have got here all common sense--he will overcome this difficulty.

Fred Bunn: I have something that has been bothering me for several years now. I understand that in Northeastern Europe in tank combat that the range of combat, the range between the combatants was, on the average, about 700 meters and very little combat beyond 2 kilometers' range, and people are very interested in having tank guns that will kill at 3 kilometers and beyond today. I'm wondering, are there any factors that you see that would indicate we'd have long-range combat between tanks in the future?

von Mellenthin: In my opinion, it doesn't matter if you fight tanks on a range of 1,000 or 3,000 meters. The basic things remain unchanged.

Fred Bunn: Well, let me add one thing and rephrase my question. It seemed to me that line of sight limited you in your combat because of terrain, and I'm interested in knowing is there any point in making guns that will kill at 3 kilometers or 3-1/2?

von Mellenthin: Certainly it is quite an advantage to have far-reaching tanks, but you can't help, you have to come close to the enemy. Even if the tank has got the distance of 3,000 kilometers' gun range, we must come closer together and fight closer.

Pierre Sprey: Let me just add to that. The actual intervisibility distances in Europe have not changed one iota since World War II. However, the boogered results of the studies have changed a lot.

Russel Stolfi: General, the subject just came up, somewhat informally, of the various studies that we use as a basis for our determinations of what our doctrine should be. Today, it is the compelling fashion in this country that all of these studies must be quantitative. That if you cannot count something, it does not exist for the purpose of all of these studies. What would have been the effect on you in the *Wehrmacht* in World War II and in your development of doctrine if you could only deal with those things that you could count?

von Mellenthin: To make it simple, we wouldn't have won our *Blitzkriegs*.

Arthur Garrett: I would like to know three quick areas. One of them is associated with the individual comment concerning lines of sight. On obscuration, particularly in tank battles, my experience was that in many cases the smoke from HE, not just from smoke rounds, but from HE bars, was sufficient to obscure targets beyond our maximum range or less than the maximum range of our guns. I would like you to comment on that.

von Mellenthin: There is no doubt, the smoke is a very effective means of defense, also of attack. You can have a smoke screen to protect your flank for instance. Also, in the future I am positive that smoke should be used for all sorts of things. As Rommel said, in the desert, I need the Italians to make smoke and to make dust.

_____: . . . question of defensive positions and there are certain lines involved within our analytical community on how to assess suppression, and it goes anywhere from residual suppressive effects of the unit if suppressed by artillery. On a certain day there would be residual effects on subsequent battles. Others go toward suppression as the intensity of the combat--the number of rounds that fire, their size per hectare, and so forth. I don't quite go along with this. I believe that suppression is both proximity to the individual firing position and the intensity of it, and I would like to get your feelings for the major defensives where the Soviets fired a lot of artillery--if there were residual effects on the defenders.

Pierre Sprey: You mean residual effects several days later?

_____: Several days or several hours later, say, after the preparation--artillery preparation was lifted.

Russel Stolfi: That's the Soviets firing at the Germans, artillery effects, the Soviets firing at you folks, the artillery effects.

von Mellenthin: The Russians called their artillery the queen of the army, and I must admit we suffered a lot by Russian attacks and preparations from their artillery fire. They were very good in their artillery coordination and concentration. They had great influence on our infantry. We had heavy losses through the artillery.

Pierre Sprey: Were you able to develop tactics to counter the Russian artillery because of their rigidity?

von Mellenthin: Yes, we countered the heavy Russian artillery attacks by reconnaissance through our Observation Group.

Pierre Sprey: Through your observation--through your observation companies.

von Mellenthin: Every artillery regiment had an observation group. This observation group could give us exactly the position where the artillery was standing and we then were able to concentrate our own artillery to suppress their artillery fire--thanks to our own very good observation company.

_____: What were the effects of artillery fire on your tank units--on their effectiveness?

von Mellenthin: In contrast, infantry had heavy losses, tanks, not much, very few.

_____: Were they able to continue firing effectively?

von Mellenthin: The tanks could go through artillery fire without great losses.

_____: The other point is on mine fields. There are two types of breaching, or what we call two types of breaching. A deliberate breach and a hasty breach. The deliberate breach takes place without enemy fire on you; the hasty breach is where we are trying to get through it under fire, the immediate defensive positions. What did the German tank units use for breaching minefields?

von Mellenthin: When there was a big minefield and our tanks couldn't go through because of the many mines, they had to stop the attack and our engineer battalion came and cleared the passage.

_____: Did you also use smoke and artillery to cover that breach then?

von Mellenthin: Yes, on the flanks.

_____: How about immediately, right there in the minefield area? What protected the engineer units while they were attempting to clear the minefields? What protected them from the defenders' artillery fire and direct fire?

von Mellenthin: Our own artillery and also smoke. We used quite a lot of smoke.

John Sloan: I have a question related to the battle of Kursk. It doesn't look like you are probably going to get to talk about it, but you might recall that during the sort of high point of the battle of Kursk, the Panther Brigade that was attached to "Gross Deutschland" Division was forced to withdraw, to resupply,

John Sloan (cont'd): and it allowed the Soviets to escape from an encirclement. Of course, that leads to my question. Could you talk about the general problem of resupply of POL and ammunition of engaged units on the battlefield and the importance of that and, conversely, is it a practicality to try to sever that resupply? How soon would it put a unit effectively out of combat if it could be done?

von Mellenthin: It should be a rule that the division goes not back to the supply, but that the supply has to go to the troops. As far as I remember, Panzergrenadier Division "Gross Deutschland" did not go back, but the supplies came in the front line and assisted them. But I hope I will have a short time to talk about the Kursk battle a little bit later.

Russel Stolfi: General, I wonder if you could talk a little bit about target priorities. If you were facing a Soviet unit, among their different elements--tanks, infantry, artillery, engineers, and air defense--what was your order of priorities? Which did you try to destroy first to render them as ineffective as possible?

von Mellenthin: There was one rule: destroy the most dangerous. That depends on the position. Mostly the tanks are the most dangerous and therefore they have to be destroyed first, but it could also be that an artillery detachment is dangerous, then you have to go first to the artillery unit. You must also be flexible in these circumstances. There is no rule, it depends on the position of the battlefield.

Kenneth Estes: This is jumping ahead a little too much, perhaps. Can you describe the impact to the Panzertruppen in 1944 of seeing the first advanced Russian tanks on the battlefield--the JS2 series, for instance, the Stalin tanks--which were so difficult to penetrate frontally? Can you describe the effect this had on the attitude of the tank troops seeing these kinds of vehicles for the first time on the battlefield?

von Mellenthin: We very soon realized that this was a very dangerous tank but, as it always is in the life and in the war, if there is a new weapon, you find a new counterweapon. It is always the same, and we very soon were capable of destroying even such a heavy tank. There was no panic.

Russel Stolfi: We are kind of running out of time in certain ways. It might be interesting for the General to discuss another operation on the Eastern Front and in the brief time at least we could maybe get some more questions going also on the counterthrust. This would be Manstein's, I assume, great counterattack and this is March of 1943 at Kharkov, General von Mellenthin, is that correct?

von Mellenthin: This counterattack of Manstein in February '42/'43 was one of his greatest achievements. You must not forget we had to withdraw our armies from the Caucasus and from the Stalingrad area about 500 kilometers, and out of this withdrawal the enemy wanted to make a great new Stalingrad going via Kharkov to the Dnieper.

Russel Stolfi: Down to Zaporozhe to Dnepropetrovsk down in here so the German forces are back in here, there is a cauldron here in Stalingrad. Now there is still a large number of German forces 450 miles down here. German forces several hundred more miles down here. The Soviets are coming down now roughly through Kharkov down to Dnepropetrovsk, Zaporozhe to cut off all of these forces--not an army, but an army group, Army Group Don, Army Group A, down in the Caucasus.

von Mellenthin: On the 17th of February, Hitler had visited Manstein to demand the immediate recapture of Kharkov, and Manstein had explained that the farther the Russian masses advanced to the west and southwest, the more effective would be his counterstroke. He was drawing the Russians into a most dangerous pocket because Army Detachment Kempf was standing firm at Krasnograd thanks to the arrival of reinforcements including Panzergrenadier Division "Gross Deutschland". On the 21st of February, Army Detachment Hollidt and the 1st Panzerarmee were holding a strong point along the line of the Mius and to the northwest of Stalino. To the northwest of that town the 4th Panzerarmee stood ready to counterattack. The 48th Panzerkorps was on the right with the 6th, 11th, and 17th Panzerdivisions, and the S.S. Panzerkorps was on the left with Panzerdivision "Leibstandarte" and Panzerdivision "Das Reich".

On the 22nd of February, these five Panzerdivisions started their drive in a northwesterly direction. The move was a concentric one and carried out under strictly coordinated control. The 48th Corps moved forward to Barvenovka,

von Mellenthin (cont'd): and its rapid advance came as a complete surprise to the Soviets. In a few days, the 17th Panzerdivision on the right flank gained the Izyum-Protopnovka Sector on the Donetz River, while the S.S. Panzerkorps took Losovaya.

During this rapid advance, the Commander of the 4th Army, General Hoth, did not interfere much with our movements. The 48th Panzerkorps had its targets: destroy the enemy and reach the area east of Kharkov. That was enough. And each night I phoned the Chief of Staff of the 4th Panzerarmee, General Fangohr, and informed him about the progress made by our Corps, made my suggestions for our attacks and targets of the next day--villages about 30 miles further to the northwest. Normally these suggestions were approved.

The terrain was almost completely open, cut here and there by narrow brooks which were then completely frozen. It was an ideal Panzer terrain--the ground frozen, we had not to use roads. Russian columns streaming back to the north were visible at a distance of 8 to 12 miles and were taken under effective artillery fire at that range. Some Russian formations succeeded in escaping the trap, but the 1st Guard Army and Armored Group Popov suffered very heavy losses in men and equipment. By the 6th of March, several large Russian armored formations and one cavalry were completely cut off by the 4th Panzerarmee; 615 tanks were destroyed and more than 1,000 guns captured. The 48th Panzerkorps pressed forward to the east of Kharkov, and by the middle of March the line of the Donetz was firmly held, the gap to Army Group Center was closed, and the front again faced east.

Interesting are the following conclusions. The following points were evident in the counterstroke of the 4th Panzerarmee in February and March 1943:

- (1) High-level commanders did not restrict the moves of armored formations, but gave them long-range tasks.
- (2) Armored formations had no worries about their flanks because the High Command had a moderate infantry force available to take care of their flanks.

von Mellenthin (cont'd):

(3) All commanders of armored formations, including Panzerkorps, conducted operations not from the rear, but from the front.

(4) The attack came as a surprise regarding time and place.

It is interesting to see how the Russians reacted to this surprise attack. The Soviet soldier is temperamentally unstable; he is carried on by the herd instinct and is, therefore, not able to endure a sudden change from a triumphant advance to an enforced and precipitate withdrawal. During the counterattack, we witnessed scenes of almost unparalleled panic amongst the Russians, to the astonishment of those who had experienced the stubborn, almost fanatical resistance the Russians put up in well-planned and efficiently organized defense. It is true that the Russian can be superb in defense (as seen in the battle of Kursk) and reckless in mass attacks, but when faced by surprise and unforeseen situations, he is an easy prey to panic. Manstein proved in this operation that Russian mass attacks should be met by maneuver and not by a rigid defense. The weakness of the Russian lies in his inability to face surprise; there he is most vulnerable. Manstein also realized that his own strength lay in the superior training of his junior commanders and their capacity for independent action and leadership. Thus, he could afford to let his divisions withdraw for hundreds of miles, and then stage a smashing counterattack with the same divisions, which inflicted heavy blows on their startled and bewildered opponents.

Here, I comment at the end of this Kharkov battle can we compare or can we use the same movements today? As I mentioned before, we can't, we haven't got the room. But in spite of this, we should not have a static defense but should let the Russians come in for a few miles, a few kilometers, and attack them by surprise from the flank or from the rear. That is my opinion, also today the best thing, because the Russians are excellent defenders in a prepared battle, but they are weak against a surprise attack. That is my conclusion. And I come now to a chapter, the Kursk battle which just shows you what we shouldn't have done.

Pierre Sprey: Do we have any questions at this point?

_____ : One more question--on withdrawals. Was there any particular system within a barrier system, that is, minefields, road cratering, Air Force interdiction. Was there any particular means that stood out that you used in order to hold the Soviets back during your withdrawal operations?

von Mellenthin: I must tell you, no there were no minefields, there was little Air Force activity. This was a mobile withdrawal and a mobile counterattack with no interference of mines and all of those other things.

Russel Stolfi: Slightly later in the campaign, later in 1943 and 1944, they will eventually develop, of course, a systematic and tremendous policy of a scorched earth moving back, roughly after the Kursk battle. But in the mobile battle as at from Stalingrad back to Kharkov, no, just the mobile operations. Afterwards, then systematically, the Germans did things: pulling up the rail lines, cutting the ties, destroying the metal, so on and so forth, but not at this time--later, yes.

_____ : General, two questions concerning your campaigns in Russia. One, could you comment on your maps--how you got them and how good they were? And secondly, could you comment on your medical support?

von Mellenthin: Question number one, in our General Staff we had a department that was responsible for maps, a General Staff department responsible for maps, and I must take my hat off because we had always first-class maps. It did not matter if it was in the desert of North Africa, or if it was in the Caucasus, or somewhere else, we were always well equipped with maps--always. It was an excellent work of our General Staff Map Department.

The medical assistance was also fabulous. Up through the company, the battalion, and so on, we had first-class medical service all over--medical assistance. It couldn't be better.

Dave Opheim: I understand from reading a document by General Balck, that the Germans utilized mines in some of their defensive maneuvers against Russian armor onslaughts. Could you comment on whether you were there when those mines were used by the Germans? And what was the Russian reaction when encountering a minefield? In other words, did they bull through or did they take other tactics?

von Mellenthin: As I mentioned before, in the mobile warfare, we haven't had much to do with minefields, but at the Kursk battle we had to suffer severely by overcoming minefields, Russian minefields at Kursk. It was a great handicap for us. We ourselves, didn't use much mines on the withdrawal.

Dave Opheim: The book I read by General Balck commented on them. He said you had used them apparently.

Pierre Sprey: Those were mostly on the Western Front against the Americans is what Balck was talking about. There was some use in Poland late in the war by the Germans, but he was talking about use of dummy mines, and so on, against the Americans, particularly against Patton in and around Metz to Beaufort.

_____: I've sort of lost track, but it seems like you've been fighting now for six months or so.

Russel Stolfi: Here we started in November of 1942, and in November of 1942 we had been talking about the beginning of the Chir River battles and carried those through until about early February of 1943. What we were just talking about, the Kharkov battle, it's March of 1943. The Kursk battle would have been July of 1943.

_____: Okay, the distance from Stalingrad back to the part he just finished is about how many miles?

Russel Stolfi: This would be about 400 miles. If you went like this and came up like this, it would be 400 miles--425 miles.

_____: What I have been hearing is the German army is falling back, fighting fiercely, it has taken 6 months or so. I am trying to overlay this on NATO. Where we have been worrying about losing all of Germany within a couple of weeks, it has taken the Soviets 6 months to push them back. As I understand it, the Soviets at this point have a vastly numerical advantage over the Germans.

_____: It was the open terrain.

_____: And the Soviets are fighting on terrain that they know very well. Who's winning the war in this sequence? And what are the relevant sequences? Or how do you measure who is winning?

Pierre Sprey: First of all, you know, those aren't steady retreats. That's the first point. It's happening in great surges of which the most important single one was Manstein's decision to simply move back very suddenly. So really what has happened is that they have been holding relatively static for most of those months, and suddenly Manstein decides to make a quick withdrawal, let the Russians advance very rapidly and then put them in the bag. Obviously, the overall front was moving back and the Germans were losing. But what they had done was they had put a tremendous crimp in the Russians and had bought themselves, perhaps, who knows, 3 months', 6 months' time by putting that many Russians in the bag.

von Mellenthin: I am now coming to the Kursk battle. As I have explained to you, we succeeded through our counteroffensive to stabilize our front line on both sides of Kharkov, and there was a bulge north of Kharkov around the area of Kursk. And our Chief of General Staff suggested to Hitler to delete this Kursk cordon by an attack by an army group from the south and the other Army Group, Model, from the north. I, myself, was at the Headquarters in March 1943 and I, myself, suggested to General Zeitzler there is only one chance to settle this Kursk bulge--by attacking immediately, because now it means in February, March, the Russians were not prepared for everything. But unfortunately, Hitler decided to wait for the arrival of bigger materiel--Panzers, Panthers, Tigers, and so on--to make our attack stronger, with the result that we gave the Russians 3 months' time to prepare the area of Kursk as a kind of fortress with huge minefields, with enormous numbers of antitank guns, defense lines, and so on. And we put against this fortress the best tank formations we had. We had about 1,500 tanks on our south army group side and about 700 tanks on our north side. It was the greatest tank battle I have ever had, but it was a catastrophe.

D-Day was finally fixed for the 4th of July. Broadly speaking, the plan was very simple. The 4th Panzerarmee from the south and the 9th Army from the north were to advance towards each other and meet east of Kursk. The main thrust of the 4th Panzerarmee was to be delivered on both sides of Tomarovka with the 48th Panzerkorps on the left and the S.S. Panzerkorps on the right. The S.S. Panzerkorps had been given three Panzerdivisions. Army Detachment Kempf, with one Panzerkorps and two infantry commands was to advance from Belgorod in a north-easterly direction, thus acting as a flank cover for the main drive. In the

von Mellenthin (cont'd): 48th Panzerkorps we had the 3rd and 11th Panzerdivisions, and Panzergrenadier Division "Gross Deutschland". This was a very strong division with a special organization.

The terrain over which the advance was to take place was a far-flung plain broken by numerous valleys, small copses irregularly laid out villages, and some rivers and brooks. Of these, the Pena ran with a swift current between steep banks. The ground rose slightly to the north thus favoring the defender. Roads consisted of tracks through the sand and became impassable for all motor transports during rain.

There had been sufficient time--unfortunately too long-- to make thorough preparations for the attack. For weeks the infantry had been in the positions from which the attack was to be launched. From there they had reconnoitered all the details of the Russian defenses. Officers in command of the attacking troops, down to the company commanders, spent days in these positions in order to become acquainted with the ground and the enemy. No precautions were omitted. None of our Panzer men wore their black uniforms lest they give the show away. The fire plan and cooperation between artillery and infantry were carefully worked out. Air photos were available for every square yard of the Kursk salient, but though these photographs showed the depth and the size of the Russian positions, they did not reveal details or give any indication of the strength of their forces, for the Russians are masters of the art of camouflage. Inevitably their strength was considerably underestimated. The most conscientious steps were taken to ensure the closest cooperation between air and ground forces. No movement whatever was allowed by day. To assemble so large a number of tanks and motorized troops was a difficult matter. The more so as few suitable roads were available.

Contrary to the normal practice, we were not to attack at dawn, but in the middle of the afternoon. On the 4th of July, the weather was hot and sultry and there was a feeling of tension along the battle front. The morale of the attacking troops was of the highest; they were prepared to endure any losses and carry out every task given them. Unhappily they had been set the wrong tasks.

von Mellenthin (cont'd): The battle of Kursk began at 1500 hours on the 4th of July with an attack on the forward Russian lines, preceded by a short but sharp artillery preparation and air bombardment. On the front of the 48th Panzerkorps, these lines ran some 3 miles south of the village of Luchanino. Riflemen supported by assault guns and engineers penetrated the Russian forward lines that evening. During the night, the tanks were moved up and Panzergrenadier Division "Gross Deutschland" was ordered to advance the next morning between Ssyrgyz and Luchanino. The 3rd and 11th Panzerdivisions were to attack on the flanks of "Gross Deutschland", but as bad luck would have it, a violent cloudburst that night transformed the ground along the banks of the stream between Ssyrgyz and Sawidowka into a morass. This proved of the greatest advantage to the Russian second line to the north of the stream and immensely increased its already considerable defensive strength. On the second day of the attack, we met our first setback, and in spite of every effort, the troops were unable to penetrate the Russian line. "Gross Deutschland", assembling in dense formation, and with the swamp on its immediate front, was heavily shelled by Russian artillery. The engineers were unable to make suitable crossings, and many tanks fell victim to the Red Air Force. Even in the area taken by the German troops on the first day, Russians appeared from nowhere and the reconnaissance units of "Gross Deutschland" had to deal with them. Nor was it possible to cross the stream on the night of 5th/6th July. On the left flank, the attacks of the 3rd Panzerdivision against Sawidowka were as unsuccessful as those of "Gross Deutschland". On the 7th of July, the fourth day of "Citadel", we at last achieved some success. "Gross Deutschland" was able to break through on both sides of Ssyrgyz and the Russians withdrew to Gremutshy. The fleeing masses were caught by German artillery fire and suffered very heavy casualties. Our tanks gained momentum and wheeled to the northwest. But at Ssyrgyz that afternoon they were halted by strong defensive fire and Russian armor counterattacks. However, on the right wing we seemed within reach of victory. The Grenadier Regiment, "Gross Deutschland", was reported to have reached Werchopenje. On the right flank of "Gross Deutschland" a battalion group was formed to exploit this success. It consisted of the reconnaissance detachment and the assault gun detachment and was told to advance as far as Height 260.8 to the south of Nowosselowka. When this battle group reached Gremutshy, they found elements of the Grenadier

von Mellenthin (cont'd): Regiment in the village. The Grenadiers were under the illusion that they were in Nowosselowka and could not believe that they were only in Gremutshy. This can happen in every war--you think you are in another village but you are much further back. Thus the report of the so-called success of the Grenadiers was proved wrong; things like that happen in every war.

On the 8th of July, the battle group, consisting of the Reconnaissance Detachment and Assault Gun Detachment of "Gross Deutschland", advanced up the main road and reached Height 260.8. It then wheeled to the west to ease the advance of the divisional Panzer regiment and the Panzergrenadiers who bypassed Werchopenje on the east. This village was still held by considerable enemy forces and the Rifle Regiment attacked it from the south.

That afternoon, the battle group on the right of "Gross Deutschland" repulsed seven attacks by Russian armor and knocked out 21 T43's. The 48th Panzerkorps ordered the *Schwerpunkt* of "Gross Deutschland" to wheel westward and bring some help to the 3rd Panzerdivision, where the threat to the left flank remained as grave as ever. However, on the 9th of July, the 3rd Panzerdivision was at last able to advance to the left of the Rakowa-Kruglik road. The 11th Panzerdivision was unable to advance very far, while the S.S. Panzerkorps operating on our eastern flank had to ward off strong armored counterattacks all along the line. Like ourselves, it had gained but little ground.

The slow progress of the southern pincer was disappointing, but we had, in fact, done much better than our comrades on the northern flank of the salient. General Guderian says of his visit to the 9th Army:

' . . . the 90 Porsche Tigers, which were operating with Model's Army, were incapable of close-range fighting since they lacked sufficient ammunition for their guns, and this defect was aggravated by the fact that they possessed no machine guns. Once they had broken into the enemy's infantry zone, they literally had to go quail shooting with cannons.'

After a week of hard and almost uninterrupted fighting, "Gross Deutschland" was showing signs of exhaustion and its ranks had been thinned out considerably. On the 10th of July, this Division was ordered to wheel to the southwest and clean up the enemy on the left flank. The Panzer Regiment, the Reconnaissance

von Mellenthin (cont'd): Detachment, and the Grenadier Regiment were to advance towards Height 243.0. They were then to seize 243 to the south of Kruglik and move southward from there to the small forest north of Bereskova, where the Russians were holding up the 3rd Panzerdivision. Strong formations of the Luftwaffe were to support this attack. The air bombardment was extraordinarily effective, and the War Diary of the Reconnaissance Detachment describes it as follows:

'With admiration we watch the Stukas attacking the Russian tanks uninterruptedly and with wonderful precision. Squadron after squadron of Stukas come over to drop their deadly eggs on the Russian armor. Dazzling white flames indicate that another enemy tank has 'brewed up'. This happens again and again.'

Supported by the splendid efforts of the Luftwaffe, "Gross Deutschland" made a highly successful advance. Heights 243.0 and 247.0 were taken, and Russian infantry and armor fled before the Panzers and sought refuge in the woods north of Bereskova.

On the night of 11th/12th July, the units of "Gross Deutschland" were relieved by the 3rd Panzerdivision according to plan. On the morning of the 12th of July "Gross Deutschland" was assembled and concentrated astride the road south of Nowosselowka waiting to launch the decisive advance to the north at first light on the 13th. On the 13th of July patrolling to the north intensified but the expected order to advance did not come, instead unpleasant reports were received from neighboring formations. Strong Russian counterattacks had been launched against the S.S Panzerkorps and the 11th Panzerdivision. It was true that the number of Russian tanks knocked out on the whole front was enormous, but new tanks took the place of the casualties. Faithful to their principle, the Russians kept on throwing in fresh troops and their reserves seemed inexhaustible. On the afternoon of the 13th of July, the Corps Commander, General von Knobelsdorff, appeared at the battle headquarters of "Gross Deutschland" and gave orders which left no hope for an advance to the north. In fact, the Division was again to attack westward.

You know, this is, more or less, the end of our attack at Kursk. As we warned our High Command before, it is always dangerous to give the Russian time to prepare his positions like a fortress. Therefore we had only one chance: either to

von Mellenthin (cont'd): attack immediately or to forget about an attack. Because it is stupidity to put Panzerdivisions against a fortress, which is not the mission of a Panzerdivision.

Russel Stolfi: I think that, in a kind of interesting way, sums up Kursk: that the attack should have gone in in April. Up there on the map it shows July. Manstein had said what General von Mellenthin is saying, that if the Soviets had had maybe only two or three weeks to prepare themselves, or maybe not any time to prepare themselves, at Kursk, the Germans probably could have pinched out the bulge and done some serious damage. When the Germans waited through the month of April, through the month of May, through the month of June, about 100 days, in 100 days the Soviets laid those 450,000 mines and set up defenses that were practically impossible for the Germans, with not very much imagination as it turned out, at Kursk, to attempt to get through. Now, something that I think is particularly instructive about the Kursk battle is that the Soviets feel that this is the most important battle of the Second World War. All that the Soviets really managed to do was set up defenses for three months and defend themselves, and I think it is a monument to something that the Soviets' great battle was the success in this defensive battle, but they don't really point out other things that they did in a mobile sense. They just didn't have that flair for effective mobile warfare. And, of course, this whole thing could have been avoided by the Germans if they hadn't attacked the Soviets after giving them 100 days to defend themselves.

Pierre Sprey: We have time only for a couple of questions, so let's just ask a few and then go on.

Russel Stolfi: Let me ask one question, General, that may relate to NATO today. If we look at the defensive plans of NATO, we see that they are very predictable on the strategic and even operational level. The German tactics today retain an element of unpredictability, but the U. S. Army tactics today are extremely predictable. Do you feel that there is a basic lesson in Kursk as regards the possible problems that arise when the enemy knows exactly what you are going to do? Would you say this was a major factor at Kursk?

von Mellenthin: There is no doubt that this was the major factor at Kursk, because the enemy had three months' time to prepare the battle, to prepare himself, and the Russian is a master of defense.

_____: What are some of the things he does well on defense that we could learn lessons from?

von Mellenthin: You know, I must give my compliments to the Russian defense at Kursk because they had very deep defense lines, defense areas, not lines, very deep defense areas and behind them they had very, very strong tank formations for counterattacks. Therefore, where our Panzerdivision "Gross Deutschland" had a slight success, they attacked them immediately with strong Russian tank formations.

_____: At this point does anyone have . . . loss rates for the last six months?

Russel Stolfi: The General had mentioned earlier, for example, that the 6th Army at Stalingrad had originally about 370,000 men in it. About 120,000, roughly, were flown out. The Germans eventually lost, let's say, approximately 190,000 men in the 6th Army at Stalingrad. Now when you look at the other armies, this is now time frame, they have lost that by early February, last day of January, 1943--now when you look at the other armies that were out there, German, there would be several hundred thousand, perhaps 300,000 to 400,000 with the army group in the Caucasus, and then, perhaps, another something like 300,000 to 400,000 in the South Ukraine, probably a little bit more. Losses would be pretty heavy amongst those organizations. The Soviets would have had--you know that adds up to about 800,000, something like that--the Soviets would have had considerably more than that. So we are talking about ballpark figures, maybe something like 800,000 or 900,000 Germans on a very big front and the Soviets with multimillion, they being on the offensive, having seized the initiative and concentrated their forces down there.

_____: It appears that the Russians are losing at a higher rate.

Russel Stolfi: The Russians are losing at a much higher rate. The thing that you have to think about historically is that when you look at the end of the Second World War, the Soviets have admitted and the historical figures are running never less than 15 million killed during the war, and this is directly related with combat shooting, and so on. Some of the figures are running as high as 25 million. The figure that probably is most accurate is something like approximately 20 to 25 million Soviets killed between '41 and '45. Now

Stolfi (cont'd): this is verifiable in various ways. They had a census in about 1939/1940 that showed 190 million people. The census after the war shows 173 million. So we are talking about 20 million killed. Some of that is the terrific firepower and, on the other hand, the types of advances, and so on, that the Soviets were willing to make. When the General said that the ratios were 9 to 1 and sometimes 20 to 1, in certain cases that was the case. On the other hand, the Germans were hit with a whole biscuit, sometimes the loss ratios were extraordinarily in favor of the Germans.

Pierre Sprey: The point is that you can't tell who is winning or losing by the losses. The attrition doesn't really count in terms of winning and losing.

_____: Yes. What I am trying to do is to come up with some kind of a summary in my mind of what I am seeing here--the superb skill. Because of their experience and their tactics, the Germans are defeating the Russians, except that the Russians are eating up the real estate at an interesting rate. And you know now that we play that back today, I am not so sure that we have the skill and tactics that equate with what the Germans had at that time in facing that onslaught of numbers.

Pierre Sprey: No, not at all. It is nothing like 9 to 1, in fact it is about 1 to 1 in manpower.

_____: We are much better off, yes. But our skill is questionable.

Pierre Sprey: Unfortunately, if you compare combat manpower, then it does get to be more like 9 to 1. But if we just used the people we had in uniform, in some reasonable way, it would be pretty close to 1 to 1.

_____: I don't understand that. You don't really think that the Soviet Army's Service support structure exists today any more than . . .

Pierre Sprey: Could you repeat that please?

_____: I don't understand the way you put that. You're talking about the standing armies on both sides today. Is there any modern nation today that can afford to have the Service support force structure that might be expected in a wartime situation to exist in peacetime?

Pierre Sprey: I mean we have a huge support structure; we have almost no combat structure. That's the whole problem. That's why we have equal manpower with the Russians, but far less combat power.

_____: It's about 900,000 people on either side.

_____: I'm talking about a flushed out or fleshed out, flushed out, maybe, total force structure. You are talking about the Service support force structure that's required to support combat and combat support force units. Do we really expect, or do we really think that structure exists on their side today?

_____: I do not understand his question.

_____: I think I understand it. I think you are saying that they would have to materially increase their Service support structure in a war. I think, my understanding is, that that is the case and that they have organized their civilian resources as have a number of Western European countries and as the West Germans are particularly doing much more of today to provide that Service support upon mobilization. Whereas we attempt to include a massive, almost wartime Service support structure in our active forces today, which is why we get such a low ratio of combat force to total force. In other words, if you took the manpower in the U. S. Army today at what--785,000?--and you got the same ratio of divisions to total manpower that the Soviets get in their army, you would have about 50 U. S. divisions, not 16.

Russel Stolfi: General von Mellenthin, you might make a brief comment. In his book, he emphasizes, and there is a passage in your book--the Soviet Army, an army without baggage, an army without baggage. Now, I don't know exactly how they are playing the game at the present moment, but in the Second World War, the Soviet Army was, in fact, an army without baggage. It, to as ruthless and effective a degree as possible, literally lived off the land. Now whether with its increased technology, and so on, it would be able to the same thing relatively is questionable, but the General might talk about an army without baggage.

von Mellenthin: To make it simple, the Russian definitely had about 10 percent of his soldiers were supply. Ninety percent were fighting men, 10 percent supply

von Mellentin (cont'd): soldiers. And in Germany it was about 30 to 70 fighters, and I don't know about your position today, but we have to become simple. We must not become too complicated and too spoiled for the future war. We can't afford to be spoiled so that every fighting man has 10 supply men behind him. It must be the other way around. Nine men fighting and one many for supply. That should be the solution.

_____: Yes, General, one might describe our situation today as baggage without an army.

_____: I think it is not quite, I mean, the Soviet army lived off the land for food, but not for ammunition and things. Now, if you read any Soviet account of the hundreds of trainloads that were assembled behind the lines prior to any of their major offensives, you will see that it wasn't just living off the land. I mean, they had to resupply.

_____: But they still did it with very few soldiers whereas we have on the order of one frontline soldier for every 10 logisticians and other support.

_____: . . . who drives a truck is a soldier. I'll admit it is a man still tied down in a logistic position. The thing is . . . from '43 onward . . . you can't deny it was logistical effort . . . without the lend-lease contributions probably would have . . .

Pierre Sprey: The issue is, you know, did they have more people in support than fighting, and the answer is no. They had a lot less people in support than fighting.

Russel Stolfi: There is another factor here which relates to doctrine. If you have a doctrine that anticipates, as ours does today, a firepower-intensive conflict of some duration over a fairly stable linear FEBA with a fairly intense firepower conflict along the entire length of the FEBA, that drives you to one type of logistic system, a very extensive logistic system essentially on a World War I model. If, in contrast, like the Germans or like the Russians today, you have essentially a maneuver doctrine, you need very intense firepower, but here and there, now and then, which enables you to concentrate and centralize your logistics and overall to have a much smaller logistical structure even for the ammunition and gasoline which, of course, any force does require.

Pierre Sprey: I think we have about come to the end of our time, and I don't think we need to debate teeth to tail in front of General von Mellenthin. So I will just ask the General to give us one last comment, and then we will close this seminar.

von Mellenthin: My last comment on the battle of Kursk is definitely not to attack with great tank formations a fortress. The Kursk area was a fortress, and it was a great mistake on our side to sacrifice our best tank formations against such an ordinary infantry attack. My second comment on the Kursk battle is that we should avoid by all means such infantry attacks. We should catch the Russian by surprise, as I mentioned at the Chir River, and I hope I can also mention the battle at Zhitomir. We have no chance with the Russians in an ordinary attack. We can only gain advantage and victory if we catch them by surprise. That is my best advice and my best solution I can give you and, therefore, this Kursk example is a good example of what we should not do. I hope I still have time to tell you a little bit about our flexible battles at Zhitomir. [Time did not permit General von Mellenthin to describe the battle of Zhitomir, but the text of what he intended to present may be found on pages 121 through 137.]

Pierre Sprey: In summary, since we have run out of time now, I would like to thank General von Mellenthin for all of the preparations that he has made for sharing with us some of the German experience from World War II and giving us some insight and some advice that I know we need very, very badly. We really appreciate the efforts to which he has gone and some of the really, really fascinating insights that he has provided us. General, thank you very much.

PREPARED TEXT FOR
GENERAL VON MELLENTHIN'S PRESENTATION*

My Eastern Front Experiences From November '42 to July '44

Defensive Battles on Chir River; German Attacks to Relieve
Stalingrad; Tatsinskaya; Defensive Battles on Donetz

To give a better understanding about the position in which I had to act as Chief of Staff, 48 Panzerkorps, from the end of November '42 in the vicinity of Stalingrad, I want to give a short introduction. Hitler's principal intentions for the summer offensive of 1942 were the capture of Stalingrad and of the Caucasus. At first glance these objectives had considerable appeal. If the German Army could cut Russia's main north-south line of communications by crossing the Volga near Stalingrad and if, simultaneously, the production of the oilfields in the Caucasus could be harnessed to the German war effort, then the future outcome of the war would be profoundly affected thereby.

The first objective, Stalingrad, lay nearly 300 miles beyond the front line that existed in the Spring of 1942. The Caucasus was over 350 miles distant. Nor were these objectives close to one another. Being some 350 miles apart, the two operations must diverge.

There were not sufficient German forces at present available to capture two such remote and distant objectives. It was suggested to demand fresh divisions from Germany's allies Rumania, Hungary, and Italy. This was the first fatal decision. Because these non-German soldiers were to be massed in a homogeneous corps or even armies of one nationality, fighting at vast distances from their homeland, ill equipped with not up to date arms and badly

*As indicated earlier, because of the time constraint, General von Mellenthin was able to present only discrete portions of his talk. The entire prepared text is presented here together with maps of the regions in which the battles took place. Although there is some redundancy with the transcript of the talk (in particular, the material presented on pages 12 through 27 is repeated on pages 71 through 86), it was decided not to attempt to eliminate it so that a complete sequential picture of the events on the Eastern Front could be presented. Following the text of the presentation are four brief papers also prepared by General von Mellenthin: "Educational Experiences and Ideas", "Eastern Front Experience: Detailed Answers to Questions Concerning Current Applications", "German Influence on Soviet Strategy and Tactics", and "Observations on the Soviet Army and Air Force".

commanded. These troops were employed along the River Don to protect the long flanks of our forces fighting at Stalingrad and the Caucasus.

In late September, although our first and principal objectives had almost been obtained, no further progress was made in the Caucasus and in Stalingrad the Russians began to put up a desperate resistance. As a scapegoat the Chief of the General Staff, Colonel-General Halder, was dismissed together with the Commander of the Caucasus Army Group, Field Marshal List. Halder's successor, General Zeitzler, made three points especially clear to Hitler, when he took over as Chief of Staff:

- (1) Owing to the summer offensive, the territory to be occupied in the East no longer corresponded to the size of the occupying army. There were too few soldiers for too much ground. Unless this were adjusted a catastrophe must occur.
- (2) The most perilous sector of the Eastern Front was undoubtedly the long, thinly held flank, stretching along the Don from Stalingrad to the right boundary of the Army Group Center. Furthermore, this sector was held by the weakest and least reliable of our troops, Rumanians, Italians, and Hungarians. This created an enormous danger, which must be eliminated.
- (3) The Russians were both better trained and better led in 1942 than they had been in 1941. This fact should be realized. Greater caution on our part was essential.

Zeitzler succeeded in making Hitler aware of the danger to the left flank of Army Group B.

However, his suggestion to withdraw the Stalingrad front westwards thus shortening the endangered flank and freeing a large number of divisions as a *masse de manoeuvre* behind a strong shortened front was bluntly refused by Hitler.

He had recently said over the radio to the German Nation: "You may rest assured that nobody will ever drive us away from Stalingrad". As early as August '42 the German General Staff had warned Hitler that the 400-km-long flank on the Don would be untenable especially in winter time only halted by the weak allied forces. At the end of October Paulus informed that the Russians were deploying strong forces on the flanks of the Sixth Army. Hitler was kept fully informed, but only half-hearted measures were ordered to reinforce the flanks. Only the 48th Panzerkorps, consisting of

one weak German Panzerdivision and a Rumanian Panzerdivision, unable to match the Russian T34 tanks, was put in behind the Third Rumanian Army. To these were added a few blocking units, some Flak, and some army artillery.

At midnight on 19 November some 3,500 Soviet guns and mortars opened a barrage on the positions held by the Rumanian Armies on the northern and southern flanks of Paulus' Sixth Army. At 8 o'clock the next morning strong Russian units attacked in accordance with a plan shrewdly devised by Marshal Zhukov. (Alone out of the Kremenskaya bridgehead with three Armored Korps, two Cavalry Korps, and twenty-one Rifle Divisions.)

In the beginning the Rumanians defended themselves gallantly, but were overwhelmed by superior strength. Panic crept in and then deteriorated into headlong flight. General Paulus threw all available units of the Sixth Army against the Soviet eastern flank, but he was unable to prevent the junction at Kalatsch, on the Don, of Russian shock troops thrown in from north and south. The Sixth Army was completely surrounded. The curtain was rising on the Tragedy of Stalingrad.

Paulus and his Chief of Staff, General Schmidt, failed to realize the deadly danger of the encirclement of the Sixth Army until 21 November. They came to the same conclusion: that to avoid encirclement they should break out to the southwest after regrouping. But on the same evening orders were received from Hitler to hold their existing positions. Paulus and his Chief of Staff obeyed orders. I think that I, myself, accustomed to independent decisions by Rommel and Balck, would have advised Paulus urgently to break out even after he had received the order. The Chief of the Army General Staff, the Commander of the Army Group B came to the same conclusion, that the Sixth Army should withdraw into a position within the bend bounded by the Don and Chir Rivers.

On 23 November General Zeitzler did his utmost to get Hitler to agree to a withdrawal into the Don bend as a last resort to save the Sixth Army. On the same day Paulus was urged by the generals under his command to abandon Stalingrad forthwith and break out to the southwest.

On 24 November Manstein, now Commander of Army Group Don, took over the Stalingrad front. He described the actual situation in his book Verlorene Siege.

"Hitler had nailed down the Sixth Army in Stalingrad, when a chance still remained that they could have fought their way out. Without going into detail about the course of the

first few days of the Soviet offensive, one may say that the encirclement of the Sixth Army could have been prevented only by challenging the enemy breakthrough at the very start, either to the west across the Don or east of the river towards the southwest. Orders for this were the responsibility of Supreme Headquarters, but Paulus should have taken things into his own hands and retreated from Stalingrad."

On 27 November '42 I received orders to report to the Chief of the Army General Staff, General Zeitzler, in East Prussia. About 5 months ago I drafted the order to attack Tobruk then Rommel's G3 and had to be flown in September from El Alamein to a German Hospital. Zeitzler informed me of my appointment as Chief of Staff of the 48th Panzerkorps and gave me his appreciation of the situation around Stalingrad. It was my impression that Zeitzler did not think it would be possible to relieve the Sixth Army and that Paulus only chance was to break out. We now know that he gave this advice to Hitler, but it was summarily rejected by the Führer, who accepted Goering's assurance that he could supply the Sixth Army by air. The large situation map in the Operations Room was not pleasant to look at. I tried to find the location of my 48th Panzerkorps but there were so many arrows showing breakthroughs and encirclements. In fact, on 27 November the 48th Panzerkorps was itself encircled in a so-called "small cauldron" to the northwest of Kalatsch. On the morning of the 28th I set off by air for Rostov to the newly formed Headquarters of Army Group Don, covering 1,500 miles.

That evening I reported to the newly appointed Commander of this Army Group, Field Marshal von Manstein, who passed me on to his Ia (G3) Colonel Busse. Here I obtained new information to supplement what I had learned from the Army Headquarters.

The Sixth Army with about 20 divisions was encircled by approximately 60 Russian divisions. The Rumanian Fourth Army between Elista and Stalingrad had been crushed by the Russian advance from the Volga and could no longer be regarded as a fighting force. But there was a thin screen of elements of the Fourth Panzerarmee on a line extending from Elista to Kotelnikovski. This screen had the task of covering the rearward communications of Army Group A. The latter Army Group was fighting in the Caucasus and its rearward communications ran through Rostov. The first reinforcements for the Fourth Panzerarmee were already en route from the Caucasus front.

It appeared that the main body of the enemy east of the Don was still facing the Sixth Army. This had made it possible for Luftwaffe

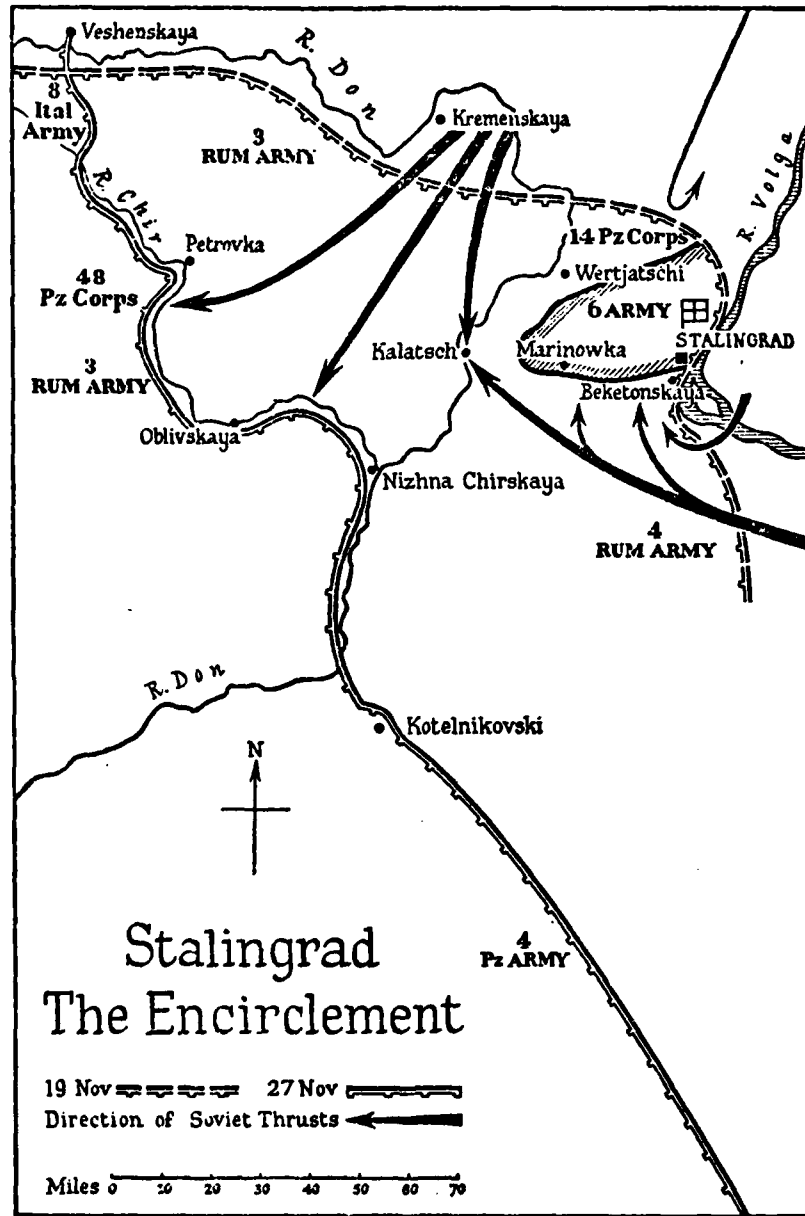
formations and rear-services personnel to build up defensive positions west of the Don bend along the Chir. The Rumanian Third Army had been rushing back to the west, the retreat was halted and some line of resistance was established in the Oblivskaya area as far north as Veshenskaya on the Don (see Map 1). There the Rumanians joined with the east-wing of the Italian Eighth Army not yet attacked by the Russians. The 48th Panzerkorps with its 13th Panzerdivision and its weak Rumanian Panzerdivision had fought its way out of encirclement and had taken up positions on the River Chir west of Petrovka.

Army Group Don was assembling forces on both sides of Kotelnikovski. These reinforcements came mainly from the Caucasus front; they were to strengthen Hoth's Fourth Panzerarmee and enable him to relieve Stalingrad. When the situation allowed, the 48th Panzerkorps was to move south of the Don and support the Fourth Panzerarmee in its fateful counterattack.

At dawn on 29 November I flew to the battle headquarters of the 48th Panzerkorps with a "Storch", and the pilot and I watched out carefully, lest we land on the wrong side of the front, flying at treetop height. The landscape recalled the North African desert, but with snow instead of sand. As we came down on the small frontline airfield, I realized that I had entered a new and very grim phase of my military career.

On my arrival at the headquarters of the 48th Panzerkorps the only man I could turn to in this turbulent situation was the Ia (G3). After the unsuccessful counterattack, the Korps Commander and his Chief of Staff had been relieved of their post; their dismissal was so summary that they were not even given time to hand over to their successors. As I was not present at the unsuccessful counterattack of the 48th Panzerkorps on 19 November, I can only state that these forces were much too weak to fight against several hundred enemy tanks. A further thousand simply ignored this battle and rushed on past them. The 13th Panzerdivision had 31 light and 13 medium tanks available whereas the First Rumanian Panzerdivision was in fact simply a motorized infantry division with 40 attached tanks--captured French and Czechoslovak A.F.V.S., and that was the 48th Panzerkorps. Now when total annihilation seemed unavoidable the Korps was ordered by Army Group B to fight its way through to the southwest. With a great deal of luck they succeeded in doing this and a few thousand Rumanians escaped with them.

MAP 1



Although the Rumanian Third Army in the beginning of December '42 had succeeded in forming a line along the River Chir, reserves were very weak and the line had only been established by the desperate expedient of drawing men from the supply services and forming new units out of stragglers.

At this time we were still holding a small bridgehead on the left bank of the Don at Nizhna Chirskaya, only 25 miles from the nearest troops of the Sixth Army at Marinovka.

But the Russians were well aware of the need to force us back westwards and early in December their Fifth Tank Army launched heavy attacks and crossed the Chir at various points. When these attacks developed, the headquarters of the 48th Panzerkorps had left Petrovka and had moved on 4 December to Nizhna Chirskaya. It was intended that we should take command of the 11th Panzerdivision, the 336th Infantry Division, and a Luftwaffe Field Division. When Hoth's Fourth Panzerarmee moved on Stalingrad, the 48th Panzerkorps was to cross the Don and join hands with their left flank.

Defensive Battles on Chir River

On 6 December the 336th Infantry Division took up positions on the Chir between Nizhna Chirskaya and Surovikino, and that day General Balck, the commander of the 11th Panzerdivision, arrived at Nizhna Chirskaya to reconnoiter the sector, where his division was to cross the Don to cooperate with Hoth's 4th Panzerarmee. But we were not destined to play any part in the attempt to relieve Stalingrad. On 7 December the Russian 1st Armored Corps forced its way over the Chir on the left flank of the 336th Division and swept forward to the settlement of Sowchos 79, far in the rear of our defensive position on the river bank. We--the 48th Panzerkorps--ordered Balck to attack the Russian armored on the move with his 11th Panzerdivision and restore the situation. The units of the 11th Panzerdivision were still making their way up from Rostov. On the afternoon of 7 December Panzer Regiment 15 engaged large Russian tank forces around State Farm 79 and checked their further advance.

As a first step General Balck set up his battle headquarters alongside that of the 336th Division at Verchne Solonovski; this made for the closest cooperation between the two divisions. The 336th Division wanted Balck to make a frontal attack on State Farm 79, so as to relieve their critical

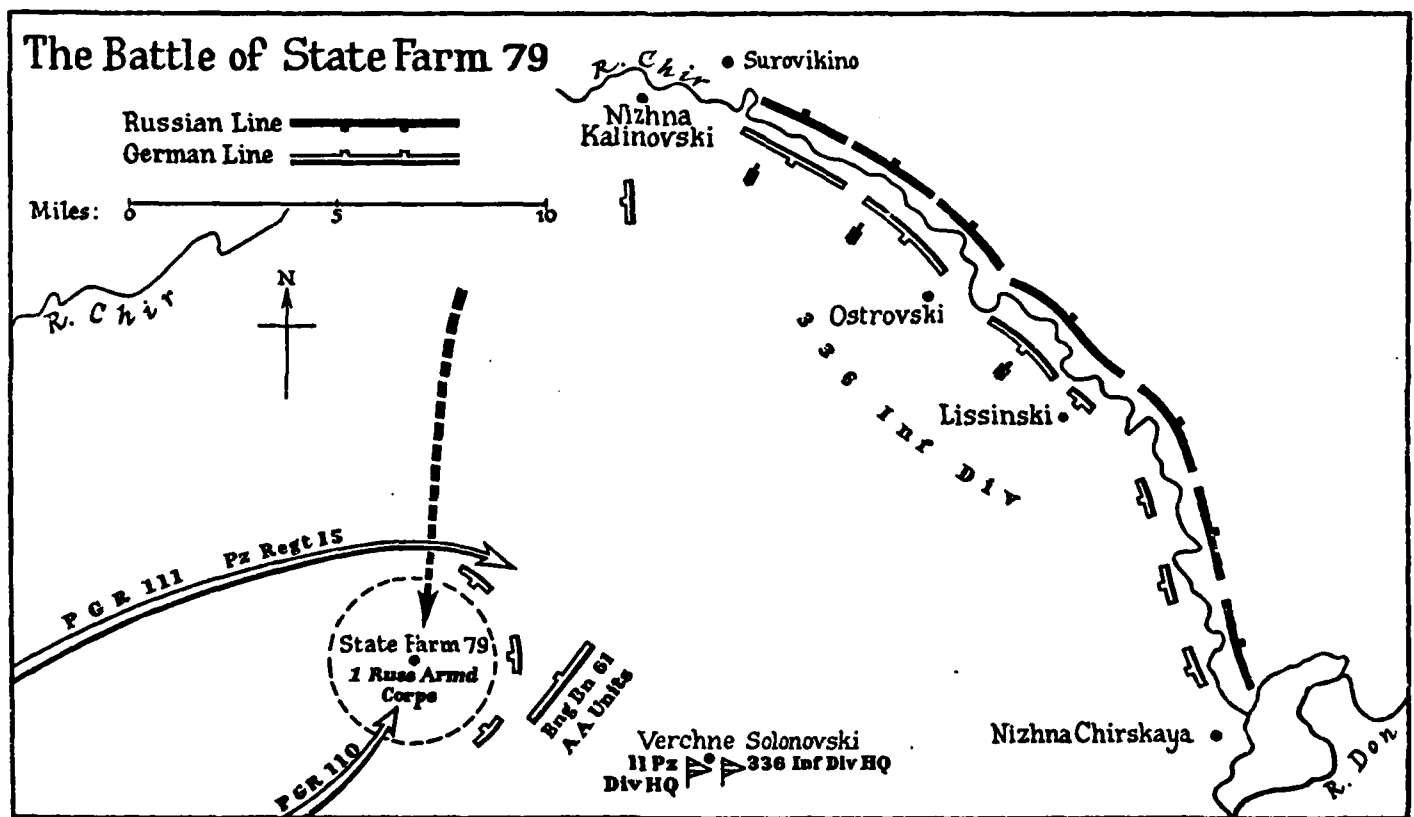
position with a minimum of delay. Balck protested that the terrain was unsuitable for armor and that in any case a frontal attack would merely push the enemy back and not lead to his destruction. He decided to make his main effort along the heights west and north of the Farm, where tanks could move easily, and throw his panzers across the Russian rear (see Map 2). The decisive thrust was to be made by Panzer Regiment 15 supported by Panzergrenadier Regiment 111, while Panzergrenadier Regiment 110 was to deliver a holding attack from the southwest. Balck stationed his antiaircraft guns and engineer battalion to the south of the Farm to prevent the Russians bursting out in that direction. The artillery of the 336th Division was to cooperate on the northeastern flank.

On the night of 7/8 December the 11th Panzerdivision regrouped in accordance with Balck's orders, and the units moved into their assembly areas. When they attacked at dawn on 8 December they hit the Russians at the very moment when they were about to advance against the rear of the 336th Division, in the confident belief that the Germans were at their mercy. Panzer Regiment 15 bumped a long column of Russian motorized infantry coming from the north and took them completely by surprise; lorry after lorry went up in flames as the panzers charged through the column throwing the Russians into the wildest panic. The column was destroyed and Balck's Panzer Regiment then advanced into the rear of the Russian armor at State Farm with Panzergrenadiers and artillery in close support. The Russians fought bravely, but their tanks were caught in a circle of fire from which they vainly attempted to escape. When the short winter day drew to a close the Russian First Armored Corps had been completely bowled over and 53 of its tanks were knocked out.

Between 9 and 13 December Balck was continually engaged in clearing up Russian bridgeheads across the Chir. The Luftwaffe Field Division took over a sector on the left flank of the 336th Division, and these two Infantry Divisions did their best to hold the line of the river along the 48th Panzerkorps front between Oblivskaya and Nizhna Chirskaya.

The evening of 11 December brought this message to Balck: "Enemy broken through at Lissinski and at Nizhna Kalinovski." The Commander of the 11th Panzerdivision decided to beat the enemy at Lissinski first; after a night march the Panzer Regiment arrived near Lissinski at dawn on 12 December and liquidated the Russian force which had broken through. After destroying the Russians at Lissinski on 12 December, the 11th Panzer marched northwest, and that very afternoon, having covered a distance of 15 miles, the Division cut into the Russian bridgehead at Nizhna Kalinovski and compressed it considerably.

MAP 2



At dawn on 13 December when the Division was about to launch its final attack on Kalinovski, it was hit on the right flank by a strong Russian attack which produced a temporary crisis. One battalion was surrounded. The 11th Panzer discontinued its assault on the bridgehead and turned against the attacks, the encircled battalion was freed and the battle ended with an indubitable German defensive success. Unfortunately it was not possible to liquidate the Russian bridgehead at Nizhna Kalinovski and this produced serious consequences later on. The 11th Panzer had been moving by night and fighting by day for eight days, and was desperately in need of rest.

On 10 December the Fourth Panzerarmee launched its attack to relieve Stalingrad. In spite of the critical situation on the Chir, the 48th Panzerkorps was called upon to play its part in this counteroffensive. Unfortunately our bridgehead across the Don at Nizhna Chirskaya had been lost under the impact of continuous Russian attacks, and it was necessary to regain it before we could fulfill our role and join hands with Fourth Panzerarmee. All was quiet on 14 December and on the 15th the 11th Panzerdivision withdrew from its positions covering the Russian bridgehead at Kalinovski and moved to Nizhna Chirskaya to force a passage over the half-frozen Don and link up with Hoth's relieving force. The sector facing the Kalinovski bridgehead was taken over by *Alarmeinheiten* [Special Alert Unit] drawn from parts of the Luftwaffen Field Division.

By 16 December Hoth's advance guard had reached the banks of the Aksay River less than 40 miles from the nearest troops of the Sixth Army, and we arranged for the 11th Panzerdivision to fight its way across the Don on the 17th and advance southeast to support Hoth's left flank. (I shall deal in detail with Hoth's operations in the next chapter.) At this critical point the Russian Command showed strategic insight of high order--Marshal Zhukov was commanding their armies on the Volga-Don front, with General Vassilevsky as his Chief of Staff. Instead of concentrating their reserves to meet Hoth's thrust, they unleashed a new offensive on a massive scale against the unfortunate Italian Eighth Army on the middle Don and extended their attacks to include the sector of Army Abteilung Hollidt, which had replaced the Rumanian Third Army on our left flank, and the positions of the 48th Panzerkorps on the River Chir. The crisis on our own front and the collapse of the Italians not only forced the cancellation of the 11th Panzer's attack across the Don,

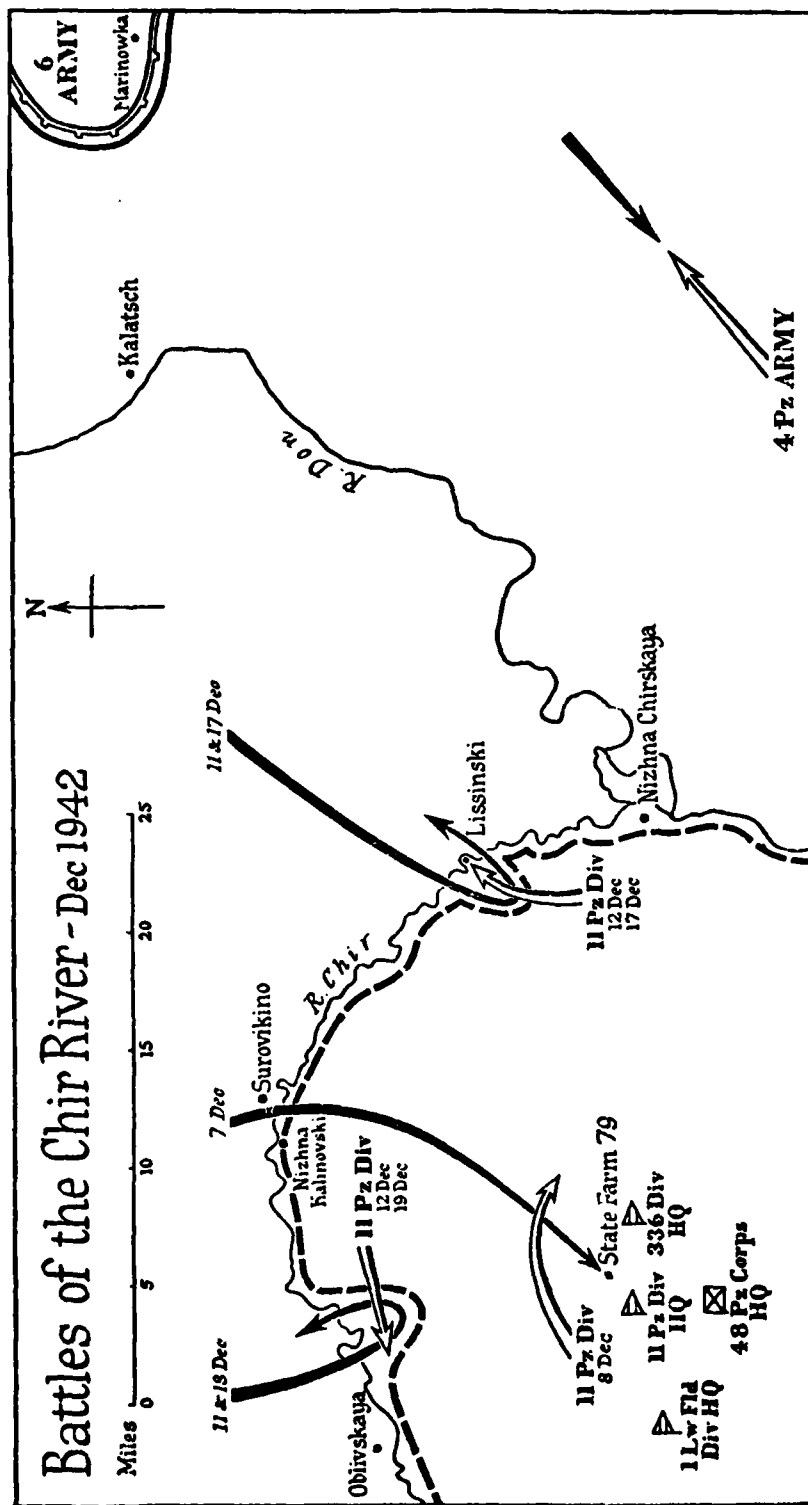
but compelled Manstein to draw heavily on Hoth's army in order to build up a new front to cover Rostov. This decided the fate of Stalingrad.

On the 17th of December a violent Russian attack broke through the positions of the 336th Division about 6 miles north of Nizhna Chirskaya. There was nothing for it but to commit the 11th Panzer, which drove the Russians back to the river bank. On the 18th of December I rang up Balck and told him about yet another deep Russian penetration from the Nizhna Kalinovski bridgehead 12 miles to the northwest. A motorized Korps had broken through on a wide front, and the resistance of parts of the Luftwaffen Field Division had dissolved. Balck protested that he would prefer to eliminate the enemy on the front of the 336th Division before doing the next order. I replied: "Sir, this time it is a bit more than ticklish. The 11th Panzerdivision must move at once, every second counts." Balck came back: "O.K. we will do it."

General Balck decided to set off immediately, march through the night, and fall on the enemy at dawn, at the very moment when the Russians would be preparing to move. For this purpose Panzergrenadier Regiment 110 was to take up a frontal blocking position, Panzer Regiment 15 was to attack the enemy's eastern flank and Panzergrenadier Regiment 111 was to follow in the right rear to protect the flank and be handy as a reserve (see Map 3).

By 0500 on 19 December all preliminary moves had been carried out. At first light the advance elements of Panzer Regiment 15 saw strong Russian tank units fully deployed and moving southward. As the approach route of the Panzer Regiment had concealed its advance, the 25 tanks remaining to the regiment followed the Russian armor and in a few minutes had knocked out 42 Russian tanks, before the latter realized that the tanks moving behind them as a second wave were German and not their own. The dominating Height 148.8 was captured. On the other side of this height another line of tanks was seen moving in a similar way to the first one. Once again the German tanks brilliantly led by Captain Lestmann attacked the Russians from behind and destroyed them before they had time to realize what was happening. (Literally a case of being kicked in the pants.) Thus 25 German tanks destroyed 65 Russian tanks in the shortest possible time and without any loss to themselves. This broke the back of the Russian attack. Their remaining troops fled before the Panzers without offering any serious resistance.

MAP 3



On the evening of the 19th the Russian 3rd Mechanized Brigade made a diversionary attack on the left flank of 11th Panzerdivision and overran the 1st Battalion of Panzergrenadier Regiment 110. But Panzer Regiment 15 soon restored the position. On 20 December the 11th Panzerdivision resumed its advance with a view to finally hurling the enemy across the Chir. The advance was going well, but towards evening a heavy Russian counterattack hit the Division on its right flank, and broke into the rear of Panzergrenadier Regiment 111. This crisis was removed by the Panzer Regiment and 10 Russian tanks were knocked out.

In view of this strong Russian attack the 11th Panzerdivision got the order to stand on the defensive. On the 21st Balck gave orders for the regiments to regroup under cover of darkness. At 0200 hours that morning both the Panzergrenadier Regiments reported that their lines had been broken through; the night was brightly lit up by a full moon and Russian tanks and infantry had broken into our units at the moment when they were busy regrouping. Panzer Regiment 15 launched an immediate counterattack and soon better reports came in from the Panzergrenadiers. Balck sent Motorcycle Battalion 61 to attack the Russians at the junction of Panzergrenadier Regiments 110 and 111, where the main onslaught of the Russian forces seemed to be directed. By daylight it was clear that the 11th Panzerdivision had gained a great defensive success--hundreds of fallen Russians lay in front of our lines. But German losses were also grave. On 22 December all was quiet on the front of the 48th Panzerkorps; in fact our great defensive battle on the line of the Chir had come to an end. But the debacle on the sector of the Italian Eighth Army had opened a hideous gap on our left flank through which the Russian First Guard Army was pouring. On 22 December our Korps headquarters was ordered to leave the Chir front and move with 11th Panzerdivision to Tatsinskaya, 90 miles to the west--unless we moved fast nothing could save Rostov.

Before concluding this account of the battles on the Chir I must pay tribute to General Balck, a born leader of armor. Throughout the fighting his Panzerdivision acted as the "fire brigade" behind the two infantry divisions to quell one dangerous conflagration after another. When the infantry found it impossible to deal with the larger Russian bridgeheads, Balck came tearing down on the enemy with the whole weight of his armor in accordance with the old maxim: Not stinting, but stunning. (*Nicht kleckern, sondern klotzen.*)

His brilliant achievements were the fruit of exemplary cooperation with the two infantry divisions and the headquarters of the 48th Panzerkorps. Balck never left a single tank in direct support of the infantry. Mobile tactics of this kind retrieved dangerous situations on numerous occasions and inflicted huge losses on the enemy. During this 17-day period more than 700 tanks were knocked out in the sector of the 48th Panzerkorps. I, the newcomer, saw and understood that the Russian masses of men and material could be successfully fought by surprise counterattacks with concentrated armor. For weeks on end the 11th Panzerdivision moved by night, and before dawn was at the very spot where the enemy was weakest waiting to attack him an hour before he was ready to move. Such tactics called for unheard of efforts, but saved lives as the attack proper cost very few casualties, thanks to the Russians having been taken completely by surprise. The axiom of the 11th Panzer was, "night-marches are lifesavers". It is true, however, that the question of when the men of 11th Panzer got any sleep was never clearly answered.

Orders were exclusively verbal within the Panzerdivision. Balck made his decision for the next day during the evening and he gave the necessary orders verbally to his regimental commanders on the battlefield; then he returned to his main headquarters and discussed his intentions with the Chief of Staff of the 48th Panzerkorps over the phone. If approval was obtained the regiments were sent the wireless message: "No change" and all the moves were carried out according to plan. If there were fundamental changes, the divisional commander visited all his regiments during the night and gave the necessary orders, again verbally. Divisional operations were conducted from the forward position on the battlefield. The divisional commander had his place with the group which was to make the main effort (*Schwerpunkt*); he visited the regiments several times a day. The divisional headquarters was somewhat further back and did not change its location during operations. There information was collected and collated, supplies were handled, and reinforcements sent on their way.

In conclusion of this chapter I am giving my first impressions of Russian tactics as they emerged during the fighting on the Chir. Practically every Russian attack was preceded by large-scale infiltrations, by an "oozing through" of small units and individual men. In this kind of warfare the Russians have not yet found their masters. However much of the outlying areas

were kept under observation, the Russians were suddenly there, in the very midst of our positions and nobody had seen them come, nor did anybody know whence they had come. In the least likely places, where the going was incredibly difficult, there they were, dug in and all, and in considerable strength. True, it was not difficult for individual men to seep through, considering that our lines were but thinly manned and strong points few and far between. An average divisional sector was usually more than 12 miles broad. But the amazing fact was that in spite of everybody being alert and wide awake during the whole night, the next morning entire Russian units were sure to be found far behind our front line, complete with equipment and ammunition, and well dug in. These infiltrations were carried out with incredible skill, almost noiselessly, and without a shot being fired. There is only one remedy against them: strongly manned lines, well organized in depth and continuously patrolled by men wide awake and alert and--most important of all--sufficient local reserves ready at a moment's notice to go into action and throw the intruders out. Another characteristically Russian principle is the forming of bridgeheads everywhere and at any time to serve as bases for later advances. Bridgeheads in the hands of Russians are a grave danger indeed.

It is quite wrong to postpone their elimination. Russian bridgeheads however small and harmless they may appear, are bound to grow into formidable danger-points in a very brief time and soon became insuperable strong points. A Russian bridgehead, occupied by a company in the evening, is sure to be occupied by at least a regiment the following morning and during the night will become a formidable fortress, well-equipped with heavy weapons and everything necessary to make it almost impregnable. No artillery fire, however violent and well concentrated, will wipe out a Russian bridgehead, which has grown overnight. Nothing less than a well-planned attack will avail. There is only one sure remedy which must become a principle: If a bridgehead is forming or an advanced position is being established by the Russians, attack, attack at once, attack strongly. Hesitation will always be fatal. A delay of an hour may mean frustration, a delay of a few hours does mean frustration, a delay of a day may mean a major catastrophe. Resolute, energetic, and immediate action means success.

Russian tactics are a queer mixture; in spite of their brilliance at infiltration and their exceptional mastery of field fortifications, yet the rigidity of Russian attacks was almost proverbial. The foolish repetition

of attacks at the same spot, the rigidity of Russian artillery fire and the selection of the terrain for the attack, betrayed a total lack of imagination and mental mobility. Our Wireless Intercept Service heard many times the frantic question: "What are we to do now?" Only a few commanders of lower formations showed independent judgement when faced with unforeseen situations. On many occasions a successful attack, a breakthrough or an accomplished encirclement was not exploited, simply because nobody saw it.

The Russian tank crews, particularly in the Motorized Corps had hardly any training. This shortcoming was one of the essential reasons for the German victory on 19 December. There was one exception to the general Russian clumsiness. The rapid and frequent exchange of units in the front line. Once a division was badly mauled, it disappeared over night and reappeared fresh and strong at some other place a few days afterwards.

German Attacks to Relieve Stalingrad Cauldron

At the beginning of December 4th Panzerarmee received its orders from Army Group Don to carry out Operation "Winter Gale", the relief of the Sixth Army. These orders can be summarized as follows:

- (1) The task of the 4th Panzerarmee was to attack east of the Don with the Fourth Rumanian Army; the 57th Panzerkorps consisting of the 6th, 17th, and 23rd Panzerdivisions. The shortest route was to be followed with objective the establishment of contact with Sixth Army.
- (2) If the situation in the Don-Chir bend allowed, the 48th Panzerkorps was to move out of the Nizhna Chirskaya bridgehead in the direction of Stalingrad. The 48th Panzerkorps was to launch its attack when the 57th Panzerkorps had reached the Aksay River. An earlier date for this Korps attack must also be considered.
- (3) The eastern flank of the 4th Panzerarmee was to be covered by the 16th Motorized Division and the VIIth Rumanian Army Corps.
- (4) The Sixth Army was ordered to attract and pin down enemy forces by means of local attacks along its southern front with purpose of establishing contact with the 4th Panzerarmee when the latter had reached the high ground in the Yerski-Krepinski area.

On paper the formations assigned to those various operations seemed adequate enough for the task. But what was the reality? The Rumanian troops which had been badly mauled in the previous operations were capable of performing a subsidiary secondary role, and their employment in the front line was ruled out.

Of the German formations involved only the 6th Panzerdivision was fully battleworthy and with 150 tanks. The 17th and 23rd Panzerdivisions, coming from the Caucasus, possessed only some 50 tanks between them. It was here on 10 December '42 that Colonel-General Hoth, Commander of the Fourth Panzerarmee, launched the attack which had been long awaited by those in the cauldron of Stalingrad. As I have explained, the breakout of the Sixth Army was not to be attempted until Hoth was within 20 miles of their outer defenses.

The 57th Panzerkorps delivered the main assault of the 4th Panzerarmee; the 23rd Panzerdivision was on the right, the 6th Panzerdivision on the left, and the 17th Panzerdivision following behind the left wing. From the outset Hoth met with furious opposition from large forces of Russian tanks and infantry under General Vatutin, one of their ablest commanders. So fierce and determined was the Russian resistance that it took a week to cover the 30 miles between Kotelnikovski and the Aksay. But on the morning of 17 December the 6th and 23rd Panzerdivisions succeeded in capturing two crossings over the Aksay by a *coup de main*.

But as I have shown in the previous chapter this was the very moment chosen by Marshal Zhukov to unleash a new offensive on the grand scale against the Italian Eighth Army on the middle Don, combined with heavy attacks on the 48th Panzerkorps along the Chir. Numerous Russian armored and infantry formations crashed through the Italian front and opened a gap 60 miles wide, through which they poured southward toward Rostov. Manstein was a commander of iron nerve, and if it had been possible to leave the 4th Panzerarmee intact he would have done so. But it was not possible. The loss of Rostov would have been fatal to the 48th Panzerkorps, the 4th Panzerarmee, and the whole Army Group in the Caucasus. With a heavy heart Manstein was compelled to detach the 6th Panzerdivision from 4th Panzerarmee and send it northwest by forced marches to try to stem the Russian flood. This was the best division at Hoth's disposal, it was still intact and if it had remained under his command it is possible that he would have broken through to Paulus. In spite of this intolerable weakening of the 57th Panzerkorps the attack was continued,

stubbornly and persistently and with the desire burning in every man's heart to bring help to the men in Stalingrad, for whom they were the only remaining hope of salvation.

After the 6th Panzerdivision had to leave the battlefield, the 57th Panzerkorps was forced into the defensive. The characteristic features of this dramatic battle were mobility, quick reaction, and utter perseverance on both sides. The Russians did not stop their attacks when darkness fell, and they exploited every success immediately and without hesitation contrary to the experiences at the Chir battle. It might have been that their Commander, General Vatutin, had great influence on the Russian lower leaders.

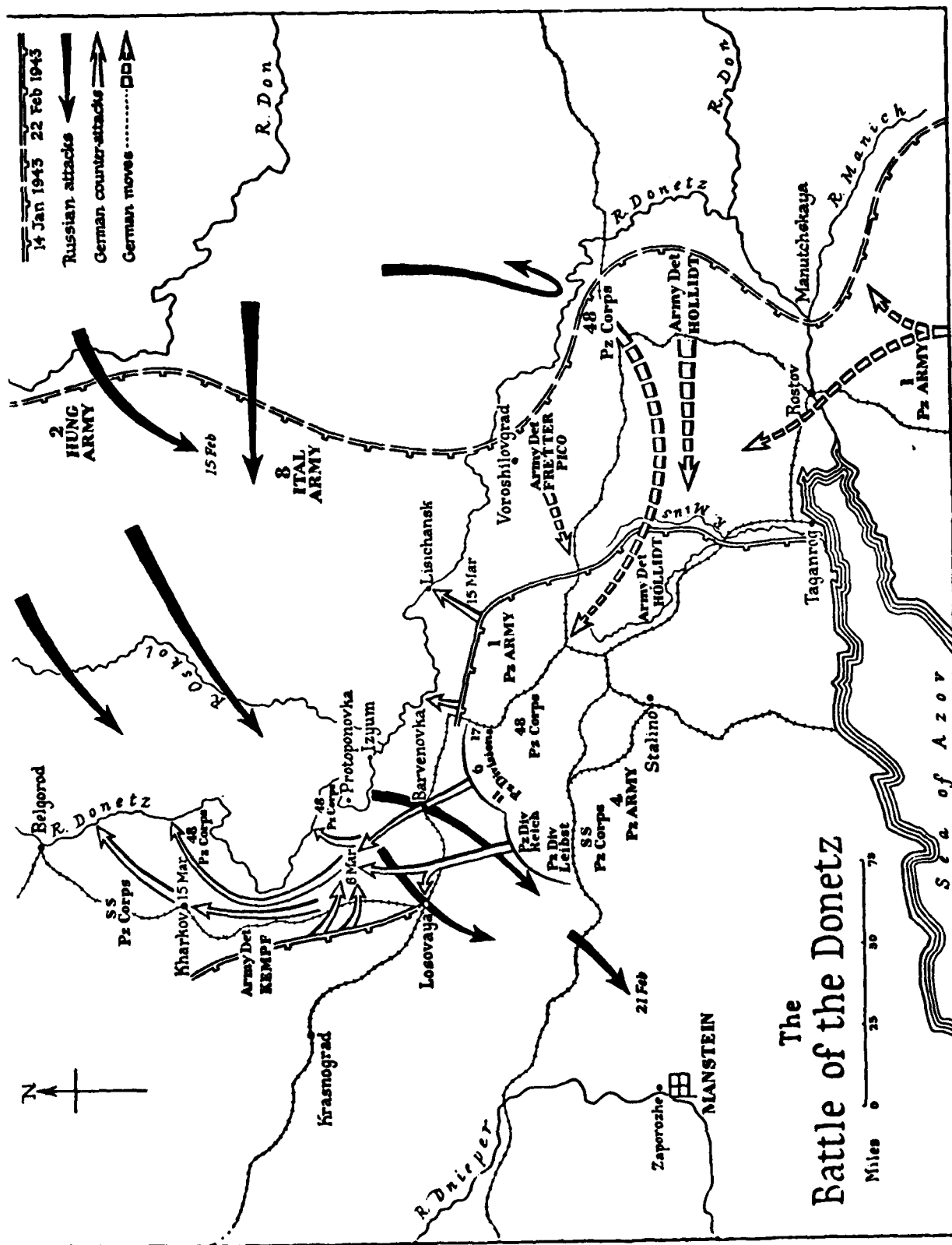
Withdrawal to West (Tatsinskaya);
Defensive Battles on Donetz (see Map 4)

It will be recalled that on 22 December the headquarters of the 48th Panzerkorps and the 11th Panzerdivision were ordered to leave the line of the Chir and move with all speed to Tatsinskaya, some 90 miles to the west. This step was forced upon Manstein by the Italian collapse on the middle Don. The Russian First Guard Army was pouring through the gap and by Christmas its spearheads were barely 80 miles from Rostov.

Our orders were to take command of the 6th and 11th Panzerdivisions and restore the front to the north and west of Tatsinskaya, where a Guard Armored Corps was driving towards the Donetz. I hurried to Tatsinskaya with the Operations Section of the Corps and set up our battle headquarters there. On Christmas Eve the Russians overran a large airfield to the west of the town which was being used to supply the Stalingrad garrison. Terrible atrocities were committed there, and when the airfield was retaken we found the corpses of many of our comrades, with eyes gouged out and ears and noses cut off.

The Sixth Panzerdivision was ordered to attack north of Tatsinskaya and close the gap in the front, thus cutting off the retreat of the Guard Corps, which had broken through. The 11th Panzerdivision was ordered to encircle and destroy the Russian Guard Armored Corps, which had broken through to the west of Tatsinskaya. The perfectly flat snow-covered steppe was ideal for armored movement, and the two Panzerdivisions carried out their task with magnificent dash and élan, recalling the spirit of the old cavalry regiments. The Guards Corps was encircled by 11th Panzerdivision and sent out frantic

MAP 4



messages for help. The appeals were all in vain; General Balck and his Division did a thorough job and the whole force was destroyed or captured. The 6th Panzerdivision succeeded in closing the gap in the frontline.

As a result of this victory the immediate danger to Rostov from the northwest was warded off, but new perils menaced us on other sectors of the immense front. Because of the withdrawal of the 11th Panzerdivision, the position on the Chir could no longer be held, and resistance collapsed during the last days of December. Army Detachment Hollidt, built up an improvised line along the Tzymbiya River, 30 miles west of the Chir, and three Russian armies hurled themselves against it. To the South of the Don the remains of Hoth's Fourth Panzerarmee were driven out of Kotelnikovski and back to the line of the Sal. The Russian advance in this direction menaced Rostov from the South and in any case seemed certain to cut the line of withdrawal of Field Marshal von Kleist's Army Group, now trying to extricate itself from the Caucasus, nearly 400 miles to the southeast.

Manstein was faced with strategic problems of a magnitude and complexity seldom paralleled in history. He handled the situation with masterly coolness and judgment, moving his slender reserves from point to point as the situation demanded. To find another example of defensive strategy of this caliber we must go back to Lee's campaign in Virginia in the summer of 1864.

The position of the Caucasus armies remained critical during January. The 17th Army withdrew into the Kuban bridgehead, while the First Panzerarmee was directed on Rostov. At the same time the 48th Panzerkorps and Army Detachment Hollidt were brought back to the line of the Donetz to the southeast of Voroshilovgrad. The 48th Panzerkorps was allotted the 6th and 7th Panzerdivisions, and the 302nd Infantry Division. With these troops we successfully contained violent Russian attacks along the Donetz during the second-half of January. The 11th Panzerdivision was detached from the 48th Panzerkorps and sent south of the Don to assist the Fourth Panzerarmee in protecting the Caucasus "bottleneck".

Withdrawal From Donetz to Area North of Stalino (150 Miles);
Great German Counterattack Northwest Through Barvenovka to
Kharkov (120 Miles) (Map 4, page 89)

On 15 January '43 the Russian High Command let loose another of their tremendous offensives, directed this time against the 2nd Hungarian Army south of Voronezh. These operations were coordinated by Marshal Vassilevsky, and Marshal Vatutin had also been brought to this sector. The Hungarian troops were of better quality than the Rumanians and Italians, but they could not withstand the flood. The Russian columns poured through a gap 175 miles wide, and by the end of January had captured Kursk, and were over the Donetz to the southeast of Kharkov.

In spite of the successful withdrawal of the Caucasus armies (1st Panzerarmee, 17th Army), another Stalingrad loomed up for Manstein. The direction of the Russian prongs pointed ominously towards the Dnieper crossing at Zaporozhe, the main supply center for Army Group Don and further to the Sea of Asov. Manstein was not unduly worried and felt that he could cope with the situation, provided he could get permission to maneuver and yield ground, where necessary. But this was precisely the point on which Hitler would never compromise, he always thought of defensive warfare in terms of the Western front of 1914-18, with its rigid defense and the contesting of every yard of ground.

Manstein had now got the First and Fourth Panzerarmee on the Northern bank of the Don; with this striking force he felt confident of smashing the Russian offensive if he was given a free hand to withdraw from the line of the Donetz, evacuate Rostov, and take up a much shorter front along the Mius River, the original starting point of the 1942 offensive. Hitler refused point-blank, but the situation was too critical for trifling and Manstein demanded an interview. On 6 February Hitler came to see Manstein and tense and prolonged discussions took place. Perhaps the surrender of Paulus in Stalingrad six days before had put the Führer in a more receptive frame of mind; anyhow, he yielded to Manstein's representations. The greatest obstacle to victory had now been overcome, and Manstein could frame his plans with an easy mind. During the first half of February everything seemed to go well for the Soviets. Army Detachment Hollidt gave up its positions on the lower Donetz, and withdrew through Rostov and Taganrog to the entrenchments along

the Mius. On 10 February the 48th Panzerkorps which had repulsed all attacks at the Donetz River, fell back. The Korps assembled for new operations to the north of Stalino. On 16 February Army Detachment Kempf was compelled to evacuate Kharkov, as its northern wing was being enveloped from the direction of Belgorod. A gap opened between Army Kempf and the left flank of Army Detachment Fretter Pico at Izyum on the Donetz. The Soviets exploited the situation and pushed southwards from Barvenovka and southwestwards through Losovaya. On 21 February Russian tanks reached the Dnieper and came within sight of Manstein's headquarters at Zaporozhe.

Manstein was perfectly calm, indeed he watched the Russian maneuver with satisfaction. On 17 February Hitler had visited him again to demand the immediate recapture of Kharkov, and Manstein had explained that the further the Russian masses advanced to the west and southwest, the more effective would be his counterstroke. He was drawing the Russians into a most dangerous pocket, because Army Detachment Kempf was standing firm at Krasnograd, thanks to the arrival of reinforcements, including Panzergrenadier Division "Gross Deutschland".

On 21 February Army Detachment Hollidt and the 1st Panzerarmee were holding a strong front along the line of the Mius and to the Northeast of Stalino. To the northwest of that town the Fourth Panzerarmee stood ready to counterattack. The 48th Panzerkorps was on the right with the 6th, 11th, and 17th Panzerdivisions, and the S.S. Panzerkorps was on the left with Panzerdivision "Leibstandarte" and Panzerdivision "Das Reich".

On 22 February these five Panzerdivisions started their drive in a northwesterly direction. The move was a concentric one and carried out under strictly coordinated control. The 48th Panzerkorps moved towards Barvenovka and its rapid advance came as a complete surprise to the Soviets. In a few days the 17th Panzerdivision on the right flank gained the Izyum-Protoponovka sector on the Donetz River, while the S.S. Panzerkorps took Losovaya and established contact with Army Detachment Kempf which had joined in the attack from the west.

During this rapid advance the Commander of the 4th Panzerarmee General Hoth, did not interfere much with our movements. The 48th Panzerkorps had its target to destroy the enemy and reach the area east of Kharkov. That was enough. At each night I phoned the Chief of Staff of the 4th Panzerarmee,

General Fangohr, informed him about the progress made by our Korps, made my suggestions for our attacks and targets of the next day--villages about 30 miles further to the northwest. Normally these suggestions were approved.

The terrain was almost completely open, cut here and there by narrow brooks which were then completely frozen. It was an ideal Panzer terrain, the ground frozen, we had not to use roads. Russian columns streaming back to the north were visible at a distance of 8 to 12 miles and were taken under effective artillery fire at that range. Some Russian formations succeeded in escaping the trap, but the First Guard Army and Armored Group Popov suffered very heavy losses in men and equipment. By 6 March several large Russian armored formations and one cavalry were completely cut off by the 4th Panzerarmee and Army Detachment Kempf; 615 tanks were destroyed and more than 1,000 guns captured. The 48th Panzerkorps pressed forward to the east of Kharkov and by the middle of March the line of the Donetz was firmly held, the gap to Army Group Center was closed and the front again faced east. The S.S. Panzerkorps took on the 15th of March Kharkov.

In the sector of the First Panzerarmee between Lisichansk and Izyum the Russians were also defeated and thrown back across the Donetz. Thus in a few weeks Manstein had been able to carry out a successful withdrawal, to launch a counterattack on a large scale, to eliminate the threat of another Stalingrad, to inflict very heavy losses on a victorious enemy, and to re-establish the southern front from Tagarog to Belgorod as a straight defensive line. In numbers of divisions the ratio of strength was 8 to 1 in favor of the Russians and these operations showed once again what German troops were able to do when led by experts in accordance with accepted tactical principles, instead of being hampered by Hitler with "holding at all costs" as the battle-cry. Having regard to the problems which faced Manstein after the Catastrophe of Stalingrad it may be questioned whether any achievement of generalship in World War II can approach the successful extrication of the Caucasus armies and the subsequent riposte to Kharkov.

The following points were evident in the counterstroke of Fourth Panzerarmee in February and March '43:

- (1) High-level commanders did not restrict the moves of armored formations, but gave them "long-range tasks".
- (2) Armored formations had no worries about their flanks, because the High Command had a moderate infantry force available to take care of flanks.

(3) All Commanders of armored formations, including Panzerkorps, conducted operations not from the rear, but from the front.

(4) The attack came as a surprise regarding time and place.

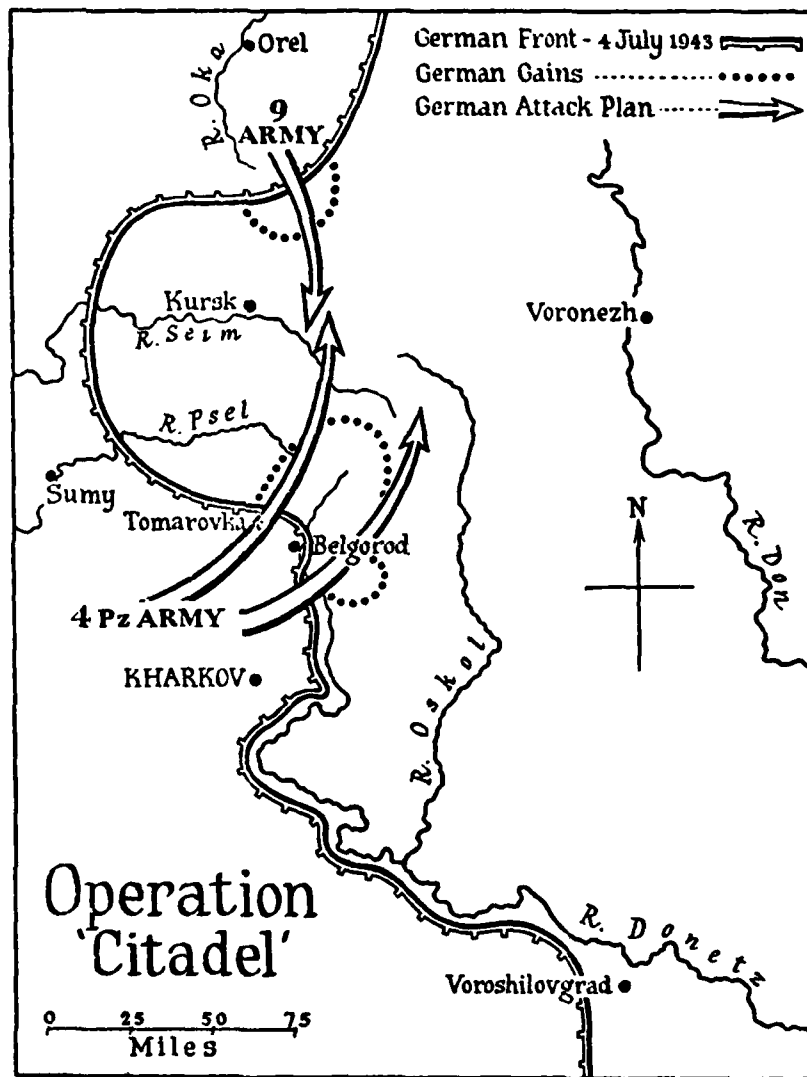
It is interesting to see how the Russians reacted to this surprise attack. The Soviet soldier is temperamentally unstable; he is carried on by the herd instinct and is therefore not able to endure a sudden change from a triumphant advance to an enforced and precipitate withdrawal. During the counterattack we witnessed scenes of almost unparalleled panic among the Russians, to the astonishment of those who had experienced the stubborn, almost fanatical resistance the Russians put up in well-planned and efficiently organized defenses. It is true that the Russian can be superb in defense (see at the battle of Kursk) and reckless in mass attacks, but when faced by surprise and unforeseen situations he is an easy prey to panic. Manstein proved in this operation that Russian mass attacks should be met by maneuver and not by rigid defense. The weakness of the Russian lies in his inability to face surprise; there he is most vulnerable. Manstein also realized that his own strength lay in the superior training of his junior commanders and their capacity for independent action and leadership. Thus he could afford to let his divisions withdraw for hundreds of miles, and then stage a smashing counterattack with the same divisions, which inflicted heavy blows on their startled and bewildered opponents.

April '43 - June '43 Spring Thaw; Stabilization of Front; Preparations of German Attack at Kursk (Map 5)

At the end of March '43 the thaw started on the Eastern Front and active operations came automatically to an end. All Panzerdivisions and some infantry divisions were withdrawn from the front line, and the armor in the Kharkov area was concentrated under the 48th Panzerkorps. We assumed command of the 3rd, 6th, and 11th Panzerdivisions together with Panzergrenadier "Gross Deutschland". Advantage was taken of the lull to institute a thorough training program, and exercise the units on peacetime lines.

Training began on troop and platoon level and was progressively extended up to divisional exercises; maneuvers were held under active service conditions and shoots with live ammunition were regularly carried out.

MAP 5



All our thoughts were concerned with the next campaign which was bound to be affected by the strategic situation as a whole. By the Spring of 1943 the military position of Germany had worsened immeasurably. In Russia the moral comfort of Manstein's latest victory could not obscure the fact that the whole balance of power had changed, and that we were faced by a ruthless enemy, possessed of immense and seemingly inexhaustible resources. The hope of forcing a decision in Russia had faded forever in the Autumn and Winter of 1942; the best we could hope for was a stalemate, and even for this our prospects were clouded by disasters in other theatres of war, only to name the U-boat war, the approaching disaster in Tunis and the Anglo-American strategic bombing on industries of the Reich. In the circumstances the German Supreme Command was faced with a grave dilemma. Should we stand purely on the defensive in the East, or should we launch a limited attack in an endeavor to cripple Russia's offensive power? I was soon drawn into these discussions on a high level, for at the beginning of April I went on a short spell of leave and was ordered to report to General Zeitzler, Chief of the Army General Staff, at his headquarters in East Prussia. I reported to Zeitzler on the role of the 48th Panzerkorps in the recent battles of Kharkov and learned that he contemplated a great offensive in which we were destined to play a very significant part. Zeitzler's objective was a limited one; he wished to bite out the great Russian bulge which enclosed Kursk and projected for 75 miles into our front. A successful attack in this area would destroy a number of Russian divisions and weaken the offensive power of the Red Army to a very considerable degree. As part of the 4th Panzerarmee, the 48th Panzerkorps was to be the spearhead of the main drive from the south. I welcomed the idea, for our hardened and experienced Panzerdivisions had suffered little in the recent thrust on Kharkov, and were fit and ready for another battle as soon as the state of the ground would permit us to move. Moreover, at this stage the Soviet defenses around Kursk were by no means adequate to resist a determined attack. Zeitzler then said that Hitler wanted to make the results still more decisive and wished to postpone the offensive until the arrival of a Panther brigade. I listened to this with misgiving and reported that according to the latest intelligence appreciations the Russians were still smarting under our recent blows, and the losses incurred in the rapid and costly withdrawal from Kharkov had not been made good. A delay of one or two months would make our task far

more formidable. Such was my introduction to the fateful Battle of Kursk--the last great German offensive in the East.

Zeitzler outlined the plan for Operation Citadel, as the new attack was to be called. All our available armor was to be concentrated in two great pincers--General Model with his 9th Army was to attack from the north and General Hoth with 4th Panzerarmee from the south. In the initial assault Hoth was to have eight Panzerdivisions and Model five; several infantry divisions were to join in the attack and to obtain them the neighboring forces were to be thinned out beyond the limits of prudence. From the strategic aspect Citadel was to be a veritable "death-ride" for virtually the whole of the operational reserve was to be flung into this supreme offensive.

Because so much was at stake, hesitations and doubts were bound to arise. When the attack was originally proposed, Field Marshal von Manstein was strongly in favor and believed that if we struck soon a notable victory could be won. But Hitler kept postponing D-day, partly in order to assemble stronger forces and partly because he had the gravest doubts about our prospects of success. Early in May he held a conference at Munich and sought the views of the senior commanders, Field Marshal von Kluge, the Commander of Army Group Center, was in favor, Manstein was now dubious, because it was too late, and Model produced air photographs which showed that the Russians were constructing very strong positions at the shoulders of the salient and had withdrawn their mobile forces from the west of Kursk. This showed that they were aware of the impending attack and were making adequate preparations to deal with it. Guderian declared an offensive at Kursk was pointless, heavy tank casualties were bound to be incurred and would ruin his plans for reorganizing the armor. He warned that the Panthers, on which Zeitzler was relying so heavily, were still suffering from many teething troubles inherent in all new equipment. But Zeitzler was still confident and Hitler put off the decision until a later date, hereby giving the Russians more time to fortify their positions. Yet under the pressure of Keitel and Zeitzler he ultimately gave way and consented to an operation of grandiose proportions. The attack from the south was to be made by ten Panzer, one Panzergrenadier, and seven infantry divisions; the northern thrust would be delivered by seven Panzer, two Panzergrenadier, and nine infantry divisions. It was to be the greatest armored onslaught in the history of war.

For two months the shadow of Citadel hung over the Eastern Front and affected all our thoughts and planning. It was disquieting to reflect that after all our training, our profound study of the art of war, and the bitter experiences of the past year, the German General Staff should be dabbling with a dangerous gamble in which we were to stake our last reserves. As the weeks slipped by it became abundantly clear that this was an operation in which we had little to gain and probably a great deal to lose. Hitler kept postponing D-day; the ostensible reason was that the Panthers were not ready, but it appears from Guderian's memoirs that the Führer distrusted the whole conception of Citadel--on this occasion his intuition did not play him false.

It is an accepted fact that plans and preparations for an operation of such magnitude cannot be kept secret for any length of time. The Russians reacted to our plans exactly as was to be expected. They fortified likely sectors, built several lines of resistance, and converted important tactical points into miniature fortresses. The area was studded with minefields, and very strong armored and infantry reserves were assembled at the base of the salient. If Citadel had been launched in April or May, it might have yielded a valuable harvest, but by June the conditions were totally different. The Russians were aware of what was coming and had converted the Kursk front into another Verdun. Even if we should hack our way through the minefields and bite off the salient, little would be gained. The losses were certain to be enormous, and it was unlikely that many Russian divisions would be caught in the sack. As for wearing down the Soviet Reserves and thus forestalling their summer offensive, it was far more likely that our own reserves would be destroyed. The German Supreme Command was committing exactly the same error as in the previous year. Then we attacked the city of Stalingrad, now we were to attack the fortress of Kursk. In both cases the German Army threw away all its advantages in mobile tactics, and met the Russians on ground of their own choosing. Yet the campaigns of 1941 and 1942 had proved that our Panzers were virtually invincible if they were allowed to maneuver freely across the great plains of Russia. Instead of seeking to create conditions in which maneuver would be possible--by strategic withdrawals or surprise attacks in quiet sectors--the German Supreme Command could think of nothing better than to fling our magnificent Panzerdivisions against Kursk which had now become the strongest fortress in the world.

D-day was finally fixed for 4 July. Broadly speaking the plan was very simple: the 4th Panzerarmee from the south and the 9th Army from the north were to advance towards each other and meet east of Kursk. The main thrust of the 4th Panzerarmee was to be delivered on both sides of Tomarovka with the 48th Panzerkorps on the left and the S.S. Panzerkorps on the right. The S.S. Korps had been given three Panzerdivisions ("Leibstandarte", "Totenkopf", and "Das Reich"). Army Detachment Kempf, with one Panzerkorps and two infantry corps under command, was to advance from Belgorod in a northeasterly direction, thus acting as a flank cover for the main drive. In the 48th Panzerkorps we had the 3rd and 11th Panzerdivisions, and Panzergrenadier Division "Gross Deutschland". This was a very strong division with a special organization.

It mustered about 180 tanks of which 80 were part of a Panther Detachment and the remainder were in the Panzer regiment. The Division also had two motorized infantry regiments. There was an artillery regiment with four detachments, an assault-gun detachment, an antitank detachment, an engineer battalion and the normal signal and administrative units. The 11th and 3rd Panzerdivisions each had an armored regiment with 80 tanks and full-strength artillery. The 48th Panzerkorps thus had more than 300 tanks and some 60 assault guns, a striking power it was never to see again.

The terrain, over which the advance was to take place, was a far-flung plain, broken by numerous valleys, small copses, irregularly laid out villages, and some rivers and brooks. Of these the Pena ran with a swift current between steep banks. The ground rose slightly to the north, thus favoring the defender. Roads consisted of tracks through the sand and became impassable for all motor transport during rain. Large cornfields covered the landscape and made visibility difficult. All in all, it was not good "tank country".

There had been sufficient time--unfortunately too long--to make thorough preparations for the attack.

For weeks the infantry had been in the positions from which the attack was to be launched. From there they had reconnoitered all the details of the Russian defenses. Officers in command of the attacking troops, down to company commanders, spent days in these positions, in order to acquaint themselves with the ground and the enemy. No precautions were omitted; none of the Panzer men wore their black uniforms lest they give the show away. The fire plan and cooperation between artillery and infantry, were carefully worked

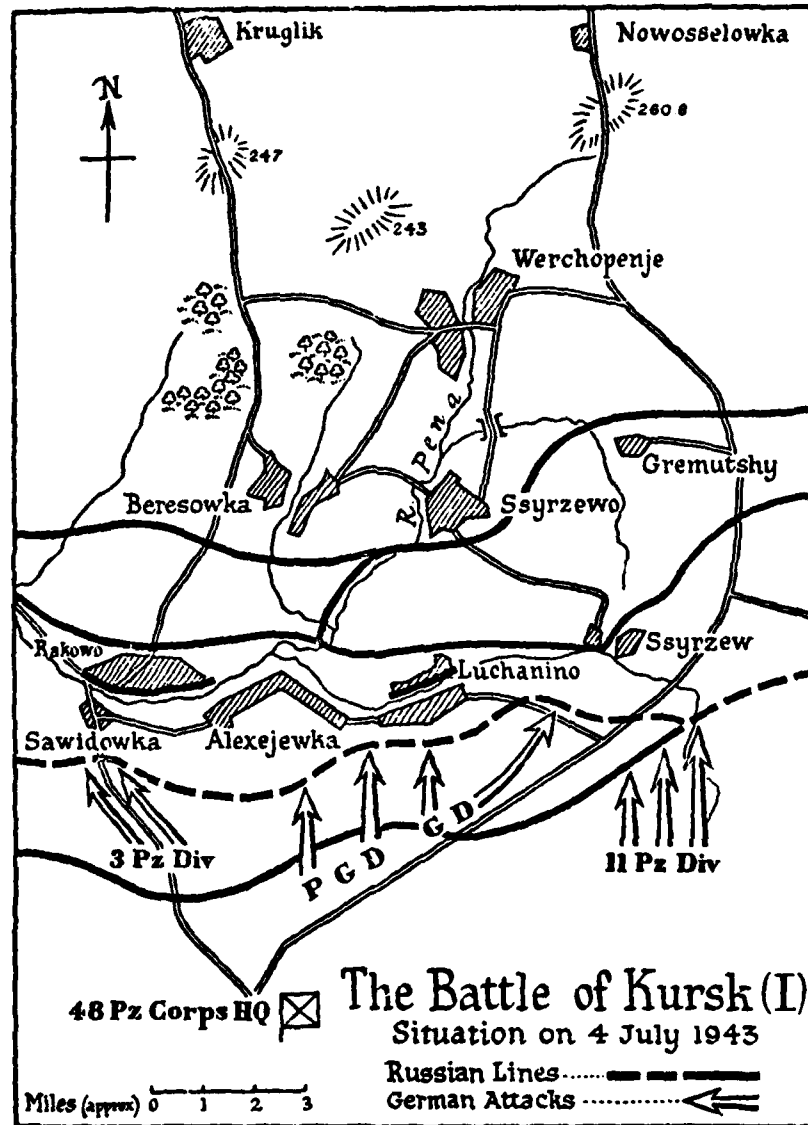
out. Air photos were available for every square yard of the Kursk salient. But though these photographs showed the depth and size of the Russian positions, they did not reveal details or give any indication of the strength of their forces, for the Russians are masters in the art of camouflage. Inevitably their strength was considerably underestimated. The most conscientious steps were taken to ensure the closest cooperation between air and ground forces. No movement whatever was allowed by day. To assemble so large a number of tanks and motorized troops was a difficult matter, the more so as few suitable roads were available. For nights on end the staff officers responsible for the movements of troops and ammunition stood by the roadside and at road crossings to ensure that everything would go off without a hitch. Rain and cloudbursts did not allow the timetable to be adhered to in all respects, but the assembly was completed in time, and suffered no interference whatsoever from the Russians.

Contrary to the normal practice, we were not to attack at dawn, but in the middle of the afternoon. On 4 July the weather was hot and sultry and there was a feeling of tension along the battle front. The morale of the attacking troops was of the highest; they were prepared to endure any losses and carry out every task given them. Unhappily they had been set the wrong tasks.

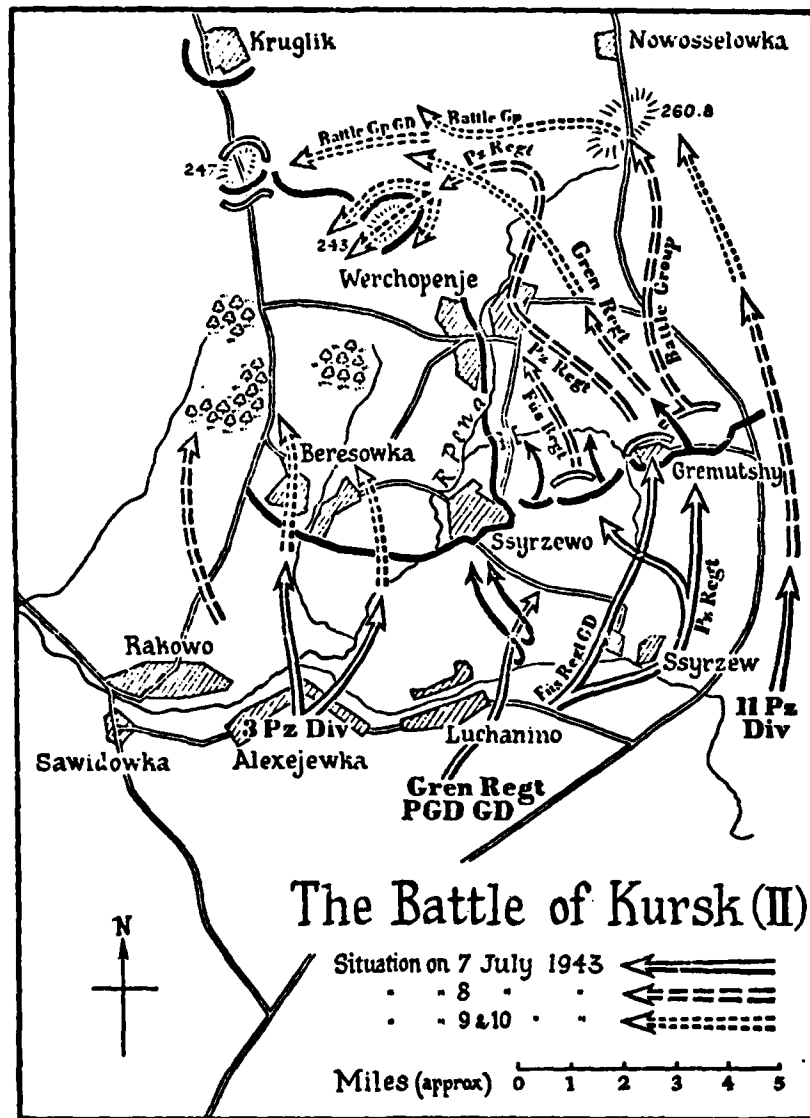
The Assault (Maps 6, 7, 8, 9)

The Battle of Kursk began at 1500 hours on 4 July with an attack on the forward Russian lines, preceded by a short but sharp artillery preparation and air bombardment. On the front of the 48th Panzerkorps these lines ran some 3 miles south of the villages of Luchanino, Alexejewka, and Sawidowka. Riflemen supported by assault guns and engineers penetrated the Russian forward line that evening. During the night the tanks were moved up, and Panzergrenadier Division "Gross Deutschland" was ordered to advance the next morning between Ssyrzew and Luchanino. The 3rd and 11th Panzerdivisions were to attack on the flanks of "Gross Deutschland". But as bad luck would have it, a violent cloudburst that night transformed the ground along the banks of the stream between Ssyrzew and Sawidowka into a morass. This proved of the greatest advantage to the Russian second line to the north of the stream and immensely increased its already considerable defensive strength. On the second day of the attack we met our first setback, and in spite of every effort

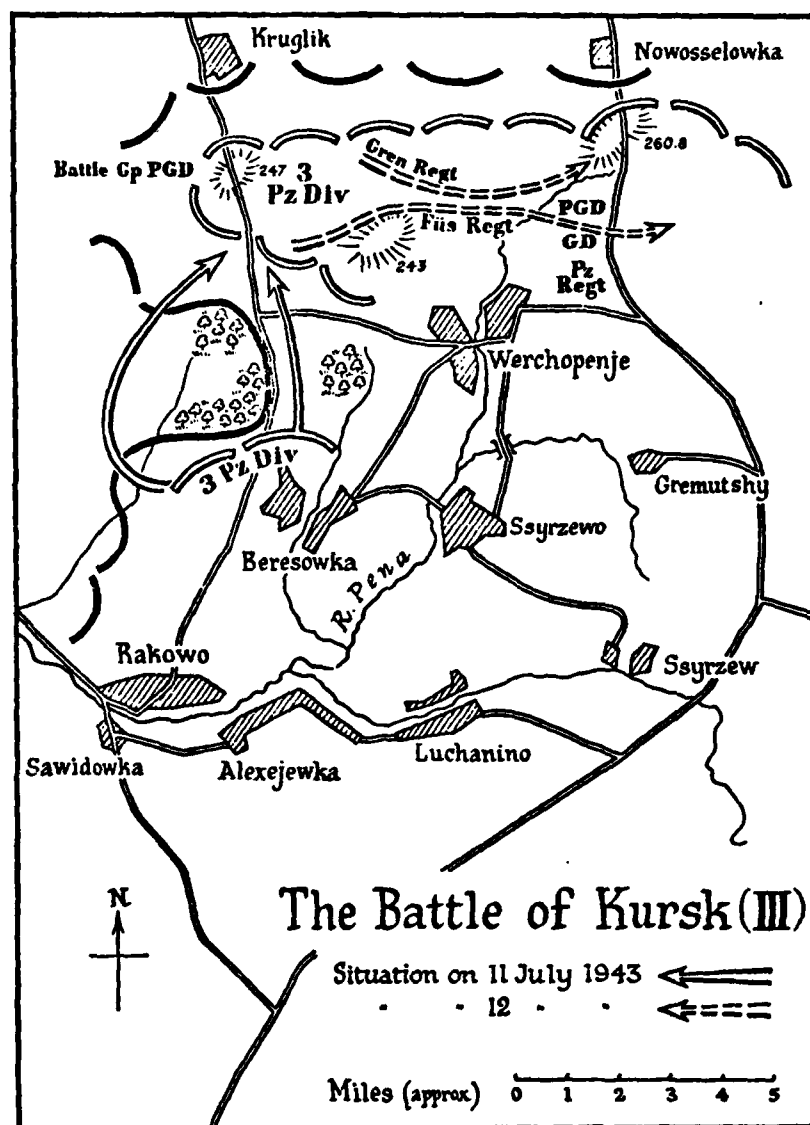
MAP 6



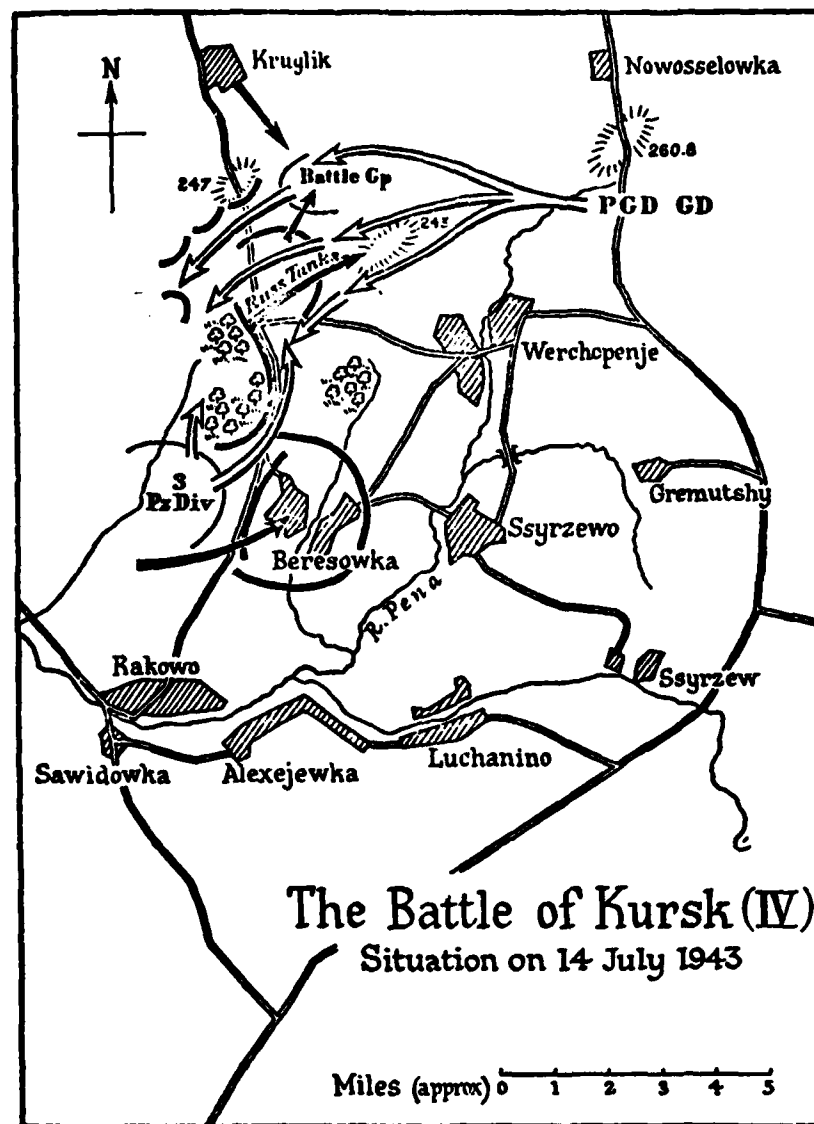
MAP 7



MAP 8



MAP 9



the troops were unable to penetrate the Russian line. "Gross Deutschland", assembling in dense formation and with the swamp on its immediate front, was heavily shelled by Russian artillery. The engineers were unable to make suitable crossings, and many tanks fell victims to the Red Air Force. Even in the area taken by the German troops on the first day Russians appeared from nowhere, and the reconnaissance units of "Gross Deutschland" had to deal with them. Nor was it possible to cross the stream and swamp on the night 5/6 July. On the left flank the attacks of the 3rd Panzerdivision against Sawidowka were as unsuccessful as those of "Gross Deutschland" against Alexejewka and Luchanino. The entire area had been infested with mines; and the Russian defense along the whole line was supported by tanks operating with all the advantage of high ground. Our assault troops suffered considerable casualties and the 3rd Panzerdivision had to beat off counterattacks. In spite of several massive bombing attacks by the Luftwaffe against battery positions, the Russian defensive fire did not decrease to any extent. On 7 July the fourth day of Citadel, we at last achieved some success. "Gross Deutschland" was able to break through on both sides of Ssyzew and the Russians withdrew to Gremutshy and Ssyzewo. The fleeing masses were caught by German artillery fire and suffered very heavy casualties; our tanks gained momentum and wheeled to the northwest. But at Ssyzewo that afternoon they were halted by strong defensive fire, and Russian armor counterattacked. However, on the right wing we seemed within reach of a big victory; the Grenadier Regiment of "Gross Deutschland" was reported to have reached Werchopenje. On the right flank of "Gross Deutschland" a battle group was formed to exploit this success. It consisted of the reconnaissance detachment and the assault-gun detachment and was told to advance as far as Height 260.8 to the south of Nowosselowka. When this battle group reached Gremutshy they found elements of the Grenadier Regiment in the village. The grenadiers were under the illusion that they were in Nowosselowka and could not believe that they were only in Gremutshy. Thus the report of the so-called success of the Grenadiers was proved wrong; things like that happen in every war.

A hill north of Gremutshy was taken during the evening against stubborn resistance; and the Panzer Regiment shot Russian tanks off Height 230.1. Darkness put an end to the fighting. The troops were already in a state of

exhaustion and the 3rd Panzerdivision had been unable to advance very far. The 11th Panzerdivision had reached a line parallel with the forward elements of "Gross Deutschland" whose further advance was badly hampered by fire and counterattacks on the left flank, where the 3rd Panzerdivision was held up.

On 8 July the battle group, consisting of the reconnaissance detachment and assault-gun detachment of "Gross Deutschland" advanced up the main road and reached Height 260.8; it then wheeled to the west to ease the advance of the divisional Panzer Regiment and the Panzergrenadiers who bypassed Werchopenje on the east. This village was still held by considerable enemy forces and the rifle regiment attacked it from the south. Height 243.0, immediately to the north of Werchopenje, was held by Russian tanks which had a magnificent field of fire. The attack of the Panzers and Grenadiers broke down in front of this hill; the Russian tanks seemed to be everywhere and singled out the spearhead of "Gross Deutschland", allowing it no rest.

That afternoon the battle group on the right of "Gross Deutschland" repulsed seven attacks by Russian armor and knocked out 21 T34s. The 48th Panzerkorps ordered the *Schwerpunkt* of "Gross Deutschland" to wheel westwards and bring some help to the 3rd Panzerdivision, where the threat to the left flank remained as grave as ever. Neither Height 243.0 nor the western outskirts of Werchopenje were taken on that day--it could no longer be doubted that the back of the German attack had been broken and its momentum had gone.

However, on 9 July the 3rd Panzerdivision was at last able to advance to the left of the Rakowo-Kruglik road and to prepare for an outflanking attack against Beresovka. During the night 9/10 July the tanks of the 3rd Panzerdivision entered Beresovka from the west, but the Division's attack to the north was again checked in front of a small forest to the north of the village.

The 11th Panzerdivision was unable to advance very far, while the S.S. Panzerkorps operating on our eastern flank had to ward off strong armored counterattacks all along the line; like ourselves it had gained but little ground.

The slow progress of the southern pincer was disappointing, but we had in fact done much better than our comrades on the northern flank of the salient. General Guderian says of his visit to the Ninth Army:

"....the ninety Porsche Tigers, which were operating with Model's army, were incapable of close-range fighting since

they lacked sufficient ammunition for their guns, and this defect was aggravated by the fact that they possessed no machine gun. Once they had broken into the enemy's infantry zone they literally had to go quail-shooting with cannons. They did not manage to neutralize, let alone destroy the enemy rifles and machine guns, so that the infantry was unable to follow up behind them. By the time they reached the Russian artillery they were on their own. Despite showing extreme bravery and suffering unheard-of casualties, the infantry of Weidling's 98 Infantry Division did not manage to exploit the tanks' success. Model's attack bogged down after some six miles."

After a week of hard and almost uninterrupted fighting "Gross Deutschland" was showing signs of exhaustion and its ranks had been thinned out considerably. On 10 July this division was ordered to wheel to the southwest and clean up the enemy on the left flank. The Panzer Regiment, the Reconnaissance Detachment and the Grenadier Regiment were to advance towards Height 243.0 and the north thereof; they were then to seize 247.0 to the south of Kruglik and move southwards from there to the small forest north of Beresovka, where the Russians were holding up the 3rd Panzerdivision; strong formations of the Luftwaffe were to support this attack. The air bombardment was extraordinarily effective and the War Diary of the Reconnaissance Detachment describes it as follows:

"With admiration we watch the Stukas attacking the Russian tanks uninterruptedly and with wonderful precision. Squadron after squadron of Stukas come over to drop their deadly eggs on the Russian armor. Dazzling white flames indicate that another enemy tank has 'brewed up'. This happens again and again."

Supported by the splendid efforts of the Luftwaffe "Gross Deutschland" made a highly successful advance; Heights 243.0 and 247.0 were taken, and Russian infantry and armor fled before the Panzers and sought refuge in the wood north of Beresovka. Trapped between "Gross Deutschland" and 3rd Panzer, it seemed as if the enemy on the left flank had at last been liquidated, and the advance to the north could now be resumed. On 11 July the 48th Panzerkorps issued orders for the units of "Gross Deutschland" to be relieved by the 3rd Panzerdivision during the night; "Gross Deutschland" was to assemble astride the road south of Height 260.8 and to stand by for an advance to the north. In view of the breakdown of Model's attack, a successful advance in this quarter offered the only hope of victory.

On the night 11/12 July the units of "Gross Deutschland" were relieved by the 3rd Panzer according to plan, but the Panzergrenadiers moved off with a sense of uneasiness. The last stages of the relief were carried out under heavy enemy shelling, and the men of "Gross Deutschland" left their trenches to the accompaniment of the battle noises of a Russian counterattack. Their fears--alas--came true, for that very night the 3rd Panzer was thrown out of its forward positions.

On the morning of 12 July "Gross Deutschland" was assembled and concentrated astride the road south of Nowosselowka, waiting to launch the decisive advance to the north at first light on the 13th. The 12th of July was their first day without fighting; this breathing space was used to replenish ammunition and fuel and to carry out such repairs as could be effected in the forward area. Reconnaissance to the north reported that Nowosselowka only seemed to be occupied by insignificant forces. Heavy firing was heard to the west, and the news from the 3rd Panzer was not encouraging.

On 13 July patrolling to the north was intensified, but the expected order to advance did not come through--instead unpleasant reports were received from neighboring formations. Strong Russian counterattacks had been launched against the S.S. Panzerkorps and the 11th Panzerdivision; it was true that the number of Russian tanks knocked out on the whole front was enormous, but new tanks took the place of the casualties; faithful to their principle the Russians kept on throwing in fresh troops, and their reserves seemed inexhaustible. On the afternoon of 13 July, the Korps Commander, General von Knobelsdorff, appeared at the battle headquarters of "Gross Deutschland" and gave orders which left no hope for an advance to the north; in fact the Division was again to attack westwards. This attack, to be carried out on the 14th, was practically identical with those of the 10th and 11th of July. The objective was to reach the Rakowo-Kruglik road. Indeed the situation on the left flank had deteriorated to such a degree that an attack northwards was no longer possible. On the 12th and 13th of July the 3rd Panzer had lost Beresowka, had been driven off the Rakowo-Kruglik road, and had been compelled to give up Height 247.0 under stubborn onslaughts by Russian armor. The enemy was being reinforced, and the 3rd Panzer was now too weak to stem the Russian advance from the west.

At 0600 hours on July 14th "Gross Deutschland" advanced westwards for the second time. A battle group was formed on the right wing consisting of the Reconnaissance Detachment, the Assault-Gun Detachment, a Rifle Company, and a Tank Company, to advance to Height 247.0. In the center the Panzer Regiment and riflemen were to advance on Height 243.0, on the left flank the Grenadiers were to attack north of Werchopenje, with the little forest north of Beresowka as the final objective. When the Division moved off it was already under heavy artillery fire, and during the morning several counterattacks from the north and west were repulsed. Nothing was to be seen or heard of the 3rd Panzerdivision, but the attack went in as planned and Height 243.0 was retaken. Slow progress was made by the battle group on the right which became involved in fierce fighting against Russian counterthrusts. On the center and left numerous Russian tanks were knocked out, and their infantry suffered very heavy losses and piled back westwards--these masses were caught by German artillery fire and shot to pieces.

That afternoon contact was at last made with the 3rd Panzer at Beresowka and a united effort secured the little forest to the north of the village. But it proved impossible to dislodge Russian tanks from the hill immediately south of Kruglik, and the enemy counterattacked strongly in that area. When the night fell it appeared that the Russians had suffered serious losses, and valuable ground had been regained. All this was certainly a success of some sort; the dangerous situation on the left wing had been rectified, and the 3rd Panzer had been given support. But "Gross Deutschland" was dangerously weak after heavy fighting lasting for ten days, while the Russian striking power had not appreciably diminished. In fact, it seemed to have increased.

By the evening of 14 July it was obvious that the timetable of the German attack had been completely upset. At the very beginning of the offensive, the piercing of the forward Russian lines, deeply and heavily mined as they were, had proved much more difficult than we anticipated. The terrific Russian counterattacks, with masses of men and materiel, ruthlessly thrown in, were also an unpleasant surprise. German casualties had not been light, while our tank losses were staggering. The Panthers did not come up to expectations; they were easily set ablaze, the oil and gasoline feeding systems were inadequately protected, and the crews were insufficiently trained. Of the 80 Panthers available when the battle was joined only a few were left on the 14th of July.

The S.S. Panzerkorps was no better off, while on the northern flank, the Ninth Army had never penetrated more than 7 miles into the Russian lines and was now at a complete standstill. The Fourth Panzerarmee had indeed reached a depth of 12 miles, but there were another 60 miles to cover before we could join hands with Model.

On 13 July Field Marshals von Manstein and Kluge were summoned to East Prussia, and Hitler informed them that Citadel must be called off immediately as the Allies had landed in Sicily; troops must be transferred from the Eastern Front to deal with the invasion.

The Russian High Command had conducted the Battle of Kursk with great skill, yielding ground adroitly and taking the sting out of our offensive with an intricate system of minefields and antitank defenses. Not satisfied with counterattacking in the salient, the Russians delivered heavy blows between Orel and Bryansk and made a serious penetration. With Hitler's decision to go on the defensive, the situation on the eastern front became very critical. The Fourth Panzerarmee was informed that the S.S. Panzerkorps would be withdrawn immediately for operations in Italy, while the 48th Panzerkorps was told to release "Gross Deutschland" and send it to the assistance of von Kluge's Army Group Center. In the circumstances it was impossible to hold our gains in the Kursk salient and by 23 July, the 4th Panzerarmee had been pushed back to its starting line.

Citadel had been a complete and most regrettable failure. It is true that Russian losses were much heavier than German; indeed tactically the fighting had been indecisive. The 4th Panzerarmee took 32,000 prisoners and captured or destroyed more than 2,000 tanks and nearly 2,000 guns. But our Panzerdivisions--in such splendid shape at the beginning of the battle--had been bled white, and with Anglo-American assistance the Russians could afford losses on this colossal scale. With the failure of our supreme effort, the strategic initiative passed to the Russians.

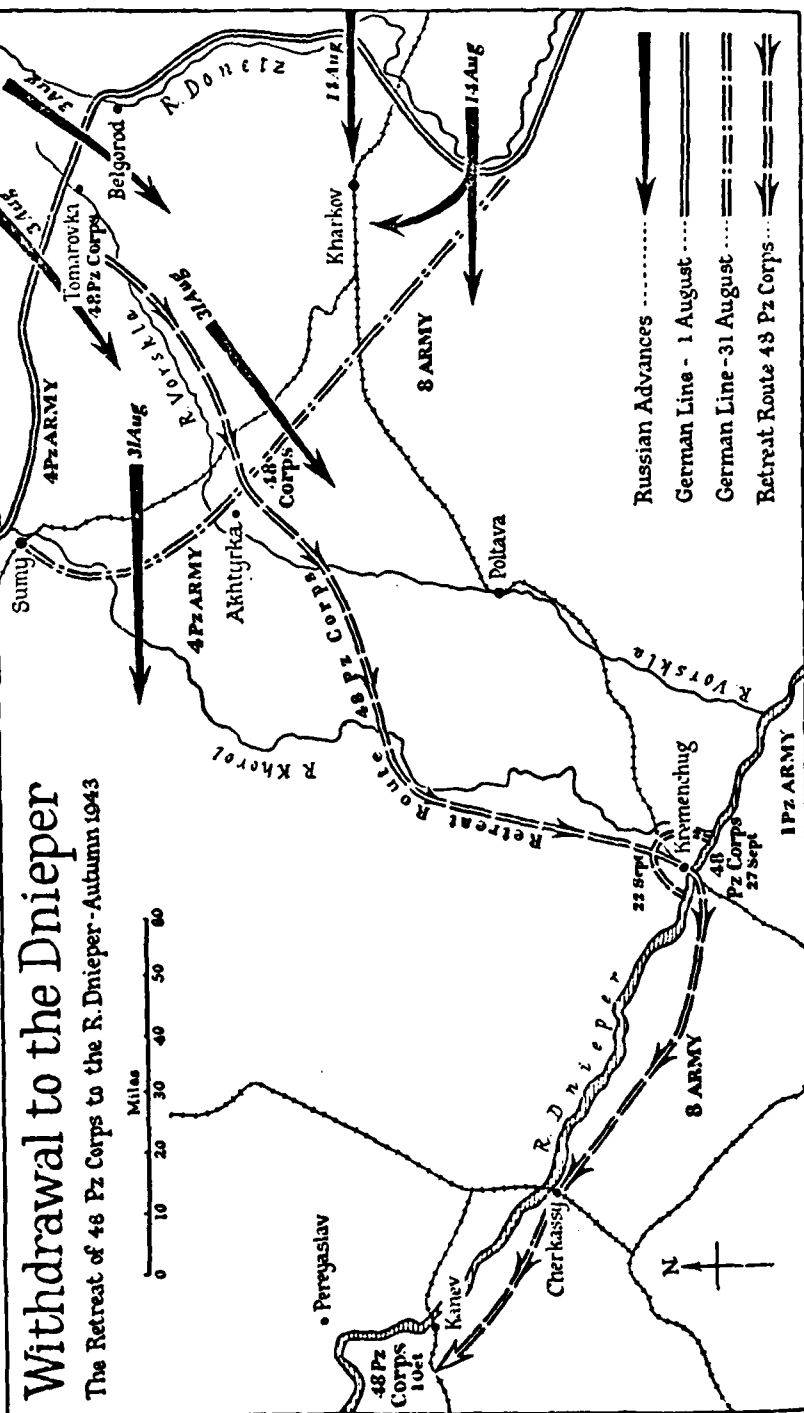
The main lesson drawn from the Kursk battle is that tank formations should have never been engaged against Russian areas for some months fortified by deep defenses strengthened by large antitank, mines, and armored forces. Hereby the main strength of the German Panzerdivisions flexibility, surprise attacks, audacious leadership of all commanders from platoon leader to the Commander of a Panzerkorps are not utilized. A few lessons of the Kursk battles are:

- (1) Every opportunity must be taken for reconnaissance in the air and on the ground.
- (2) The armored formation carrying out the attack must be made as strong as possible by super-heavy tanks, brought to bear in the *Schwerpunkt*.
- (3) Fire concentration by tank guns must be rapid and effective; the armor must keep moving and tanks should only stop to fire their guns.
- (4) Observers for all heavy weapons supporting the attack must travel with the armor. Wireless communication between the tank leader and the air is most essential.
- (5) Engineers in armored vehicles must follow the armor.
- (6) Light tanks must be at hand to exploit success.
- (7) Fuel and ammunition supply for the armor must be assured during the battle by armored supply carriers. Much experience is needed to carry out this difficult operation.
- (8) Tanks should be supplied with smoke gear to blind enemy antitank weapons, and with colored smoke grenades for unit commanders to indicate direction.
- (9) For night attacks tanks should be supplied with direction-finding equipment.

Withdrawal to the Dnieper River at Kremenchug (Map 10)

Even while the Kursk offensive was still in progress the Russians had launched a heavy attack between Bryansk and Orel, and they now expanded this into a major operation. The Ninth Army had been greatly weakened during Citadel and could no longer hold the Orel salient. Surprisingly enough Hitler not only consented to a large-scale withdrawal by the Ninth Army, but demanded that it should be speeded up. The reason for this unusual attitude was his anxiety about the situation in Italy; he wanted to withdraw as many troops as possible from Russia to restore the situation in the south. In consequence, the Ninth Army abandoned Orel on 5 August and retired behind the Desna. The Russians continued to attack furiously and pressed von Kluge's Army Group Center back towards Smolensk. Unfortunately Hitler still insisted that Army

MAP 10



Group South should hang on to its advanced positions, and oppose a rigid defense to the Russian offensive, which opened on 3 August against Kharkov and Belgorod.

The front had been weakened by our abortive offensive, and by the withdrawal of the S.S. Panzerkorps to Italy; moreover, reserves had been moved southwards along the line of the Donetz. To the southeast of Tomarovka the Russians broke clean through the front of the 52nd Infantry Corps and took Belgorod on 4 August. The Corps headquarters was attacked and dispersed by Russian tanks, and the 48th Panzerkorps was ordered to take over the threatened sector, which was on our right flank. During the next fortnight our line was forced steadily back towards the Sumy-Kharkov railways; the Soviet offensive was on a massive scale and Panzergrenadier Division "Gross Deutschland" was brought back from Army Group Center to enable us to cope with these masses. The German 8th Army on our right was under terrific pressure, but although the the Russians crossed the Donetz and reached the suburbs of Kharkov on 14 August, the city held out for another week.

During this phase an operation took place which illustrated once again our superiority in maneuver. On 20 August a Russian armored corps and infantry division broke through the 8th Army front on the right of "Gross Deutschland" then holding a sector around Akhtyrka. The Division was ordered to take immediate action to restore the situation. An Assault Group was formed under command of Colonel von Natzmer, G3 of "Gross Deutschland", and consisted of the following units: one Panzer detachment with about 20 tanks; one company of the reconnaissance unit; one battalion of infantry on armored vehicles; and one troop of artillery with self-propelled guns.

This group was childishly small in comparison with the Russian forces to be pushed back, but accomplished its task within 12 hours. Success was due primarily to surprise and the skillful handling of the few available tanks. The Russians had thought that the 48th Panzerkorps was tied down on the Akhtyrka front and the appearance of our tanks and their attack on the Russian flank came as a complete surprise. Initial resistance was negligible and at first there was no serious resistance. Leaving behind masses of equipment of every description the Russians withdrew in panic, abandoning their gains almost without fighting. Interrogation of prisoners showed that the enemy had overrated the size of the German units and thought them many times stronger than they actually were.

The Russian reaction was certainly exceptional, but tends to prove how isolated they feel when attacked in flank, particularly when such attacks come as a surprise and are carried out by armor. During World War II such incidents occurred on many occasions and we learned that skillful use of a few tanks, or well-executed tank raids, often brought much greater results than very heavy artillery fire or massed bombing attacks. Colonel von Natzmer's success, however, was only an isolated incident on a front of over 100 miles from Sumy to the Donetz; General Koniev's army group continued to attack strongly and on 22 August Kharkov was lost. Nevertheless, we succeeded in halting his main drive towards Poltava, and late in August the Russian assaults on the front of the 8th Army and 4th Panzerarmee died away. We took advantage of the lull to extricate the Panzerdivisions and give them some much needed rest and replenishment.

Further to the south however the Soviets pierced the defenses along the Donetz and on the Mius River; at the end of August our 29th Corps was encircled in Taganrog and had great difficulties in breaking out. On 3 September von Manstein flew to Hitler's headquarters to warn him that Army Group South was facing catastrophe and to demand a change in the conduct of operations. The interview was a stormy one and led to no results. The situation at the front became increasingly critical, for early in September the Russians captured Stalino and smashed their way into the Donetz industrial area. Moreover, Koniev resumed his offensive on the sector of the 4th Panzerarmee. The 48th Panzerkorps was the target of strong attacks and the Russians broke through our left flank, while they also severely handled the northern wing of the 8th Army on our right.

Not until then, when Army Group South was in imminent danger of breaking up into isolated groups, did the Supreme Commander of the Wehrmacht give permission for a withdrawal behind the Dnieper. But Hitler had refused to permit the construction of any fortifications on the river bank, on the ground that if his generals knew there was a reserve line they would at once fall back there. Thus it was very doubtful whether we would be able to stop the Russians at the Dnieper, and to make matters worse there were only five crossings available. The situation could only be mastered if the Russian advance could be delayed.

As is well known the Russians make very limited use of supply columns, and their troops live mainly on the country. Their method is not new; it is essentially similar to that of the Mongols of Genghiz Khan, or the armies of Napoleon. The only means of slowing down armies of this kind is to totally destroy everything that can be used to feed and house them. In the autumn of 1943 the German Army deliberately adopted this policy and R.T. Paget remarks very appropriately: "Some five years later lawyers were to argue for hours as to the legality of the demolitions and requisitions carried out by the Germans during their retreat, but I am afraid that no law that conflicts with an Army's capacity to survive is ever likely to be effective."

We certainly did not relish the idea of destroying all food supplies and putting a zone of scorched earth between us and the pursuing Russians. But the existence of an entire army group was at stake, and if we had not adopted such measures, many thousands of troops would never have succeeded in reaching the Dnieper and establishing an effective defense line under cover of the river.

During September the Fourth Panzerarmee retired westwards through Priluki towards Kiev, while the First Panzerarmee fell back into the great bend of the Dnieper at Dnepropetrovsk. These withdrawals were fairly methodical and were covered by raging fires which destroyed the crops over wide areas. The 48th Panzerkorps, now under the 8th Army, was less fortunate; we were harried all the time by Russian mobile columns and had great difficulty in getting into the bridgehead of Kremenchug, where we hung on for a few days to protect the crossing of the Dnieper by the 8th Army. At the end of September the 4th Panzerarmee formed a thin front on both sides of Kiev and the 8th Army and 1st Panzerarmee were stretched out along the river as far as Zaporozhe. Manstein was still holding Melitopol and covering the approaches to the Crimea.

Problems of Withdrawal

During World War II the German Supreme Command could never decide on a withdrawal while the going was good. It made up its mind either too late or when a retreat had been forced upon our armies and was already in full swing. A classic example of a retreat, smoothly and efficiently conducted, occurred

in March 1943, when Hitler was persuaded to evacuate the dangerous salient of Vyaz'ma-Rzhev on the front of Army Group Center. This operation was known by the code name of Buffalo and is worth describing in detail. First of all, thorough preparations were made. Roads, bridges, tracks, and river crossings were systematically improved, assembly areas for troops were chosen and camouflaged, elaborate calculations were made to determine what equipment and material could be moved, and what transport would be required. All telephone lines were removed and the command posts and battle headquarters were established in the rear before the movement began. Demolitions, road blocks, and minefields were designed to fit in with the plan for delaying actions on specific lines of resistance.

The gravest problem was the evacuation of civilians, for in Buffalo the entire population, old and young, healthy and sick, peasant and town-folk, all insisted on coming along, so great was their dread of the soldiers and commissars of their own country. Of course, a mass migration of this sort had not been foreseen by the German military authorities, and to cope with it a special organization had to be improvised. The main thing was to canalize the movement, but to direct it off the main lines of withdrawal of auxiliary tracks and routes. Engineers and construction detachments were sent to build bridges and roads to enable these masses to keep going in orderly fashion. Supply and ration centers were organized, medical and veterinary aid posts were not forgotten. The most important point was traffic control, for these wandering masses had to be very carefully handled. As long as they were near the front line, their moves took place by night. The vast spaces and huge forests helped to bring this mass migration to a successful conclusion. In modern war long-range planning and detailed preparations have to be made to help the civil population in their flight, otherwise the movements of troops will be brought to a complete standstill. It must be accepted as a foregone conclusion that any population will flee before the advance of a Soviet Army. It is impossible to stop them. Thus, in modern war there is no such thing as a purely military withdrawal; the civil population has to be included in any plans for a retreat. Turning now to military factors, it is essential to keep secret the intention to withdraw and to conceal the retreat as long as possible after it has started. The withdrawal of reserves does not present many problems as it is comparatively easy for them to move at night and occupy

rearward positions. The real difficulty starts when the forward troops are drawn out of the line. They must get out immediately after dark, without making any noise, and their "first bound" should be as far back as possible. On no account should they form columns of more than battalion strength and each company must move as a separate unit. By daybreak all troops should be in their new position.

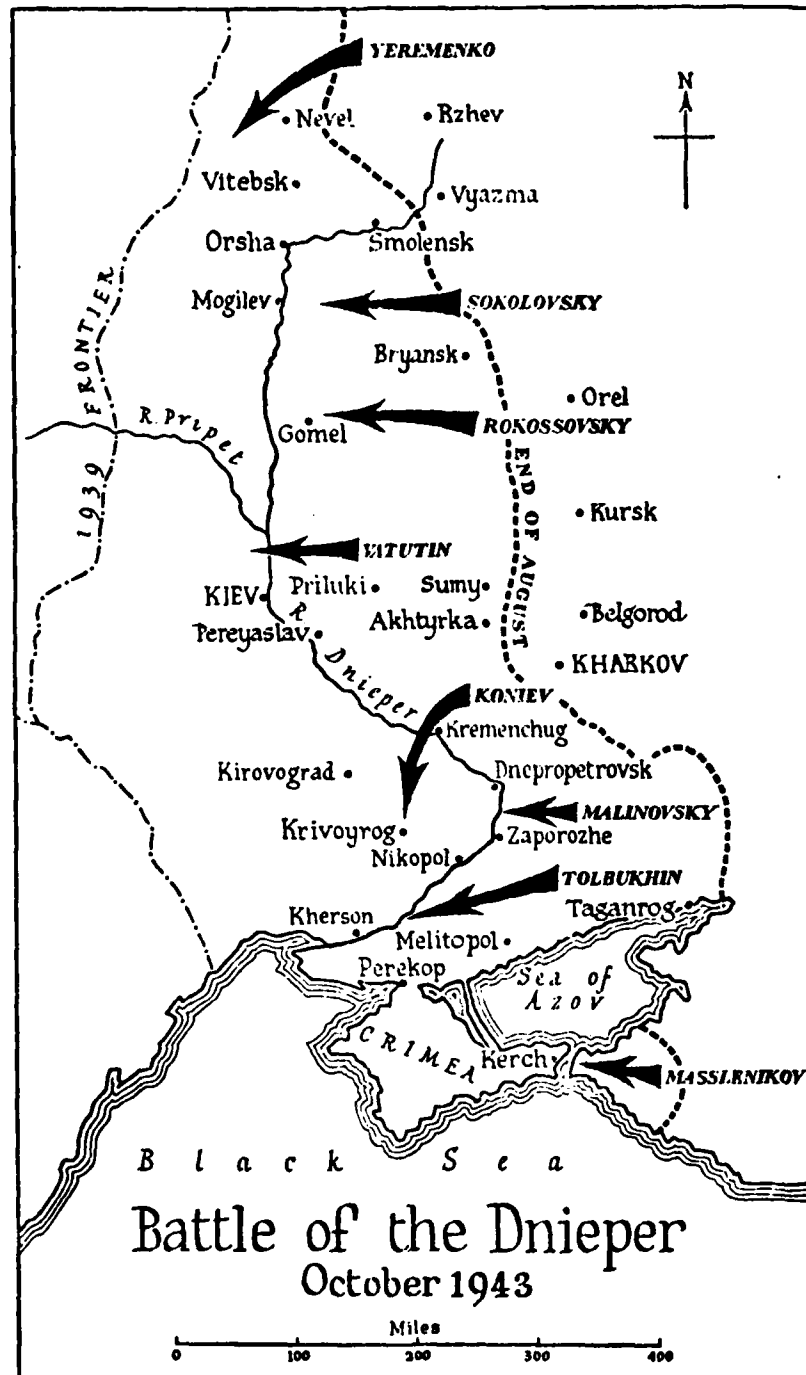
Of course, it frequently happened that we were unable to carry out a systematic withdrawal, for not much planning is possible when troops have to break contact after a lost battle. Thus in September 1943, the 48th Panzerkorps found itself in a position of the gravest peril; there was no longer a coherent front and Russian mobile units were already operating far in our rear. We had to get back to the Dnieper as quickly as possible. There was no stopping by day; the position was too serious for us to worry about the Red Air Force. A withdrawal of this kind, harassed by the enemy, does not absolve commanders from their duty to maintain order and discipline. Engineers must guard and keep intact all bridges and prepare their demolition. Recovery parties with tractors must be placed along the routes to keep vehicles and guns on the move or to pull total casualties off the road, antiaircraft guns have to be stationed at crossroads and important bridges and defiles, and fighter protection, if available, should be provided to cover the main arteries of the withdrawal.

In general, however, the wide spaces of Russia favor well-organized withdrawals. Indeed, if the troops are properly disciplined and trained, a strategic retreat is an excellent means of catching the enemy off balance and regaining the initiative.

Defense of the Dnieper (Map 11)

On 27 September the 48th Panzerkorps had abandoned the bridgehead at Kremenchug, and stood safely on the southern bank of the Dnieper. The river itself was a comforting obstacle, about 400 yards wide at this point, and with the bank on our side of the river considerably higher. However, thick reeds extending some distance into the water made it relatively easy for the Russians to hide boats and camouflage their preparations. Moreover, it has been most wisely said that "few indeed are the instances in history of a river line athwart the advance of a superior army proving an effective defense". In

MAP 11



modern times river crossing will be made even easier by the use of swimming tanks and helicopters.

Indeed, on 27 September we learned that the Russians had already gained a foothold across the Dnieper near Pereyaslav, south of Kiev. We were ordered to liquidate the bridgehead at once and for this purpose the 7th Panzerdivision and the 20th Panzergrenadier were put under our command. Moving rapidly up the Dnieper towards the danger point we caught the Russians advancing southwards, and our Panzers went straight into action without waiting to deploy. The Russian columns were thrown into great disorder and driven back into a bend of the river. There they hung on and could not be dislodged. A great mistake from our side--we should have tried by all means to destroy this little bridgehead.

The next fortnight passed quietly on our front; the scorched-earth tactics were bearing fruit and the Russians were still unable to mount an offensive on a large scale in this sector. The 48th Panzerkorps was under command of the 8th Army, which held a front of over 200 miles from Kremenchug to south of Kiev. The only Russian bridgehead on the front of the 8th Army was the one which the 48th Panzerkorps was containing to the south of Pereyaslav. There was no doubt that the Russians would attack again in this quarter and reconnaissance and intelligence reports showed that a constant stream of reinforcements was moving into the bridgehead. They had thrown several bridges across the Dnieper, and such was their skill at field engineering that they actually built bridges below water level on which troops or animals could wade across.

On the German side feverish preparations were made to meet the coming attack. The 7th Panzerdivision was withdrawn from our command, but we still had the 20th Panzergrenadier Division, while the 19th Panzer and the 1st Infantry Division were moved up. Under the supervision of the Artillery Commander of the 48th Panzerkorps, the guns of all divisions were coordinated in such a way that fire could be concentrated in a single massive blow against any threatened point or hostile assembly area.

The antiaircraft guns had a very important part to play in the general fire plan. We adopted the principle that antitank work was the task of all weapons, and of every individual man. Antitank ditches, roadblocks, cross-country obstacles of every conceivable size, minefields, and minebelts were all devised to canalize the expected torrent of Russian tanks and direct

them into prearranged channels. All obstacles were covered by fire. That the attack was imminent was clear from the aggressive reconnaissance thrusts carried out by considerable Russian forces; trenches were dug as far forward as possible to enable their infantry to rush our advance positions and numerous deserters infiltrated into our lines. Night air reconnaissance reported large movements of motorized columns in the direction of the bridgehead, and air photographs showed a great number of new artillery positions. The best and most reliable source of intelligence was our Wireless Intercept Service, but soundlight ranging detachments of our artillery observer units brought valuable information during the last phase on the eve of the attack, when the gunners started their range-finding shots.

At 0630 on 16 October the Russians launched their attacks against the positions of the 48th Panzerkorps. I happened to be in one of the forward observation posts of the 19th Panzerdivision, and had to stay there for fully two hours. The artillery bombardment was really quite impressive. No movement was possible, for 290 guns of all calibers were pounding a thousand yards of front and during those two hours the Russians expended their normal ammunition allowance for one-and-a-half days. The bombardment reached as far back as divisional battle headquarters, and the two divisions holding the Corps front were shelled with such intensity that it was impossible to gauge the *Schwerpunkt*. After two hours' bombardment our trench system looked like a freshly ploughed field, and, in spite of being carefully dug in, many of our heavy weapons and antitank guns had been knocked out.

Suddenly Russian infantry in solid serried ranks attacked behind a barrage on a narrow front, with tanks in support, and one wave following the other. Numerous low-flying planes attacked those strongpoints which were still firing. A Russian infantry attack is an awe-inspiring spectacle, the long gray waves come pounding on, uttering fierce cries, and the defending troops require nerves of steel. The Russian onslaught made some headway, but during the afternoon the armored assault troops, whom we were keeping in reserve, were able to wipe out those Russians, who had penetrated the defense system. We only lost a mile or so of ground.

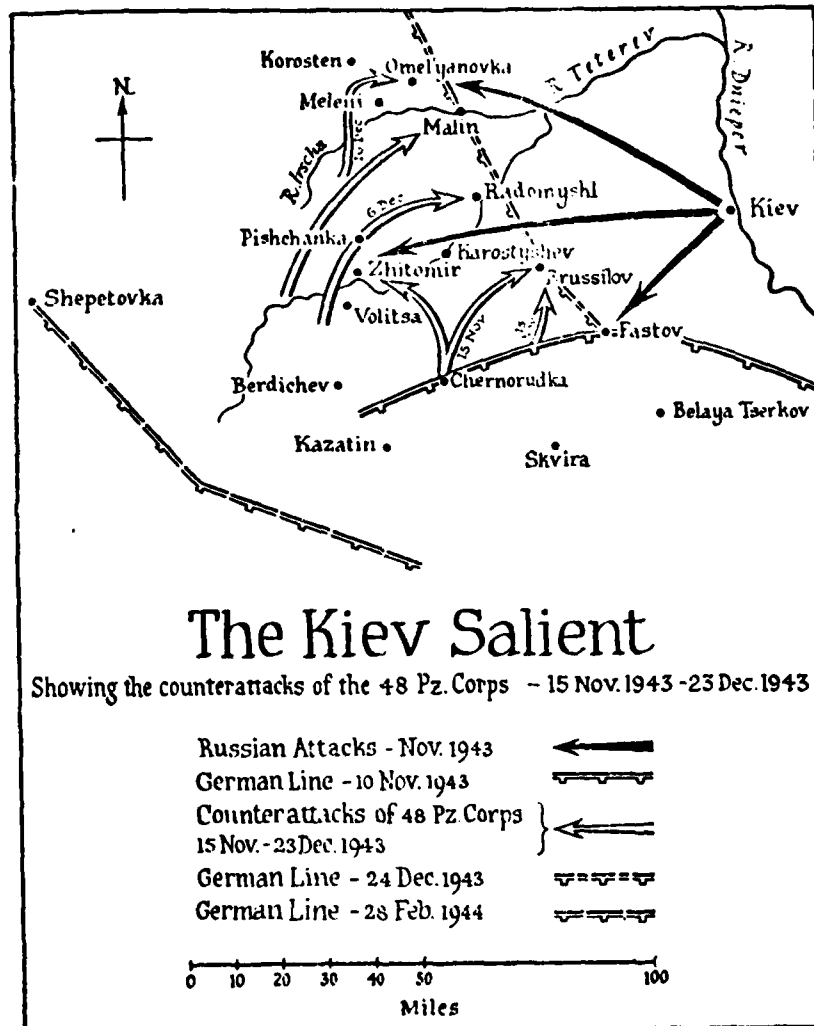
On subsequent days the Russian breakthrough attempts were repeated in undiminished strength. Divisions decimated by our fire were withdrawn and fresh formations were thrown into the battle. Again wave after wave attacked,

and wave after wave was thrown back after suffering appalling losses. But the Russians did not desist from their inflexible and rigid methods of attack. On our side artillery and armor bore the main burden of the fighting. Our fire plans were flexible, allowing for concentrations where they were most needed, and designed to break up the Russian columns before they could advance to the attack. Wherever a deep penetration occurred it was quickly patched up, and a few hours later counterattacks by our tanks were delivered against the flanks of the bulge. This battle continued for more than a week and the defensive strength of the 48th Panzerkorps began to dwindle. The 8th Army moved up its last reserve--the 3rd Panzer Division--to the danger point. Two days later the Russian attacks on the front of our Korps broke down.

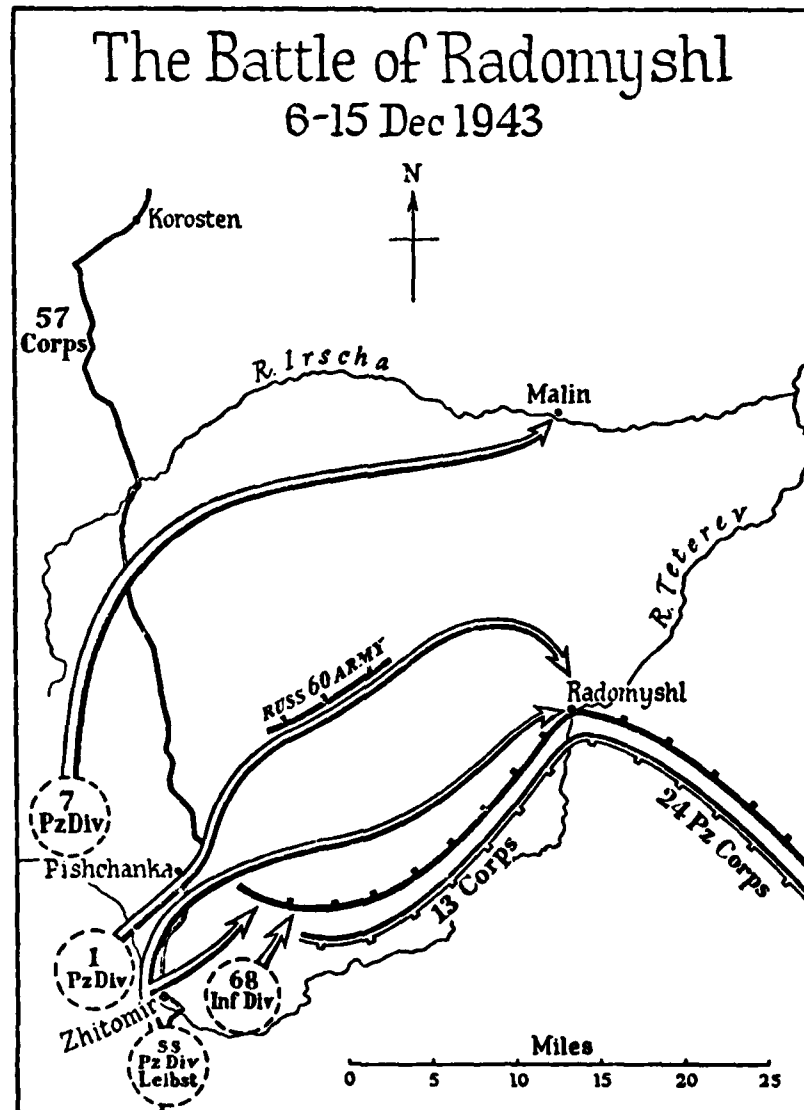
Soviet Breakthrough at Kiev;
Withdrawal to Vicinity of Zhitomir (Map 12)

The 48th Panzerkorps had brilliantly repulsed the attacks south of Pereyaslav, but on our flanks matters did not go so well. By mid-October General Koniev had gained three bridgeheads east of Kremenchug and he then struck heavily towards the important industrial center of Krivoyrog, and Nikopol, which were lost. Manstein wanted to evacuate the great bend of the Dnieper, but Hitler insisted that he should counterattack and save these two cities, which was nonsensical from the strategic point of view. Manstein did so on 2 November and tactically the operation was a notable success; Koniev's columns were caught in flank and flung back towards the Dnieper. But 300 miles to the northwest, Marshal Vatutin's Army Group crossed the river in great force on both sides of Kiev; on 3 November he broke out of his bridgeheads with 30 infantry divisions, 24 armored brigades, and 10 motorized brigades. The German defense was swamped, and on 6 November Kiev was captured. On 7 November Russian spearheads reached Fastov, 40 miles southwest of Kiev, on the 11th they were at Radomyshl 55 miles west of the Dnieper, and by the 13th their tanks stood on the outskirts of the important town of Zhitomir (see Map 13). A broad and deep wedge threatened to separate Army Group South from Army Group Center and immediate countermeasures had become essential. On 6 November Manstein decided to concentrate all available Panzerdivisions in the area Fastov-Zhitomir with a view to thrusting towards Kiev, and battle headquarters of the 48th Panzerkorps was ordered to move to the area south of Fastov without delay.

MAP 12



MAP 13



On 7 November I set up the headquarters at Belaya Tserkov, 15 miles south of Fastov; we were now under command of the 4th Panzerarmee. It was our intention to build up a defensive line through Fastov, but the Russians gave us no time. Fastov, which was garrisoned by two battalions of elderly men of second-grade value was lost on the evening of the 7th.

Unfortunately the 25th Panzerdivision was prematurely involved in the fighting at Fastov. This division was formed in Norway and since August 1943 had been training in France. It was far from fit for operations, but against the advice of Guderian, the Inspector General of Panzer troops, it was sent off to the Ukraine, and rushed into battle. To make matters worse, Army Group South had arranged for the wheeled elements of the division to detrain in the Berdichev area, while the tracked units went to Kirovograd 125 miles to the southeast. In view of the critical situation west of Kiev, Army Group South arranged for the wheeled elements to move straight from their trains towards the battle area. On the evening of 6 November the 4th Panzerarmee ordered the Division to advance with the utmost speed towards Fastov and hold it at all costs in conjunction with a regiment of the S.S. Panzerdivision "Das Reich". The divisional Panzer Regiment could not possibly arrive for several days.

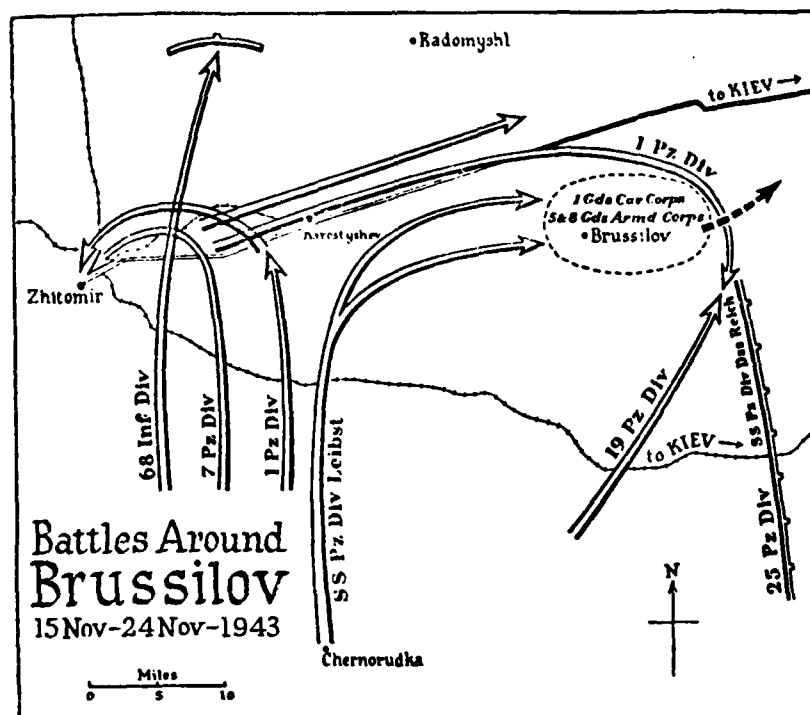
At noon on 7 November the advance guard of Panzergrenadier Regiment 146 ran into T34 tanks south of Fastov and was thrown into panic. Unused to any fighting the troops streamed back in great disorder and although they were rallied by the personal efforts of their divisional commander, yet they had great difficulty in escaping from the Russians. On 8 November, the 25th Panzerdivision passed under our command. On 9 November their Panzer Regiment arrived and the 25th Panzerdivision was now ordered to stop the Russians advancing farther to the southwest and south. Thanks to the splendid leadership of General von Schell, the 25th Panzerdivision advanced as far as the eastern outskirts of Fastov, where it was held up by very superior Russian forces. This fighting gained us a breathing space to gather armor for a deliberate counterattack, but unfortunately the 25th Panzerdivision lost so heavily in men and material, that we were unable to use the Division for weeks to come in any offensive operation. The experience of the 25th Panzerdivision proved once again, that while veteran troops can outmaneuver the Russians, yet untrained units have little chance against them.

During the week 8-15 November the 48th Panzerkorps assembled strong forces to the south of the Kiev salient and to my great joy General Balck was

appointed Corps Commander just before our counterattack was launched. For the counterattack on the Kiev salient the 48th Panzerkorps was given no fewer than six Panzerdivisions, and one infantry division. I was proud to know that we were regarded as the corps d'élite and that our headquarters was entrusted with any operation of particular difficulty or significance. Our plan was to use this powerful force to advance from Fastov directly towards Kiev, thus cutting in towards the base of the huge salient, hamstringing any further Russian advance to the west and perhaps trapping and destroying very considerable forces. Unfortunately Colonel General Rauss, Commander of the Fourth Panzerarmee, regarded this plan as too ambitious and felt that it was essential to recapture Zhitomir, and wipe out the Russian forces there before turning towards Kiev. Our idea of a lightning thrust far into the rear of the Russian masses was discarded in favor of an operation which was essentially orthodox in character. The events of the next few weeks showed that in spite of great tactical successes, it was impossible to crush the huge Kiev bridgehead by pushing at it frontally from the west. I stress the point, because the history of armored warfare--and of cavalry warfare before that--shows that the great prizes can only be won by speed, daring and maneuver. The "play safe" school of generals was very well on the Western Front in 1914-18, but is out of place in this age of the gasoline engine and the airplane.

Forced to modify our plan on orders of the 4th Army, the 48th Panzerkorps made dispositions as follows: the 25th Panzerdivision and the S.S. Panzerdivision "Das Reich" were to guard the right flank of the Corps and the 68th Infantry Division and 7th Panzer were to move on the left (see Map 14). The *Schwerpunkt* was to be in the center, where the 1st Panzer and Panzerdivision "Leibstandarte", both veteran divisions and well up to strength were to thrust from Chernorudka towards the railway Kiev-Zhitomir. On 15 November their advance began; they hit the Russians on the left flank and took them completely by surprise. On 17 November the 1st Panzer and "Leibstandarte" reached the railway line and flung the Russians back to the northeast. Bound by our orders, we now had to swing off towards Zhitomir. "Leibstandarte" was left in positions facing east, while the 1st Panzerdivision advanced on Zhitomir in conjunction with 7th Panzer and the 68th Infantry Division. On the night of 19/20 November the 1st Panzer from the east and the 7th Panzer from the south penetrated the town, and on 20 November Zhitomir was firmly in German hands.

MAP 14



Meanwhile the Russian Command had pulled itself together and concentrated large forces around Brussilov. On 17 and 18 November the Russians counterattacked violently at Karostyshev and Brussilov with the 1st Guards Cavalry Corps and the 5th and 8th Guards Armored Corps. They met with no success, and General Balck decided to destroy this Russian tank army in a pincer movement. The newly arrived 19th Panzerdivision was to attack from the south, "Leibstandarte" was to attack Brussilov from the west, the 1st Panzer was to thrust along the Zhitomir-Kiev road, the 7th Panzer was to bypass Radomyshl and form a protective front to the north. Although the preparations were made with great energy the attack could not be launched before 20 November.

The frontal attack of "Leibstandarte" failed. But on the flanks all went well. The 7th Panzer carried out its role perfectly, the 1st Panzer thrust deeply across the Russian rear and the 19th Panzer smashed through on the right flank and knocked out 16 tanks and 36 antitank guns for a loss of only four killed.

Obviously the 1st and 19 Panzer should have kept moving, and closed the ring around the three Guards Corps. Unfortunately they did not exploit their remarkable achievements, and remained where they were on the night 20/21 November instead of continuing the advance. Balck was furious when he heard of the delay which gave the Russians an opportunity to build up a new front. Disregarding all arguments, he ordered the two Divisions on the evening of the 21st and at 2100 their spearheads met. It remained to clean out the bag, and by 24 November we had taken many prisoners, together with 153 tanks, 70 guns, and 250 antitank guns. The bodies of 3,000 dead Russians littered the ground. The success was no means complete, for in a most skillful way the Russians extricated a considerable part of their forces from the trap. It was practically impossible to prevent even large units from sneaking through the German lines during the long and dark winter nights, and there were many gaps in our encircling ring. It was characteristic of the Russian mentality that first of all the staffs, the officers and certain specialists were taken out of the ring, while the bulk of the men were left to their fate. Our victory was gained in the nick of time. On 26 November the cold weather broke, and mud and slush stopped practically every movement. Thus our proposed attack on Kiev had to be cancelled. Our tactical achievement at Brussilov was impressive but we failed to gain the smashing victory, on which we had a right to count. Too

much time was lost through the detour to Zhitomir; the Russians were given a respite, and the mistake was irreparable.

Victory at Radomyshl

After our success on 24 November the situation was as follows: The Russians had built up a new and strong front east of Brussilov, which we could not possibly attack as long as the mud conditions lasted; moreover the Russians were concentrating strong reserves in that sector. On the other hand, the forces we had driven from Zhitomir had taken up new positions not far north of the Zhitomir-Radomyshl road and were well placed to attack our left flank should we attempt to thrust directly from Brussilov towards Kiev. The headquarters of the Russian 60th Army was identified in the area. Army Group South decided to eliminate this threat. On 30 November the 48th Panzerkorps received orders to make a surprise attack on the right flank of the Russians on the Zhitomir-Radomyshl front, and to roll up and destroy their whole line from west to east. The operation looked simple on paper, but was rather difficult in practice. The situation on the Zhitomir-Radomyshl sector was clear enough--it was covered by the German 13th Korps consisting of more or less tired infantry and security divisions. But the position to the north and west of Zhitomir was very obscure. Nobody knew where the Russian right flank rested. It was quite possible that there was no gap and that the front merely bent northwards in a continuous line, and it was equally possible that the gap was covered by guerrillas. Because of bad weather air reconnaissance produced no information, and we decided not to send out ground recce forces, as their activity would have told the Russians, that something was afoot. To increase the difficulties, it appeared that all bridges in the area between Korosten and Zhitomir had been destroyed. The 48th Panzerkorps decided that the troops should remain in their present areas before advancing as a surprise move; the 68th Infantry Division was then to thrust from Zhitomir directly against the Russian right wing; to the left of the infantry, Panzerdivision "Leibstandarte" was to attack the enemy's flank and to the left of "Leibstandarte" the 1st Panzerdivision was to swing across their rear. The Thirteenth Corps was to join the attack with its main effort on the left. On D-day the spearheads of both Panzerdivisions were to cross the Zhitomir-Korosten road at 0600 hours. No reconnaissance was permitted, and the divisions were to assemble under cover of night.

Our trump card was the 7th Panzerdivision. We intended to send this Division on a wide swing to the left of the 1st Panzerdivision, and to move it far behind the Russian front. For this complicated plan to succeed it was of the utmost importance that the thrust should come as a complete surprise. On D-day minus one, armored cars and engineers were sent northwest to Zhitomir to repair the bridges and improve the roads which our Panzerdivisions would have to use. They were given strict orders not to approach the Zhitomir-Korosten road. We hoped this move would not attract Russian attention. The 7th Panzer was to move by night in a single bound along these routes and to time its advance in such a way that the Zhitomir-Korosten road could be crossed at 0600 hours on 6 December. The Tiger detachment of the 7th Panzer was too heavy to accompany the division along its line of march and for this reason it was first attached to "Leibstandarte". On D-day it was to move along the Zhitomir-Korosten road and drive right through enemy territory to join up with the 7th Panzerdivision commanded by General Hasso von Manteuffel, an officer who had the personal dash and courage required to inspire his men in this very difficult and dangerous task.

Light frost and a moon were predicted for the night of the attack. All orders were given verbally and were discussed in detail at the battle headquarters of the various divisions. On the evening before the attack we moved the battle headquarters of the 48th Panzerkorps to Pishchanka, immediately behind the forward line.

At 0600 hours on 6 December the spearheads of all three Panzerdivisions crossed the Zhitomir-Korosten road. Contrary to what we expected, there was a strongly manned position running along the road, although it was still in the course of construction. The Russians were taken completely by surprise as they had seen absolutely nothing of our outflanking maneuver. On this line they offered brave but uncoordinated resistance which was speedily broken down, particularly on the front of the 7th Panzer. From then onwards the thrust went on smoothly and penetrated far into hostile territory. At no time was there any crisis. In those days we were really good at intercepting Russian wireless traffic. At first the Russians underestimated the importance of the German thrust. Later a few antitank guns were thrown into the fray. Then slowly the Russian command got worried. Towards noon the Russian 60th Army went off the air, and soon afterwards our tanks overran the army headquarters. By evening

the Russian front had been rolled up for a length of 20 miles. The attack was brilliantly supported by the VIII Air Force Corps. General Seidemann had his Headquarters next to the 48th Panzerkorps. The Air Liaison Officer travelled in an armored car with our leading tanks and kept in direct wireless contact with the air squadrons.

The advance continued without a halt. During the night 7/8 December "Leibstandarte" thrust deeply through the Russian lines. Unfortunately the success could not be exploited as the tanks ran out of gasoline and "Leibstandarte" was kept busy the whole day rescuing immobile tanks. The 1st Panzerdivision broke down all resistance and pushed through as far as the Teterev River. Fighting stubbornly the 7th Panzer smashed the Malin bridgehead on the banks of the Irscha, and on 9 December the area between the two rivers was mopped up. The 7th Panzer eliminated the bridgehead south of Malin while the divisions of the 13th Corps took up positions in the rear of our armor.

The results so far achieved were satisfactory. The Russian 60th Army had been completely disrupted, and it was clear from their huge ammunition dumps and the intricate roadnet they had developed that we had forestalled an offensive of gigantic dimensions.

At the battle headquarters of the 48th Panzerkorps we realized that no more could be done for the present, and we suggested to the 4th Panzerarmee that the armor should be withdrawn and regrouped for another blow. We proposed to outflank the Russians at Malin by swinging westwards through Korosten.

Before a new role could be accepted, the 48th Panzerkorps was required to cover the 13th Korps while it settled down in the new positions. Balck decided to solve this task offensively. There was still a fair-sized Russian bridgehead in the Radomyshl area, to the west of the Teterev River, and this was eliminated in an attack by the 1st Panzer and "Leibstandarte" both well coordinated and firmly controlled by corps headquarters. Three-and-a-half Russian divisions were encircled and then destroyed on the following day, and we also inflicted heavy punishment on troops who attempted to relieve their comrades inside the circle. The booty included 36 tanks and 204 antitank guns.

On 14 December a thrust was made in the opposite direction, and we wiped out another Russian bridgehead to the north of Radomyshl. Then the Panzers were withdrawn into reserve, and the infantry of the 13th Corps took over the new front along the Rivers Teterev and Irscha. The Russians were

certainly flabbergasted by these ghostlike thrusts, which seemed to come from nowhere, and their wireless traffic provided abundant evidence of their bewilderment and anxiety. By 15 December we had stabilized the front, and the 48th Panzerkorps stood ready for another battle.

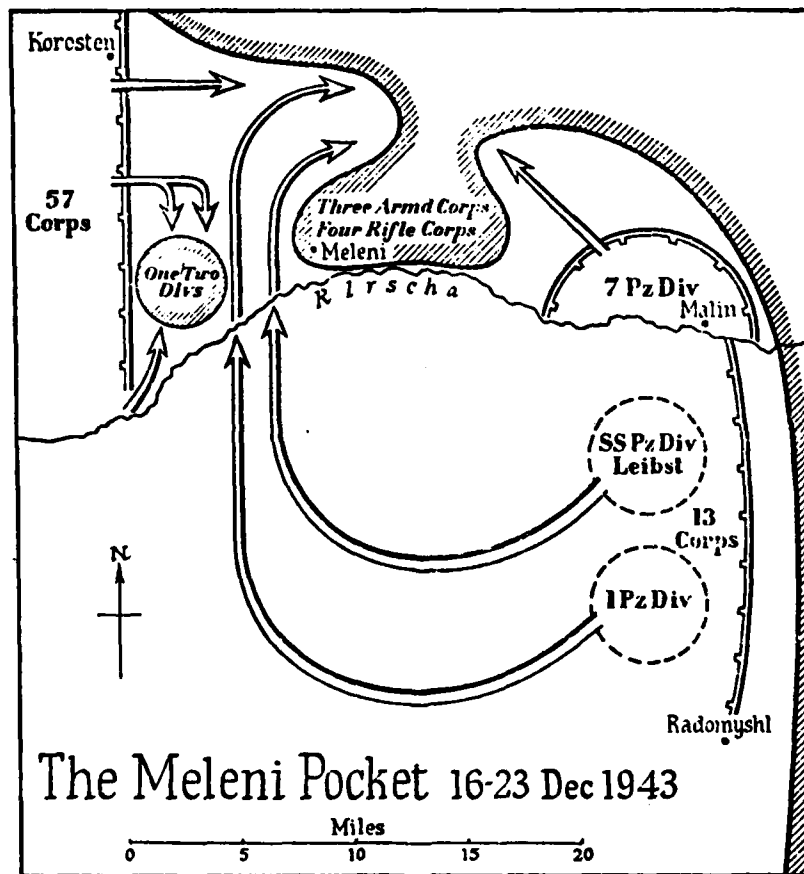
The Meleni Pocket (Map 15)

Meanwhile the 57th Korps had captured Korosten and was pushing eastwards. There was reason to believe that the Russians intended to cut in between the 13th and 57th Korps, and we were given orders to forestall them. Balck decided on another of those enveloping attacks, which had proved fatal to so many Russian divisions and corps and which he could execute with such consummate skill. As a preliminary the 7th Panzer was ordered to cross the Irscha to the north of Malin, and form a strong bridgehead there. This done, Balck planned to move the 1st Panzer and "Leibstandarte" in two night marches to the area south of Korosten. From there he proposed to launch the two divisions in a surprise attack towards the area north of Meleni, in conjunction with a thrust by the 7th Panzer from the bridgehead at Malin. By this means the powerful Russian forces assembling near Meleni might be caught in a trap (see Map 15).

The troop movements and concentrations of the 1st Panzer and "Leibstandarte" were carried out in the strictest secrecy. No reconnaissance was permitted. We had the highest confidence in the skill of these two divisions and hoped to make a surprise breakthrough of the Russian front to the west of Meleni. The attack was planned for 0900 on the 16th and the divisions got into position with only a very slight delay.

The attack was launched under cover of a very heavy bombardment. Thirty batteries and a mortar brigade put down concentrated fire on the front of "Leibstandarte", and the Division then moved forward with the tanks of 1st Panzer under its command. As soon as "Leibstandarte" had made reasonable headway, the artillery and mortars switched their fire to the sector of the 1st Panzer. The Panzergrenadiers of this Division assaulted the Russians in front, and their tanks, which had been moving with "Leibstandarte", swung west and took the enemy in flank and rear. Such a complicated method of attack could only be employed with troops of high quality, but these two divisions were among the finest in the Wehrmacht. They broke clean through the Russians,

MAP 15



and penetrated far into the rear. Manteuffel's 7th Panzer also got on well, and by the evening of the 16th we hoped that a miniature Tannenberg would be achieved in the Meleni area.

On the following days we endeavored to close the pincers around substantial, but undefined forces in the Meleni pocket. The 7th Panzer was involved in heavy fighting and "Leibstandarte" knocked out 46 tanks. Gradually the Russian resistance stiffened and on 21 December their forces in the pocket launched counterattacks on a scale which took our breath away. Fighting furiously against superior forces within and without the ring, our heroic troops mastered every crisis, but the Russians were in much greater strength than we expected.

At noon on the 21st a map, found on the body of a Russian major, was brought to our headquarters. It was a sensational document, for it showed that there were no fewer than three armored corps and four rifle corps in the pocket we were attempting to encircle. The Russian Command had in fact been concentrating their forces for a massive offensive from Meleni towards Zhitomir, and our own attack with three Panzer Divisions must have seemed to them an instance of classical audacity.

At 1500 that afternoon we heard that a large number of Russian Senior Officers had met at a conference. This fact and the situation on our front, indicated that the enemy was changing his plan; it was probable that he would now relinquish his proposed attack on Zhitomir, and concentrate on annihilating the 48th Panzerkorps. For this reason we decided to go on the defensive, and abandon this attempt to encircle forces so greatly superior to our own. But "Leibstandarte" was ordered to capture Meleni and join hands with the 7th Panzer to the south of the pocket.

On 22 December "Leibstandarte" gained no ground, but the 1st Panzer repulsed the attacks of two armored corps and knocked out 68 tanks. On 23 December we pulled back our enveloping wings, and fighting entirely on the defensive, we warded off every attempt to cut off our Divisions. The 48th Panzerkorps had the satisfaction of knowing that it had forestalled and thoroughly disrupted another great offensive, which would probably have overwhelmed the 13th Corps.

Our withdrawal had begun just in time. Fifty miles to the south the Russians attacked again at Brussilov--our old battlefield of 22/24 November--and the 24th Panzerkorps was completely bowled over. The Fourth Panzerarmee

had no reserves, and issued an urgent SOS, calling on our Corps to pull out of the Meleni sector and hurry southwards with our three Panzerdivisions to restore the broken front. By this time we had established ourselves as the "fire-brigade" of Army Group South, and were well used to being rushed from crisis to crisis.

Thus ended the offensive battles of the 48th Panzerkorps in the Kiev salient. From the tactical aspect, the conduct of operations showed that General Balck handled his Corps with masterly skill, he showed a complete understanding of the classic principles of maneuver and surprise and he displayed a resourcefulness, a flexibility, and an insight into tactical problems. It is true that the main task--the capture of Kiev--proved beyond our strength. If Balck had been allowed to carry out the original plan, it is possible that we would have retaken Kiev. Panzer leaders should strive for great solutions (Kiev) not small ones (Zhitomir). But our main problem was the combination of political and military leadership in one person--Hitler. The war with Russia was by no means lost. The critical month was October, 1942, when Sixth Army could have been easily extricated from the Stalingrad salient. A cautious and circumspect policy--combining strategic withdrawals with tactical offensives--would have played havoc with the Russian masses while conserving our own manpower and material. Even after the Stalingrad disaster, there would have been some hope if Hitler had not consented to the fatal attack on Kursk.

Defensive Victory at Berdichev

On Christmas Eve 1943 the situation of Army Group South had again become very critical. We knew that the 24th Panzerkorps had been heavily defeated and that the Russians were pouring through the gap at Brussilov; they were reported to be heading for Zhitomir, and the 48th Panzerkorps was called upon to stop them. On Christmas Day our Corps arrived at Zhitomir, which was packed with supply columns and administrative troops, including the rear services of the 13th and 24th Corps. We made our way through the crowded streets with difficulties and established our headquarters to the south of the town. The Panzerdivisions of the 24th Panzerkorps (the 8th, 19th, and S.S. "Das Reich") were placed under our command, but no one had the slightest idea where they were, or what their losses had been. We assumed that they would be found

somewhere in the forests to the east of Zhitomir; at all events it was now our duty to extricate these unfortunate Divisions and reestablish a fighting front.

Our problems were complicated by the frightful congestion in Zhitomir. Apart from supply troops, the Fourth Panzerarmee had sent an artillery division into the town, with the result that more than 20,000 men and thousands of vehicles were crammed together in the streets. Indeed the place had become a veritable rat trap, and to make matters worse, the absence of good roads compelled our three Panzerdivisions (the 1st, 7th, and "Leibstandarte") to pass through Zhitomir.

With great difficulty and only after General Balck had taken drastic steps, the 1st Panzer infiltrated through the town and moved eastwards to gain contact with the remnants of the 24th Corps. Eventually the 1st Panzer reported that it had broken through to S.S. "Das Reich" and the headquarters of the 8th Panzerdivision, but that the 19th Panzer and part of the 8th Panzer were cut off to the south by strong Russian forces. After some delay our Corps headquarters got into wireless contact with the 19th Panzer, and ordered it to break through to the area south of Zhitomir where S.S. "Leibstandarte" would try to meet them. Unfortunately Zhitomir was now jammed beyond imagination, and "Leibstandarte" moved through, bit by bit, and at a snail's pace.

I shall never forget that extraordinary Christmas Day. A signal came through from the 19th Panzer: "Am attacked by 30 enemy tanks. No gasoline. Help, help, help"---then silence. General Balck absolutely refused to send "Leibstandarte" into action in dribs and drabs, even if this meant the total loss of the 19th Panzerdivision. Eventually, after nearly six hours of anxious waiting, a signaller handed me a most welcome message from 19th Panzer: "We are withdrawing to the west in tolerable order."

On 26 December the 19th Panzer and part of the 8th Panzerdivision made contact with "Leibstandarte" in the Volitsa area. They had lost hardly any equipment and had knocked out many tanks. They had done what the Russians used to do---left the road and found a way through the forests.

Intelligence reported that the Russians were advancing in great strength, and thrusting straight for Zhitomir. On 27 December we expected very strong attacks, and awaited them with much anxiety. But the Russian columns did not appear. Whether they had been made cautious by the bold thrust of the 1st Panzer or whether they had too many formations moving on the same

road, I cannot say, but the fact remains that they did not attack and this greatly eased our situation. The first part of our task was now accomplished, we had extricated the divisions of the 24th Panzerkorps and had formed a new front to the east of Zhitomir. The Fourth Panzerarmee decided to take advantage of this, and to move the 48th Panzerkorps farther south to cover the sector Kazatin-Berdichev. The Russians had already taken Kazatin, and we were ordered to concentrate rapidly for a counterattack. On 27 December S.S. "Leibstandarte" took over the area east of Berdichev, and on the 28th the 1st Panzer passed through them with orders to recapture Kazatin. (The 7th Panzer was still en route from the north.) The 48th Panzerkorps mustered between 100 and 150 tanks with which to cope with the 500 Russian tanks in this area.

Heavy fighting developed on 29 December. "Leibstandarte" had to hold a sector of 20 miles, and was attacked by 140 tanks. Meanwhile the 1st Panzer gained some ground, but met fierce resistance from very superior forces. Sixty-eight tanks were knocked out on the front of "Leibstandarte", but the divisional front was pierced at several places, 48 tanks penetrating far into the rear of the Divisions. To meet this threat Balck decided to shorten his front and to withdraw his two Divisions to a new line on both sides of Berdichev. On the morning of 30 December our position was very critical. The ground was slippery with ice and gravely hampered the retreat of the 1st Panzer and "Leibstandarte" had to hack its way through strong Russian columns. Moreover the advance of the 7th Panzer was delayed. But we knocked out 32 tanks during the day, and by noon had established a coherent front.

On 31 December the Russians came on in force and launched violent attacks which cost them 67 tanks. Once again we got the impression that the spearheads of the Red Army were no longer followed by heavy infantry masses. The numerous prisoners were mostly lads of 16 and some young boys of 13 were found among them. One of the Russian tank commanders captured by "Leibstandarte" had been a factory worker in the Urals. He said that on 17 November a proclamation by Stalin was read out, saying that anyone who could drive a tank must now go to the front. Off he went, and within a month found himself in battle, without having had any training at all.

It is true that the Russians captured Zhitomir on 31 December, and on 3 January had the satisfaction of crossing the 1939 frontier of Poland. But

in fact their offensive power had been worn down, the German front in the Western Ukraine was still relatively intact, and the fighting spirit of our troops remained unbroken.

Problems of Defensive Warfare

On the whole, the defensive battles in the Western Ukraine were successful because there was no rigid defense line, but an elastic one, which was allowed to bend but not to break. The junior commanders took advantage of every opportunity to counterattack, with the view to destroying as many Russians as possible. On the other hand a rigid defense system, like that of the 24th Corps east of Brussilov, usually broke to pieces in a very short time. Armor employed *en masse* and in surprise attacks pierced almost any front, as in the vast spaces of Russia every defensive line was more or less a screen. The secret of a successful defense depended on dispositions of the reserves, and the weight and vigor of counterattacks.

Our difficulties were aggravated by fault in the German War Establishment. We did not possess antitank divisions. At the beginning of a battle divisions of this type should be kept in reserve, and should only be committed, when a serious breakthrough is threatened. After they have stabilized the front, the armored divisions can be thrown into a counterattack. Our lack of antitank divisions was the cause of many misfortunes and it would have been very easy to form them. The 48th Panzerkorps strongly advocated this course, but our representations were turned down on the ground that the required equipment was not available. This excuse does not hold water as the 48th Panzerkorps alone captured between 500 and 600 Russian antitank guns in December 1943. These would have been ample to equip a division; the Russian antitank artillery was of high quality, and it was easy to adapt their guns to German ammunition. Although we had no antitank divisions, an artillery division was very much in evidence during the fighting at Zhitomir. It comprised several artillery regiments, an assault-gun unit, and a battalion of heavy cannons. The division was a complete misfit, and did nothing but block the roads and lose its guns. There was some idea in high quarters that it could be used as an armored division, but it proved a failure in attack or defense, and was quite incapable of holding Zhitomir. If its regiments had been used purely as artillery, the division could have done useful work under corps control.

One of the great problems of defensive warfare is the organization of rear areas and lines of communication. I have mentioned the deplorable traffic congestion in the vital road junction of Zhitomir--the same thing happened at Berdichev and many other towns. The difficulty was that the rear services of all front-line formations congregated at the road junctions. During a Russian offensive these places became centers for people who were not keen to fight and of masses of vehicles impossible to disentangle. If the Russians broke through, hundreds and thousands of vehicles were lost and had to be burnt, moreover, important movements of armor were drowned in this quagmire of men and vehicles. The root of the trouble was that life in the towns was easy and soft and that the open country was dominated by guerrillas.

The lesson of Zhitomir was afterwards applied by the 48th Panzerkorps in other towns; we simply declared such road junctions out of bounds to all troops and ruthlessly enforced this order. The rear services were spread out and accommodated in villages, a practice which automatically put an end to guerrilla warfare. Moreover, Russian air attacks on these traffic centers became relatively ineffective.

Withdrawal to Tarnopol

On 27 December 1943 a very important conference was held at Hitler's headquarters. The subject under discussion was a memorandum which Manstein had submitted advocating a limited withdrawal from the great band of the Dnieper and the evacuation of Nikopol. Manstein's proposal would have secured a shortening of the front by 125 miles, but Hitler refused to consider them, he persisted in holding a front which was strategically indefensible. As I was on sick leave until the middle of April I will not describe the following battles in detail.

In mid-January the Red Army resumed the offensive. The front of the 48th Panzerkorps held firm and the Russians made little progress in the Western Ukraine. Further to the east they gained important successes, and Nikopol fell--as Manstein predicted--on 8 February. By this time our Eighth Army was holding a most perilous salient, which enclosed Korsun and extended as far as the Dnieper. Hitler insisted against Manstein's advice on its retention. And the result was a miniature Stalingrad. Marshal Vatutin's "First

Ukraine Front" and Marshal Koniev's "Second Ukraine Front" broke through on both sides of Korsun and trapped over 50,000 troops in the pocket. Vatutin fell ill and his command was taken over by Marshal Zhukov. In March this army group opened a new offensive. There were two main thrusts, the first was directed towards southern Poland, but after capturing Rovno and Lutsk it was held between Lemberg and Tarnopol. The second thrust was the more dangerous and smashed its way towards the headwaters of the Dnieper and the foothills of the Carpathians. Meanwhile Koniev's Second Ukraine Front reached the Bug and pushed to the southwest to join hands with Zhukov's spearheads.

The 48th Panzerkorps was still holding firm to the south of Berdichev, and was now threatened with envelopment on both flanks. The Corps was permitted to withdraw towards Tarnopol--a task which required plenty of nerve and very great skill. General Balck says in his report that "The main point was to inspire faith, to remain cool, calm, and steadfast, and to avoid creating the impression that this was a 'hand-to-mouth' operation".

During this very risky march across the front of Zhukov's advancing armies, the 48th Panzerkorps adopted the principle of moving by night and fighting by day. Balck paid particular attention to the location of his Corps headquarters, for during a retreat it is vital to maintain control. Balck did not hesitate to place the headquarters far behind the front so that it could stay put in the same place for several days, before making another long step to the rear. As a result of these measures there was never a moment when the Divisions were not in wireless contact with the Corps.

As every Russian attack was aimed at large towns, these places were avoided like the plague. Many disasters were caused in the Russian campaign by locating higher headquarters in large towns, or by putting them too near to the front as a retreat. We avoided this error and took care to site our headquarters away from the main roads. During a withdrawal, the 48th Panzerkorps was always careful to issue warning orders at an early stage, to give the Divisions plenty of time to make their arrangements. The 48th Panzerkorps succeeded in concentrating west of Tarnopol, where it assisted in establishing a firm front.

If Army Group South was not annihilated in the first months of 1944 the credit must go to the German commanders and troops, who refused to panic and fought their way out of the most critical situations. Nevertheless the effects of the campaign were most serious. The spring thaw brought operations on the Eastern Front to a close.

Spring Thaw at Tarnopol; Training; Defense in Depth

In the middle of April 1944 I reported back to General Balck at the battle headquarters of the 48th Panzerkorps to the west of Tarnopol. When I arrived the Corps had been drawn out of the line and was engaged in intensive training. The whole front was quiet. We were now under the First Panzerarmee, and had the 1st and 8th Panzerdivision under command. General Balck did his utmost to take advantage of the lull and bring the two Panzerdivisions up to the highest standard of efficiency.

For more than two months nothing happened on the Eastern Front. The Russians seemed to be engaged in large-scale reorganization, though it became increasingly evident that their own offensive was about to burst on an enormous front from the Baltic to the Carpathians. In mid-June the 48th Panzerkorps moved back into line and took over the vital sector immediately south of the Lemberg-Tarnopol railways. The front of the 48th Panzerkorps ran along the River Strypa and enclosed some marches between the Seret and the headwaters of the Bug. The First and 8th Panzerdivisions had passed under command of the 3rd Panzerkorps, and we were given eight infantry divisions, an artillery division, and some independent units. No precise information was available about Russian intentions. Wireless intercept and interrogation of prisoners produced most contradictory reports. At one moment an attack was believed to be imminent, and at another it seemed improbable. The picture kept changing from day to day. Only second-rate Russian formations were identified in the front line, but this meant nothing, as it was their habit to concentrate assault troops at the last moment. To the 48th Panzerkorps it appeared dangerous to allow the enemy to retain the ground west of the line of lakes on the Seret River. The sector between Jezierna and Brody was covered by dense forests, which would enable the Russians to conceal their preparations and deployment. We suggested that the Russians should be attacked and driven back to the line of the Seret, but the proposal was turned down. Instead we were ordered to make a reconnaissance in force, with two battalions supported by tanks and artillery. The operation was duly carried out, and merely demonstrated that it would be quite easy to reach the Seret and forestall the Russian offensive. But we were forbidden to do more. Meanwhile something very unpleasant was happening on the Central Front. On 22 June the Red Army commemorated the third anniversary of our invasion by launching an offensive with four army

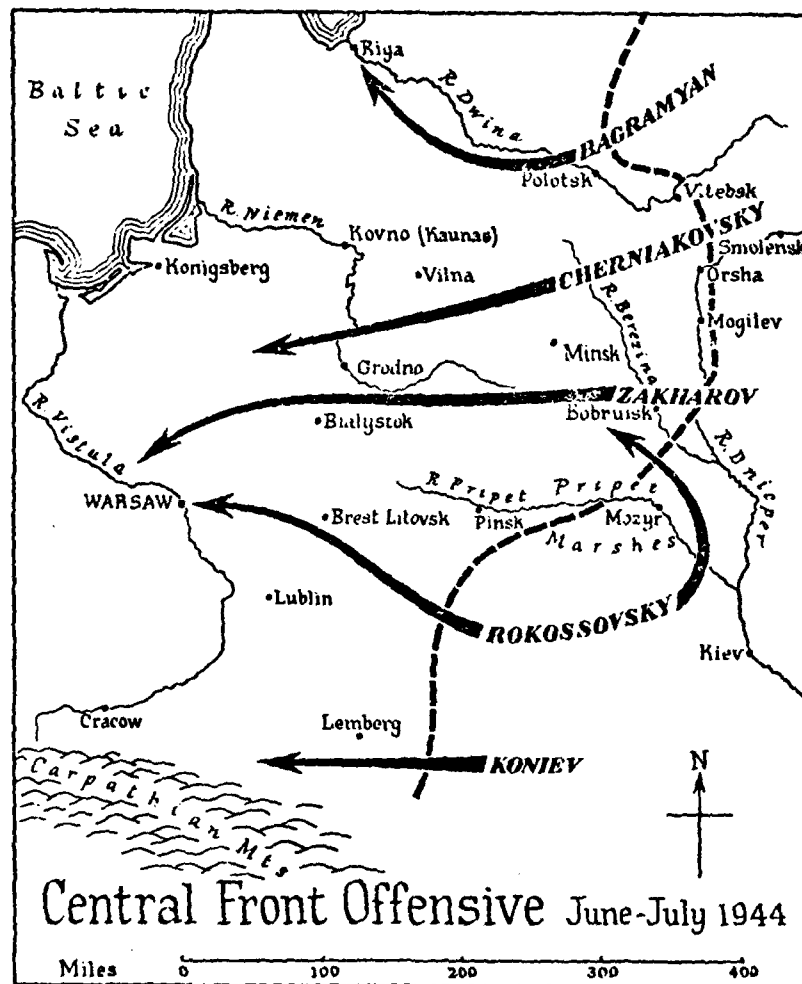
groups (143 infantry divisions and 43 tank brigades) from Mozyr on the Pripet to Polotsk on the Dwina. Field Marshal Bush, the Commander of Army Group Center, had seen what was coming and had requested permission to step back to the River Berezina, and throw the elaborate Russian preparations out of gear. Hitler of course imposed his veto and the unfortunate Army Group Center stretched out on far too wide a front, simply broke to pieces before the onslaught. Vitebsk fell on 26 June, Orsha on the 27th, and Bobruisk on the 29th (see Map 16). Large German pockets were isolated. On 1 July the Russians forced the passage of the Berezina. By 13 July the Russians had taken Vilna and Pinsk and were within a hundred miles of the German frontier.

During the first part of July the 48th Panzerkorps was preparing for the blow, but our problem was complicated by the uncompromising attitude of Model, Army Group Northern Ukraine, who laid down the following principles: "Forward lines are to be held at all costs, artillery and armor are to be disposed in rear along a defensive line showing no gaps; if the enemy breaks through he must meet with obstacles everywhere."

The 48th Panzerkorps had different opinions, for in our opinion the forward line should consist merely of outposts, and the main defense line should be located far in the rear and out of effective artillery range. To put the bulk of the infantry in the forward positions would be to expose them to the full weight of the Russian artillery. The orders of Army Group Northern Ukraine required that the forward lines should be fully manned at night and that the bulk of the troops should retire to the main position at dawn.

Such orders were bound to exhaust the troops before the battle had even begun. Moreover, Balck thought it wrong to deploy the artillery and antitank weapons in a long unbroken line, for this would prevent our using concentrated fire. We proposed to organize the artillery in groups and to locate detachments of assault and antitank guns as mobile reserves. The essential point, however, was that we should hold a line of outposts, echeloned in depth, and that the main defensive position should be 3 to 4 miles in the rear, and very well camouflaged. All this led to heated arguments with our Army Group, but gradually we succeeded in bringing them round to our point of view. When the attack began we had succeeded in disposing our infantry in the way we wanted, but the regrouping of the artillery and antitank guns was still incomplete. The 3rd Panzerkorps with the 1st and 8th Panzerdivisions, was acting

MAP 16



as our reserve. Its routes for advance and counterattack had been carefully reconnoitered, and various situations and problems had been thoroughly rehearsed. We laid our minefields behind the outpost line, so that the Russians could only get at them by actually launching an attack. During the weeks before the offensive the Russians endeavored several times to gain possession of dominating heights, but all penetrations were driven off by counterattacks, strongly supported by artillery.

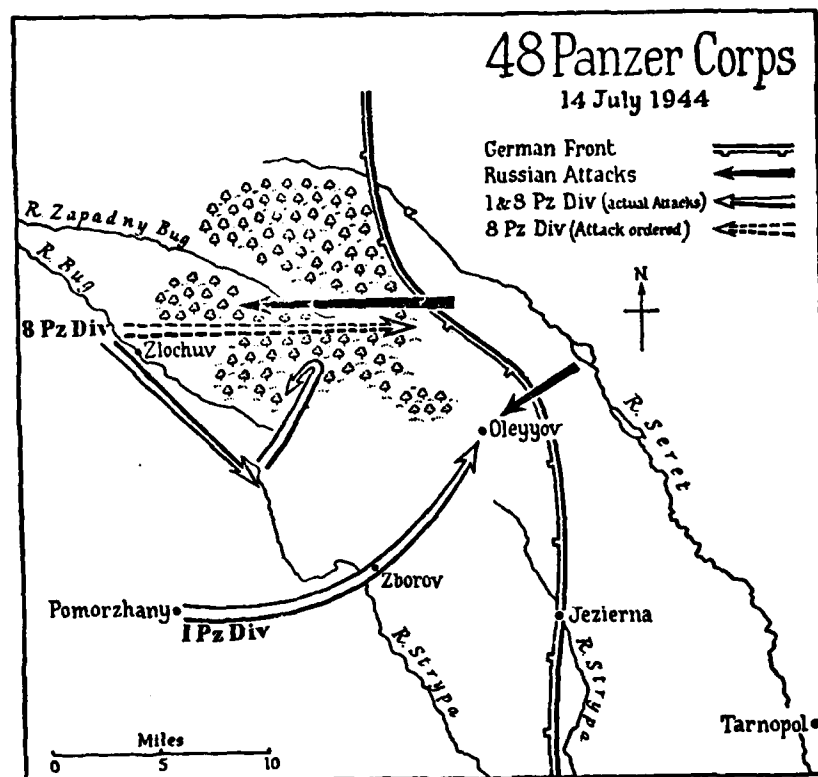
Koniev Breaks Through

At 0820 on 14 July the great onslaught began. The Red Army employed masses of materiel on a scale never known before; in particular, they flung in thousands of aircraft and for the first time in the war enjoyed unquestioned command of the air. The preliminary bombardment only lasted an hour but was very violent; it was followed by concentrated attacks in two sectors. By 0930 it was clear that two of our Divisions had been hit very heavily and would be incapable of mastering the situation on their own, so we asked for the 1st and 8th Panzerdivisions to counterattack.

General Balck faced this new crisis with complete calm. The two Panzerdivisions were both placed under our command, and we were confident that they would restore the broken front. The move of the 1st Panzer was executed with perfect smoothness: on 15 July it counterattacked at Oleyyov and after some hard fighting brought the Russians to a halt. Things went very differently with the 8th Panzer. The breakthrough had occurred at the expected point, and the division had only to obey orders and move through the forests on a route previously arranged (see Map 17). But unfortunately the divisional commander decided to depart from his instructions, and to save time he moved along the great road Zlochuv-Jezierna. General Balck had specifically forbidden any troop movements along this main road. Eighth Panzer was caught on the move by Russian aircraft and suffered devastating losses. Long columns of tanks and lorries went up in flames and all hopes of a counterattack disappeared. A Galician S.S. Division was holding a reserve position in the forest, but its resistance was feeble. The Russians made a deep penetration into the left wing of the 48th Panzerkorps.

Meanwhile the 13th Corps on our left flank had fared badly; the Russians succeeded in enveloping the Corps and completely encircled it.

MAP 17



Fortunately on 15 and 16 July the 48th Panzerkorps managed to restore a defensive front, and so we could do something to help our comrades of the 13th Corps. On 17 July this Corps was trying to cut its way through in the sector northeast of Lemberg, and we decided to join hands with them. For this purpose General Balck told me to take command of the 8th Panzerdivision.

On the evening of 17 July I tried to make wireless contact with the 13th Corps in order to arrange for them to attack southwards on the 18th while the 8th Panzer struck north, but communications failed. I assembled the regimental commanders and explained my plan: in particular I stressed the moral significance of the attack on which depended the salvation of 40,000 of our encircled comrades. Our task was anything but easy; strong Russian armored units had pierced the front south of Brody and a barrage of infantry and anti-tank guns had been placed between the 13th Corps and the 48th Panzerkorps. In order that there should be no confusion over command I placed the infantry units holding our front line under command of the Panzer Regiment for the duration of the night. At dawn on the 18th I went to the battle headquarters of the Panzer Regiment accompanied by my artillery commander and on the way I found to my astonishment, that our infantry--due to attack in half an hour--were withdrawing southwards. The Commander of the Panzer Regiment confessed that he had ordered this withdrawal as he wished to regroup before launching the attack. I immediately relieved him of his command, but once again the disobedience of this Division had done irreparable harm. Valuable time was lost, and what is more, the Russians observed our movements. With incredible speed they laid new minefields, and concentrated their tanks and artillery. In the circumstances I had no choice except to cancel the attack. Our only hope was to surprise the Russians with a concentric, rapid, and well-camouflaged armored attack; I knew from bitter experience that if the Russians were given time to organize a defense, our chances of success would be nil.

Two days later the bulk of the 13th Corps succeeded in fighting their way through to our lines further to the west. Thousands of men formed up in the night in a solid mass and to the accompaniment of thunderous "hurrahs" threw themselves on the enemy. The impact of a great bloc of desperate men, determined to do or die, smashed through the Russian line; and thus a great many of the troops were saved. But all guns and heavy weapons had to be abandoned, and a huge gap was opened in the front. Marshal Koniev's tanks poured through and the whole German position in southern Galicia became untenable.

On 27 July Lemberg fell and by 1 August Koniev's columns had reached the Vistula on a wide front south of Warsaw. The Fourth Panzerarmee was driven over the Vistula, and the First Panzerarmee with the 48th Panzerkorps was forced back to the Carpathian Mountains. At this stage General Balck was ordered to take over command of the Fourth Panzerarmee, I followed him as Chief of Staff a fortnight later.

Soviets Cross Vistula at Baranov

At the beginning of August, when Balck and I reached the Fourth Panzerarmee then trying to form a front in the great bend of the Vistula, near its confluence with the San, strong Russian forces had crossed the Vistula at Baranov. They were threatening to roll up the front from south to north. Our 56th Corps was holding a front from Solec to the River Pilica; in this sector the Russians had already established two bridgeheads at Koshenice and near Ivangorod. From Solec the front of our 42nd Corps ran westwards towards Ostrowiec. There was a gap on the right flank of this Corps and the 3rd Panzerkorps was moving up to fill it. To the south of the Vistula the 17th Army was detraining in the Cracow area. Meanwhile the advance of the Russians across the San west of Przemyśl was being delayed by the 24th Panzerdivision. The situation at Baranov was particularly critical between 5 and 9 August. The 42nd Corps was under terrific pressure from large Russian tank forces, but fortunately it was an élite formation with very able commanders.

Defense was organized in depth, and the supply and administrative services behind the front were taught to organize "tank destroyer commanders" to deal with parties of Russian tanks whenever they broke through. While the 42nd Corps fought a defensive battle, Balck directed the 3rd Panzerkorps against the left rear of the Russians. This attack gained much ground and brought their offensive to a halt. The 48th Panzerkorps now arrived and with their help we were able to reduce the Baranov bridgehead to relatively small proportions. In his book "Panzer Leader" Guderian says: "It was thanks to the inexhaustible energy and skill of General Balck that a major disaster was finally avoided."

When it became evident that the Baranov bridgehead could not be eliminated altogether--I have already stressed the rapidity with which the Russians can make a bridgehead impregnable--Balck decided to wipe out the two bridgeheads

on the front of the 56th Corps. He planned to conduct these attacks with an overwhelming quantity of materiel and a minimum of men. For the attack on the bridgehead at Koshenice, held by two to three Russian divisions, we used only six battalions, but supported them by 120 assault guns, the artillery of the 42nd Corps and the entire artillery of three Panzerdivisions. In addition, we brought up two mortar brigades. The concentration of the guns of the 42nd Corps was particularly daring, for only one gun was left in each battery position facing the Russians on the Baranov front. The guns were moved by night to the Koshenice sector and were returned immediately after the shoot.

The artillery preparation was short, but of the utmost intensity. Assault guns were used *en masse* and under the hurricane of fire Russian resistance broke down, in spite of the great courage displayed by some individuals and units. The following wireless conversation was intercepted during the bombardment:

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| A. "Hold your position." | B. "I am finished." |
| A. "Reinforcements are moving up." | B. "To hell with your reinforcements. I am cut off. Your reinforcements won't find me here anymore." |
| A. "For the last time I forbid you to speak openly over the wireless. I would prefer you to shoot your own people than allow the enemy to shoot them." | B. "Tovaric No. 54; perhaps you will grasp the situation when I tell you that I have nobody left I can shoot, apart from my wireless operator." |

The front of the Fourth Panzerarmee on the Vistula was now firmly held but General Balck and I were not destined to remain long in a relatively quiet sector. The Normandy campaign had ended in the frightful disasters of Mortain and Falaise. Paris fell on 25 August, and the spearheads of Patton's Third Army were already probing eastwards towards the frontiers of the Reich. In September General Balck received a summons to report at Hitler's headquarters; he was to be appointed to the Command of Army Group G in the West, and I was to accompany him as Chief of Staff. So at last I said farewell to the Russian front, and set out for yet another theater of war.

PAPERS RELATING EASTERN FRONT
EXPERIENCES TO CURRENT APPLICATIONS

EDUCATIONAL EXPERIENCES AND IDEAS

The fundamental principles of military education have not changed, and I think they should not change. Among the basic elements of morale are honor, loyalty, trustworthiness, a sense of duty, diligence, a love of one's country, and a forward-looking mind. Nowadays it is difficult to escape the impression that these moral fundamentals are lacking to a considerable extent in the Western world. A nation's will to defend itself and also the steadfastness of its army largely depend upon whether its citizens are consciously aware of these moral values. A man without ideals has no incentive. But those ideals can be developed only in association with known reality with which the political and military leadership has to reckon. The morale of a nation and its fighting forces are a single, indivisible whole. An army founded on conscription will fight with conviction only if it knows itself to be identified with its homeland. All authorities in a position of leadership must therefore strive to present their objectives and methods of education convincingly to the people.

As a young soldier I was brought up and educated in the German 100,000 man army. We were told to stay away from politics, we were not allowed to take part in elections. This was certainly not an ideal situation.

How are the educational principles in today's *Bundeswehr*? The guiding principle of the German armed forces is the "citizen in uniform". The officers, noncommissioned officers and young men performing their national service are representatives of German society and of the general attitude towards the state, national defense, and the values upon which our Constitution is based. The basis is the Atlantic Alliance; its military strategy is the prevention of war through the threat of retaliation.

Political education is just as important in the German armed forces as military training. Political education is intended to convince the soldiers of the necessity and the sense of their service. The Parliamentary State Secretary of the Ministry of Defense, Dr. Andreas von Buelow, explains the meaning of "Internal Leadership": A form of man management that is in keeping with our time. For the soldier it means that he is a citizen in uniform, a person who retains his full civil rights when he puts on his uniform. A sense of responsibility and self-discipline, obedience, personal initiative,

preparedness to give one's best and to behave in a comradely way are a few of the educational ideals. The citizen in uniform cannot be a citizen in night-shirt and nightcap. He must be politically awake and must feel himself to be a politically responsible member of society.

A far-reaching reform of the educational system in 1975 did much to improve military training in respect to the way it allowed for the requirements of later civilian life. A soldier's chances of making his way in later civilian life have become greater. If a soldier enlists for 8 years, he can look forward to rising to rank of sergeant and to the training up to the craftsman level. A young man, who engages to serve for 12 or 15 years can attend a technical school, completing his training with the certificate of a state-examined technician.

The Federal German President Walter Scheel reminded the country recently in a speech: "Our Democracy demands more than just a weapon technician. There is scarcely any vocation, any profession that calls for such intensive contemplation of its ethical and intellectual basis as that of the soldier".

EASTERN FRONT EXPERIENCE: DETAILED ANSWERS TO QUESTIONS
CONCERNING CURRENT APPLICATIONS*

- *November '41 - January '43: Relief of Stalingrad; Defensive Battles on the Chir; Withdrawal to Tatsinskaya; Defensive Battles on the Donetz*

NATO should never risk having encircled places like Stalingrad. 1942/1943 a Stalingrad could have been avoided by flexible mobile warfare. A static defense is also today inferior to a mobile, flexible defense. A static defense behind rivers (Elbe) is not reliable. The aggressor has got swimming tanks, troops on helicopters, and underwater bridges to cross rivers. The defender can give up small areas in order to counterattack even with small units.

- *February - March '43: Withdrawal from Donetz to Area North of Stalino; German Counterattack Northwest to Kharkov*

See general remarks where I stressed that we cannot afford to give up space on a large scale as the distance between the Elbe River and the Rhine River is only ± 100 miles. Major NATO attacks have to be launched in time from the flanks to avoid losing ground.

- *April - June '43: Spring Thaw; Preparations for German Attack at Kursk*

In Germany we have not got the same spring or autumn thaw as in Russia where for some weeks every movement on roads and cross-country is stopped by impregnable mud. NATO preparations attack vs prepared defense are much better carried out than in World War II, as today's air reconnaissance has so much improved (air satellite).

- *July '43: Battle of Kursk*

The Battle of Kursk teaches that it will always be dangerous to attack a Russian defense zone well prepared for some months. It is the surprise attack against the Russian flank and rear which counts.

*See also pages 36 and 37 where General von Mellenthin discusses current applications of his Eastern Front experiences.

- *August - September '43: Withdrawal to the Dnieper at Kremenchug; Movement Northwest to Defensive Positions Near Kiev*

As mentioned before, a NATO withdrawal to the Rhine is not possible. Certainly it is possible that the spearhead of an attack can break through. Then a political decision is necessary with clear signals to nuclear engagement. With the loss of the area eastwards of the Rhine, the strongest part of NATO's defense would have gone.

- *October - December '43: Soviet Breakthrough at Kiev; Withdrawal to Vicinity of Zhitomir; Defensive Victories at Brussilov, Radomyshl*

As in the area of Zhitomir, no large withdrawal but immediately counterattacks against the flank and rear of the enemy.

- *January - March '44: Defense near Berdichev; Withdrawal to Tarnopol*

The whole conduct of battle of the NATO Forces can only be done by mobile defense. This is also a lesson learned in World War II: We have to avoid static situations which are exhausting our forces. As mentioned again and again, the struggle of the Allied Forces of several nations in Central Europe requires a flexible, mobile warfare. An assimilation of tactical principals is of vital importance. (For instance, air and artillery support between units of different nations.) Therefore, training and exercises above the national level should be practiced.

- *April - July '44: Massive Soviet Offensive Near Tarnopol; Air Attack Decimates 8th Panzerdivision*

This is mainly a difficult supply problem. The decisive question: Can we keep the lines over the Atlantic open. This situation is difficult to compare with 1944 with the exception of a few principals as the relief of unit personnel and materiel supply. NATO defense against Soviet air attacks on ground combat forces might be similar to that of World War II. Massed targets have to be avoided. Antiaircraft units and weapons have to be integrated into the units of the Army. Additional air defense has to be done by Air Force units, presumably limited on *Schwerpunkt*.

- *August '44: Soviets cross Vistula at Barenov; Containment of Soviet Bridgeheads*

I could not apply my experience from World War II on a NATO situation, where the Warsaw Pact has occupied the whole of Germany, that includes all logistical bases of the *Bundeswehr*, possibly the whole of the Benelux territory, including all U. S. bases in Central Europe and those of other NATO allies in that area. I think we would agree that such a situation would call not only for a political signal, but for a political decision.

GERMAN INFLUENCE ON SOVIET STRATEGY AND TACTICS

In 1941 and 1942 Russian tank tactics were clumsy, and the armor was dissipated in small units scattered over wide fronts. Then in the summer of 1942 the Soviet Command began to be influenced by German armor tactics and strategy. They started to form entire tank armies, with armored and mechanized corps. The task of the armored corps, which were not particularly strong in motorized infantry and artillery, was to assist infantry divisions in making a breakthrough. The role of the mechanized corps was to exploit the breakthrough and thrust far behind the front. At first the Russian tank armies had to pay heavily for their lack of experience and, in particular, the lower and middle commands showed little understanding or aptitude for armored warfare. They lacked the daring, the tactical insight, and the ability to make quick decisions.

In his book *Military Strategy*, Soviet Marshal V. C. Sokolovsky says with undoubted justification that formerly generals and general staffs often prepared themselves to fight the next war according to the methods of the last. Such an approach fails to take account of the unknown, and because of its paucity of ideas is sure to lead to bitter disillusionment and defeat. Sokolovsky reckons that under existing circumstances no kind of war is improbable. A war may begin with conventional methods. Tactical nuclear weapons may then be brought into action and such a war can then soon escalate into unlimited nuclear warfare. The employment of new-style weapons in a future war of intercontinental missiles and nuclear armament will substantially change the objectives of those responsible for the conduct of hostilities and will result in a revolutionary change in the methods of fighting and warfare in general. This raises the question what, under such circumstances, the main military strategical objective of war can be--the wiping out of the enemy's main force, as was the rule in the past, or the annihilation and destruction of targets in the enemy hinterland and its disorganization. Sokolovsky provides the answer: "Both objectives must be attained simultaneously". But such demands can be met only if the military strategy adopted is based on the offensive from the outset. Sokolovsky makes no bones about it when he states that Soviet strategy is to grasp the initiative from the beginning, which means that decisive importance must be attributed to the opening phase of any future war.

Marshal Zhukov, one of the best Russian leaders in World War II, has got lessons from the German Generalstaff during 1921-1922 under Seekt. He states in his memoirs: "Strict centralization of the Supreme Headquarters is a pressing necessity for the successful conduct of war. But this does not exclude independent initiative by commanders at the front; rather it actually requires it".

In conclusion I want to state that it is well known that today's Soviet leadership is trained according to the German Panzerleader Guderian's principles of mobile warfare, "*Schwerpunkt*" and "long-range tanks".

OBSERVATIONS ON THE SOVIET ARMY AND AIR FORCE

As time passes, the value of the experience gained by German troops when fighting the Russians will decline, and new assessments of their military capacity will be required. Nevertheless, the character and qualities of the Russian soldier, and his typical methods of fighting, are unlikely to change materially. The experiences of World War II provide the essential foundation on which to build up a serious appreciation of Russia's military power.

The Russian character must contain the key to an understanding of their soldierly qualities, their achievements and their way of fighting. The human heart and the psychology of the individual fighting man, have always been the ruling factors in warfare, transcending the importance of numbers and equipment. This old maxim held good during World War II, and I think it will always do so.

I am, of course, aware that the Slavs migrated into Russia from the West, and were originally a European people but the Mongol invasion of 1241, and the two centuries of domination which followed, gave an Asiatic twist to the Russian outlook and character, a development accentuated by the policy of the Tsars.

"There is no way of telling what the Russian will do next; he will tumble from one extreme to the other. With experience it is quite easy to foretell what a soldier from any other country will do, but never with a Russian. His qualities are as unusual and many-sided as those of his vast and rambling country. He is patient and enduring beyond imagination, incredibly brave and courageous - yet at times he can be a contemptible coward. There were occasions when Russian units, which had driven back German attacks with ferocious courage, suddenly fled in panic before a small assault group. Battalions had lost their nerve, when the first shot was fired, and yet the same battalions fought with fanatical stubbornness on the following day. The Russian is quite unpredictable; today he does not care whether his flanks are threatened or not, tomorrow he trembles at the idea of having his flanks exposed. He disregards accepted tactical principles but sticks to the letter of his field manuals. Perhaps the key to this attitude lies in the fact that the Russian is not a conscious soldier, thinking on independent lines, but is the victim of moods which a Westerner cannot

analyze. He is essentially a primitive being, innately courageous, and dominated by certain emotions and instincts. His individuality is easily swallowed up in the mass, while his powers of endurance are strengthened from long centuries of suffering and privation."

Thanks to the innate strength of these qualities the Russian is superior in many ways to the more conscious soldier of the West, who can only make good his deficiencies by superior mental and moral training.

A feature of the Russian soldier is his utter contempt for life or death, so incomprehensible to a Westerner. The Russian is completely unmoved when he steps over the dead bodies of hundreds of his comrades; with the same lack of concern he buried his dead compatriots and with no less indifference he faces his own death. For him life holds no special value, it is something to throw away easily.

With the same indifference, the Russian soldier endures cold and heat, and the pangs of hunger and thirst. Unheard of hardships make no impression on his soul. He lacks any true religious or moral balance, and his moods alternate between bestial cruelty and genuine kindness. As part of a mob he is full of hatred and utterly cruel, but when alone he can be friendly and generous.

The Russian soldier is fond of "Little Mother Russia", and for this reason he fights for the Communist regime, although generally speaking he is not a political zealot. I have remarked that interrogation of prisoners often disclosed a profound distrust and sometimes an unquenchable hatred towards the Communist Party and its officials. But the fact remains that the Party and its organs are all-powerful in the Red Army. The political commissars rule with cunning craft, and violence, and their narrow-meshed net encompasses the entire army in its toils. The commissars are almost exclusively city men and come from the working class, they are courageous to the point of recklessness, they are also very intelligent, and know no scruples. Although they have no bond of sympathy with the troops, they have given the Russian Army what it lacked during World War I--an iron and absolutely unshakeable discipline. The ruthless military discipline--which I am convinced no other Army would endure--has transformed a mob into a fighting instrument of terrific hitting power. Discipline is the trump card of Communism, the motive power of the army, and was the decisive factor in Stalin's extraordinary political and military successes.

The Russian soldier is independent of seasons or environment; he is a good soldier everywhere and under any conditions; he is also a reliable tool in the hands of his leaders who can unhesitatingly subject him to sufferings far beyond the conception of the European mind. This has important implications in the age of nuclear atomic warfare. One of the main points in Russia's favor would be her capacity to endure ruin and slaughter on the largest scale, and to make unprecedented demands on her population and fighting troops.

The ration problem is of secondary importance to the Russian Command, for their soldiers are virtually independent of army food supplies. The field kitchen, almost holy in the eyes of other troops, is a welcome surprise to the Russian soldier if it turns up, but he can do without it for days and weeks. He is quite content with a handful of millet or rice and for the rest he takes what nature offers him.

This nearness to nature is also responsible for his ability to become part of the soil; one may say that he allows himself to be sucked up by the soil. The Russian soldier is a past master of camouflage, of digging and shoveling, and of building earthworks. In an incredibly short time he literally disappears into the ground, digging himself in and making instinctive use of the terrain to such a degree that his positions are almost impossible to locate. The Russian soldier properly dug in, hugging Mother Earth, and well camouflaged, is an enemy doubly dangerous. Even after long and careful scanning it is often impossible to detect his positions. One is well advised to exercise extreme caution, even when the terrain is reputedly free of enemy.

The industrialization of the Soviet Union, carried through with ruthless force, has provided the Red Army with a large number of highly skilled technicians. The Russians have rapidly mastered the handling of new weapons, and surprisingly enough have shown a considerable aptitude for technical warfare. Carefully selected technicians are distributed among the rank and file, and instruct them in the use of the most complicated weapons and equipment. They have achieved notable success, especially in the signals service. The longer the war lasted, the better did the Russians master their sets, and the more skillful they became in interception, jamming, and deception.

To some extent the good military qualities of the Russians are offset by dullness, mental rigidity, and a natural tendency towards indolence. But

during the war they were improving all the time, and the higher commanders and staffs learned much from the Germans and from their own experience. They became adaptable, energetic, and ready to take decisions. Certainly in men like Zhukov, Koniev, Vatutin, and Vassilevsky Russia possessed army group commanders of a very high order. The junior officers and many among the middle command group, were still clumsy and unable to take decisions: because of the draconian discipline they were afraid of shouldering responsibility. Purely rigid training squeezed the lower commanders into the vise of manuals and regulations, and robbed them of the initiative and originality which are vital to a good tactician. Among the rank and file the gregarious instinct is so strong that an individual fighter is always submerged in the "crowd". Russian soldiers and junior commanders realized instinctively that if left on their own they were lost, and in this herd instinct one can trace the roots of panic as well as deeds of extraordinary heroism and self-sacrifice.

But in spite of these shortcomings there is no doubt that, on the whole, the Russian makes an excellent soldier, and when handled by capable commanders he is a very dangerous enemy. It would be a serious mistake to underestimate him, even though somehow he does not quite fit into the picture of a modern war fought by modern soldiers. The strength of the Western soldier lies in his personal qualities, his moral and mental training, his initiative and his high standard of intelligence. To a veteran of World War II it is hardly conceivable that a Russian private soldier should be capable of independent action. But the Russian is so full of contradictions that it would be a mistake not to reckon even on this quality, which may well be lying dormant. The skillful and persistent methods of Communism have produced astonishing changes in Russia since 1917; there is no doubt that the Russian is becoming more conscious of himself, and his standard of education is steadily improving. It is quite possible that a long period of peacetime training will develop his personal initiative.

Such a renaissance would certainly be furthered by the military authorities as far as they can. The Russian High Command knows its job better than the High Command of any other army; it is well aware of the weaknesses in the Red Army and will do all it can to eliminate them. There are indications that their training methods now aim at developing independent tactical action by the individual soldier, and at encouraging junior officers to take bold decisions. To the Communist

Regime there is of course a real peril in the development of individual action and critical thought, and such a tendency would hardly accord with their ruthless and unquestioning discipline. But given a long period of peace the Red Army may well work out some sort of compromise.

The Russian form of fighting, particularly in the attack - is characterized by the employment of masses of men and materiel, often thrown in unintelligently and without variations, but is, even so, frequently effective. Russians have always been renowned for their contempt for death. The Communist Regime has exploited this quality and Russian mass attacks are now more effective than ever before. An attack delivered twice will be repeated a third and a fourth time irrespective of losses, and the third or fourth attack will come in with the same stolid coolness as the first or second. Such ruthless methods represent the most inhuman and, at the same time, the most expensive way of fighting.

Right up to the end of the war the Russians did not bother to loosen up their attacking waves and sent them forward almost shoulder to shoulder. The herd instinct and the inability of lower commanders to act for themselves always resulted in densely packed attacks. Thanks to superiority in numbers, many great and important successes were achieved by this method. However, experience shows that it is quite possible to smash these attacks if they are faced by adequate weapons handled by trained men under determined commanders.

The Russians attacked with divisions, very strong numerically and on very narrow sectors. In no time the terrain in front of the defenders was teeming with Russians; they appeared to spring from the soil, it seemed impossible to stem the oncoming tide, and huge gaps made by our fire were closed automatically. The waves came on and on until the supply of men was exhausted, then perhaps the waves rolled back. But in many cases they did not roll back, but swept forward with an impetus impossible to contain. The repulse of this sort of attack is not merely a question of materiel; it is more particularly a matter of nerves. Only veteran soldiers were able to overcome the fear which is bound to grip everyone; only the soldier who is conscious of his duty and ability, only he who learned to act on his own, will be able to withstand the terrible strain of a Russian massed attack. Sometimes the Russians supplied vodka to their storm battalions, and the night before the attack we could hear them roaring like devils.

After 1941 the Russians added masses of tanks to masses of men. Such onslaughts were of course far more difficult to stop, and nervous strain was proportionally increased.

Although the Russians are perhaps not masters of improvisation, they certainly understand the art of having new formations ready at any time to take the place of those smashed or decimated in battle. They replaced their exhausted units with surprising speed and in doing so displayed a ruthlessness only too typical of the Russian mentality. There were cases when Russian military leaders conscripted the male inhabitants of a whole town or an entire district; they pulled them in regardless of age, nationality, or occupation. They sent these people into battle after a few days training or with no training at all; they were committed without uniforms and sometimes without weapons. They learned what they could in the field of battle, where they picked up the weapons of their fallen comrades. Russian officers knew well that the military value of such people was very slight, but they helped to fill gaps, and so fulfilled their purpose.

The Russians favor troop movements by night and carry them out with very great skill; however, they do not favor night attacks on a large scale. They seem to realize that their junior commanders are insufficiently trained for such operations. Nevertheless, they sometimes make night attacks for limited objectives, either to recover lost ground or to facilitate a daylight attack.

When fighting Russians it is necessary to get accustomed to a new sort of warfare. Fighting must be primitive and ruthless, rapid and versatile. One must never allow oneself to be bluffed; one must be alert for surprises as anything may happen. It is not enough to fight according to well-proven tactical principles, for one can never be sure what Russian reactions will be. It is impossible to say what effect encirclement, surprise, deception, and so on will have on Russians. In many situations the Russians relied on instinct rather than tactical principles, and it must be admitted that their instinct frequently served them better than the teaching of many academies could have done. At first their measures might seem incomprehensible, but they often turned out to be fully justified.

There was one tactical error which the Russians never eradicated in spite of bitter lessons; I mean their almost religious belief in the importance of high ground. They made for any height and fought for it with the utmost

stubbornness, quite regardless of its tactical importance. It frequently happens that the occupation of high ground is not tactically desirable, but the Russians never understood this and suffered accordingly.

I come now to the tank arm, which began the war with the great advantage of possessing in the T34, a model far superior to any tank on the German side. In 1942 their heavy Klim Voroshilov was not to be despised; they then produced an improved model of the T34 and, finally, in 1944 the massive Stalin tank which gave our Tigers plenty of trouble. The Russian tank designers understand their job thoroughly; they cut out refinements and concentrate on essentials - gun power, armor, and cross-country performance. During the war their system of suspension was well in advance of Germany and the West.

In 1941 and 1942 Russian tank tactics were clumsy; and the armor was dissipated in small units scattered over wide fronts. Then in the summer of 1942 the Russian Command learned its lesson and began to form entire tank armies, with armored and mechanized corps. The task of the armored corps, which were not particularly strong in motorized infantry and artillery, was to assist infantry divisions in making a breakthrough. The role of the mechanized corps was to exploit the breakthrough and thrust far behind the front; for this purpose they had the same number of tanks as the armored corps, but were not given the heavy models. In addition, their establishment included large numbers of motorized infantry, artillery, and engineers. The rise of the Russian tank arm dates from this reorganization; by 1944 it had become the most formidable offensive weapon of the war.

At first the Russian tank armies had to pay heavily for their lack of experience and, in particular, the lower and middle commands showed little understanding or aptitude for armored warfare. They lacked the daring, the tactical insight, and the ability to make quick decisions. The initial operations of the tank armies were a complete failure. In tight masses they groped around in the main German battle zone, they moved hesitantly and without any plan. They got in each others way, they blundered against our antitank guns, or after penetrating our front they did nothing to exploit their advantage and stood inactive and idle. Those were the days when isolated German antitank guns or 88's had their heyday and sometimes one gun would shoot up and knock out more than 30 tanks an hour. We thought that the Russians had created a tool which they would never be able to handle expertly, but even in the winter of 1942-43 there were signs of improvement.

1943 was still a year of apprenticeship for the Russian armor. The heavy German defeats on the Eastern Front were not due to superior Russian tactical leadership, but to grave strategic errors by the German Supreme Command, and to the vast Russian superiority in numbers and material. It was not until 1944 that those large armored and mechanized formations developed into a highly mobile and keenly edged tool, handled by daring and capable commanders. Even the Junior Officers became remarkably efficient; they showed determination and initiative, and proved willing to shoulder responsibility. The destruction of our Army Group Center, and the sweeping advance of Marshal Rotmistrov's tanks from the Dnieper to the Vistula marked a new stage in the history of the Red Army and one of ominous import to the West. Later we were to see the same methods in the great assault of January, 1945.

The extraordinary development of the Russian tank arm deserves the very careful attention of students of war. Nobody doubts that Russia can produce a Seydlitz, a Murat, or a Rommel - several of their generals in 1941-45 were certainly on [this] level. But this was more than the development of a few gifted individuals. In this case an apathetic and ignorant crowd, without training or natural aptitude, was endowed with brain and nerves. In the fiery furnace of war the tank crews of the Red Army were elevated far above their original level. Such a development must have required organization and planning of the highest order, it may be repeated in other spheres - for instance in the air force or submarine fleet, whose progress is furthered by the Russian High Command "by every available means".

It is characteristic of the Russians that even their armored divisions have far fewer vehicles than those of Western powers. It would be wrong to attribute this to lack of productivity in the Russian motor industry, for even infantry divisions with horse-drawn transport have a low complement of animals and wagons. However, the strength returns of any Russian regiment or division are much lower than those of Western armies. But in any Russian formation the strength returns of the actual fighting troops are relatively the same as in the West, for they have far fewer men in their supply columns and administrative units. Apart from the records of officers, N.C.O.'s, and specialists, the Russians do not bother to maintain any personnel branch. When a unit requires replacements, it calls for so many men. Similarly the supply columns of the Red Army do not have to worry about clothing, tents, blankets, and many other items regarded as essential in the West;

during an advance they can afford to forget about rations, for the troops "live on the country". The chief task of the supply columns is the movement of gasoline and ammunition, and even these items are frequently packed on what a Western army calls "fighting vehicles". In a Russian motorized division, the soldier has no luggage apart from what he carries on his person. Somehow or other he squeezes onto a vehicle packed with gasoline or ammunition. The scarcity of vehicles has a dual effect: tactical and psychological. Because the number of vehicles in a motorized division is much lower than in the West, the division is far more mobile; it is easier to handle, to camouflage, or to move by rail.*

The psychological aspect is also interesting. Every Western soldier is linked somehow or other with his rearward services; they bring him the sustenance and comforts which make his hard life bearable. When a unit is "rubbed out" in battle, the survivors usually cluster around the field kitchen or baggage train to seek refuge and solace. Even the shirker or the shell-shocked usually reappears at this focus on one pretext or another. There is nothing like that for a Russian. He has only his weapons, and there are no attractions for him in the rear. There is no field kitchen and no baggage train, his refuge is his rifle, his tank, or his machine gun. If he loses them he has lost his home; if he wanders into the rear he will be rounded up sooner or later by the patrols of the M.V.D. (Military Police).

Thus the low Russian vehicle establishments bring them significant advantages; their High Command has a deep understanding of the mentality of the Russian soldier and has contrived to turn his weaknesses into strength.

In June and July, 1941, the Red Air Force suffered a devastating defeat, and was struck down so hard that it seemed probable that it would never rise again. Yet this disaster was followed by a revival of unexpected dimensions, only rendered possible by the inexhaustible resources of a vast country.

The difficulties to be overcome by the Russian air arm were far more formidable than those of the ground forces. The aircraft factories were much more vulnerable and were thoroughly disorganized by the advance of the German armies.

*Incidentally, the Russians showed very considerable ability at moving troops by rail. They did not have a "railway atlas", and they did not employ the elaborate calculation of Western staffs, but they moved the troops with a minimum of delay from point to point.

The transfer of factories to the Urals and Siberia caused serious delays in production, and the losses of experienced air crews and ground staffs had been so heavy, that it was extremely difficult to improvise training programs for the new drafts of pilots and technicians. But the Soviet State proved itself fully capable of tackling the enormous task and in this respect the help given by the Anglo-Americans was of greatest importance. The Red Air Force never disappeared entirely from the sky, and even in the winter of 1941-42 it delivered some effective blows. During 1942 the Luftwaffe had air superiority but it could not control every sector of the immense front, and the Russians frequently gained local command of the air. In 1943 the tide began to turn, until in the autumn of that year 1,500 German first-line aircraft faced 14,000 Russian machines. The ratio became still more unfavorable later on.

It is true that the efficiency of the Red Air Force did not correspond with its numerical strength. The casualties among experienced personnel in the first months of the war were never made good, and the types of aircraft in mass production were decidedly inferior to our own. Senior officers seemed unable to adapt themselves to the principles of modern air warfare.

The Russians had virtually no strategic air force, and the few long-range operations they carried out did not inconvenience us at all. Reconnaissance planes occasionally flew 30 to 60 miles behind the front, but it was rare to see bombers or fighters more than 20 miles behind our lines. This proved of tremendous advantage to the German Command, and even in the worst periods of the war the movement of troops and supplies could proceed smoothly in rear areas.

The Russian aircraft operated as a tactical air force in the battle zone, and from the summer of 1943 they swarmed over the battlefield from morning to night. Their heavily armored Stormviks specialized in low-flying attacks and their pilots certainly showed plenty of dash and courage. Their night bombers operated singly, and their main object seemed to be to disturb our sleep. Certainly the degree of cooperation between air and ground forces kept improving all the time, and their technical inferiority gradually disappeared. But, tactically they were always inferior, and their pilots were no match for our own.

The achievements of the German soldiers in Russia clearly prove that the Russians are not invincible. In the late autumn of 1941, the German Army was definitely in sight of victory in spite of vast spaces, the mud and slush of

winter, and our deficient equipment and inferior numbers. Even in the critical years of 1944-45 our soldiers never had the feeling of being inferior to the Russians - but the weak German Forces were like rocks in the ocean, surrounded by endless waves of men and tanks which surged around and finally submerged them. The Russians should certainly not be underestimated, but their virtues and deficiencies should be calmly and coolly appreciated. Nothing is impossible as far as their actions are concerned, but it would be wrong to regard them as invincible as long as the strength ratio is not fantastically unequal.

Experience gathered in the war shows that the Germans fought successful actions with a strength ratio of 1:5, as long as the formations involved were more or less intact and adequately equipped. Success was sometimes achieved with an even more unfavorable strength ratio, and it is unlikely that any other Western army could do better.

The Russian Armed Forces are at their best on the ground and were not particularly formidable on the water or in the air. In spite of postwar achievements the Red Air Force will find it difficult to attain the level of Western Air power - and there can be no doubt that the Russian Navy has still very much to learn. In the war of the future Russia's main strength will again be in her ground forces and particularly in her huge numbers of tanks. We must expect far-reaching offensives, delivered with lightning rapidity, and coordinated with disorders fostered by Communist sympathizers in other lands. What effect nuclear atomic warfare will have on such operations it is still impossible to say, but Russia's vast spaces and the veil of secrecy which shrouds her activities make her a formidable opponent if it comes to swapping nuclear bombs.

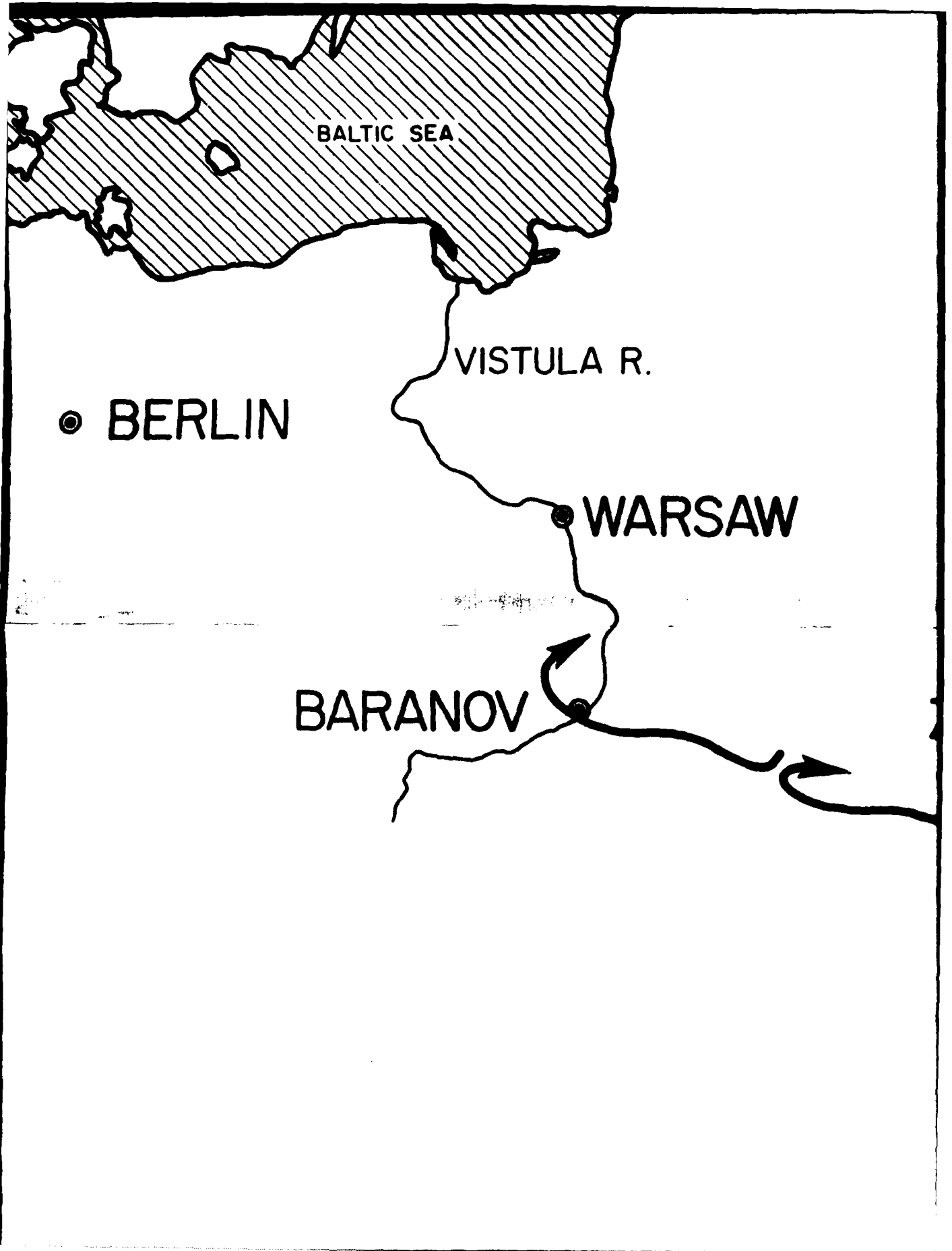
The Western soldier has to be carefully and systematically trained for the fateful fight. Not only tactical but physical training must be planned so the troops can meet the Russians on equal terms; we must take into consideration the peculiarities of Russian fighting methods and adapt our preparations accordingly. The essential points are personal hardiness, initiative, and readiness to shoulder responsibility. Strict discipline is another fundamental for fighting against Russians.

No air force, however powerful, will be able to stop the Russian masses. The Western World's most crying need is for infantry, determined to do or die, and

ready to stem the Russian onslaught with antitank weapons. The West also needs strong armored and mechanized formations to counterattack and hurl back the Russian invader.*

And, in conclusion I would like to say: "History will condemn only those nations that make no attempt to defend themselves".

*I stress the need for infantry although my service during the war was almost exclusively with armor.



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