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THE GERMAN AIR FORCE VERSUS RUSSIA, 1941

by
Generalleutnant Hermann Plocher

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USAF HISTORICAL DIVISION
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July 1965

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Generalleutnant Hermann Plocher

Edited by Mr. Harry R. Fletcher
USAF Historical Division



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Everyone who desires to become a strategist has before him a book entitled "Military History" . . .

I must admit that the reading is not what one might call stimulating in its entirety. One has to work his way through the mass of scarcely palatable ingredients. But behind it all one still arrives at the facts, often cheering facts, and upon the basis of this finds the knowledge of how everything has come about, how it had to come about, and how it will happen again.

Alfred Count von Schlieffen,*

From an address given at the Centennial of the German War Academy in Berlin on 15 October 1910.

*Alfred Count von Schlieffen (1833-1913) served as Chief of the Prussian General Staff from 1891 to 1906. His study Cannae: Principle of the Victory of Annihilation through Envelopment is world famous and has become a basic study for the field of Military Science.

FOREWORD

The German Air Force versus Russia, 1941, written by General-leutnant Hermann Plocher, and revised and edited by Mr. Harry Fletcher, is one of a series of historical studies written for the United States Air Force Historical Division by men who had been key officers in the German Air Force during World War II.

The overall purpose of the series is twofold: 1) To provide the United States Air Force with a comprehensive and, insofar as possible, authoritative history of a major air force which suffered defeat in World War II, a history prepared by many of the principal and responsible leaders of that air force; 2) to provide a firsthand account of that air force's unique combat in a major war, especially its fight against the forces of the Soviet Union. This series of studies therefore covers in large part virtually all phases of the Luftwaffe's operations and organization, from its camouflaged origin in the Reichswehr, during the period of secret German rearmament following World War I, through its participation in the Spanish Civil War and its massive operations and final defeat in World War II, with particular attention to the air war on the Eastern Front.

The German Air Force Historical Project (referred to hereinafter by its shorter and current title, "The GAF Monograph Project") has generated this and other especially prepared volumes which comprise, in one form or another, a total of more than 40 separate studies. The project, which was conceived and developed by the USAF Historical Division, was, upon recommendation of Headquarters Air University late in 1952, approved and funded by Headquarters USAF in early 1953. General supervision was assigned to the USAF Historical Division by Headquarters USAF, which continued principal funding of the project through 30 June 1958. Within the Historical Division, Dr. Albert F. Simpson and Mr. Joseph W. Angell, Jr., respectively Chief and Assistant Chief of the Division, exercised overall supervision of the project. The first steps towards its initiation were taken in the fall of 1952 following a staff visit by Mr. Angell to the Historical Division, Headquarters United States Army, Europe, at Karlsruhe, Germany, where the Army was conducting a somewhat similar historical project covering matters and operations almost wholly of interest to that service. Whereas the Army's project had produced or was producing a multiplicity of studies of varying length and significance (more than 2,000 have been prepared to date by the Army project), it was early decided that the Air

Force should request a radically smaller number (around 40) which should be very carefully planned initially and rather closely integrated. Thirteen narrative histories of GAF combat operations, by theater areas, and 27 monographic studies dealing with areas of particular interest to the United States Air Force were recommended to, and approved by, Headquarters USAF in the initial project proposal of late 1952. (A list of histories and studies appears at the end of this volume.)

By early 1953 the actual work of preparing the studies was begun. Col. Wendell A. Hammer, USAF, was assigned as Project Officer, with duty station at the USAREUR Historical Division in Karlsruhe. General der Flieger a. D. Paul Deichmann was appointed and served continuously as Control Officer for the research and writing phases of the project; he also had duty station at the USAREUR Historical Division. General-leutnant a. D. Hermann Plocher served as Assistant Control Officer until his recall to duty with the new German Air Force in the spring of 1957. These two widely experienced and high-ranking officers of the former Luftwaffe secured as principal authors, or "topic leaders," former officers of the Luftwaffe, each of whom, by virtue of his experience in World War II, was especially qualified to write on one of the topics approved for study. These "topic leaders" were, in turn, assisted by "home workers"--for the most part former general and field-grade officers with either specialized operational or technical experience. The contributions of each of these "home workers," then, form the basic material of most of these studies. In writing his narrative the "topic leader" has put these contributions into their proper perspective.

These studies find their principal authority in the personal knowledge and experience of their authors. In preparing the studies, however, the authors have not depended on their memories alone, for their personal knowledge has been augmented by a collection of Luftwaffe documents which has come to be known as the Karlsruhe Document Collection and which is now housed in the Archives Branch of the USAF Historical Division. This collection consists of directives, situation reports, war diaries, personal diaries, strength reports, minutes of meetings, aerial photographs, and various other materials derived, chiefly, from three sources: the Captured German Documents Section of The Adjutant General in Alexandria, Virginia; the Air Ministry in London; and private German collections made available to the project by its participating authors and contributors. In addition, the collection includes the contributions of the "home workers." The authors have also made use of such materials as the records of the Nuremberg Trials, the manuscripts prepared by the Foreign Military Studies Branch of the USAREUR Historical Division, the official military histories of the United States

and the United Kingdom, and the wealth of literature concerning World War II, both in German and English, which has appeared in book form or in military journals since 1945.

With the completion of the research and writing phases in 1958, the operations at Karlsruhe were closed out. At that time the project was moved to the Air University, Maxwell Air Force Base, Alabama, where the process of editing and publishing the studies was begun by the USAF Historical Division.

Basic revising and editing of the monographs has been handled by Mr. Edwin P. Kennedy (1958-61), Dr. Littleton B. Atkinson (1961-62), Mr. Gerard E. Hasselwander (1962-63), and the present Editor, Mr. Harry R. Fletcher. Final review and editing has been the responsibility of Dr. Albert F. Simpson, Chief, USAF Historical Division, with the assistance of Dr. Maurer Maurer, Chief of the Division's Historical Studies Branch.

The complexity of the GAF Monograph Project and the variety of participation which it has required can easily be deduced from the acknowledgments which follow. On the German side: General Deichmann, who, as Chief Control Officer, became the moving force behind the entire project, and his assistant, General Plocher; General Josef Kamhuber, a contributor to, and strong supporter of, the project, who became the first chief of the new German Air Force; Generaloberst a. D. Franz Halder, Chief of the German Army General Staff from 1938 to 1942, whose sympathetic assistance to the project was of the greatest value; the late Generalfeldmarschall Albert Kesselring, who contributed to several of the studies and who also, because of his prestige and popularity in German military circles, was able to encourage many others to contribute to the project; and all of the German "topic leaders" and "home workers" who are too numerous to mention here, but whose names can be found in the prefaces and footnotes to the individual studies.

In Germany, Colonel Hammer served as Project Officer from early in 1953 until June 1957. Colonel Hammer's considerable diplomatic and administrative skills helped greatly towards assuring the project's success. Col. William S. Nye, USA, was Chief of the USAREUR Historical Division at the project's inception; his strong support provided an enviable example of interservice cooperation and set the pattern which his several successors followed. In England, Mr. L. A. Jackett, Head of Air Historical Branch, British Air Ministry, gave invaluable assistance with captured Luftwaffe documents.

The project is indebted to all of those members of the USAREUR Historical Division, the Office of the Chief of Military History, and the USAF Historical Division, whose assistance and advice helped the project to achieve its goals.

At the Air University, a number of people, both military and civilian, have given strong and expert support to the project. The several Commanders of Air University during the life of the project in Karlsruhe (1952-58) without exception were interested in the project and gave it their full backing. Other personnel at Headquarters Air University who contributed time and experience include: the several Directors of the Aerospace Studies Institute since 1952; Dr. James C. Shelburne, Educational Advisor to the Commander; Mr. J. S. Vann, Chief of Special Projects Branch, DCS/Operations; and Mr. Arthur P. Irwin, Chief, Budget Division, DCS/Comptroller.

The project is grateful to Lt. Col. Leonard C. Hoffman, former Assistant Air Attaché to Germany, who gave indispensable aid during the project's last year in Germany, and to Mr. Joseph P. Tustin, Chief Historian of Headquarters, United States Air Forces in Europe during the years when the project was at Karlsruhe, who rendered substantial assistance by solving a variety of logistical and administrative problems.

Mrs. Mary F. Hanlin deserves special thanks for her expert typing of the final draft.

AUTHOR'S FOREWORD

My intimate involvement with the Russian campaign dated from the earliest beginnings of the preparations for BARBAROSSA. I served for many months during the war against the Soviet Union as a General Staff officer of the Luftwaffe and as the commanding officer of an air division. A pre-World War II course of study at the Army War College (Kriegsakademie) in Berlin was invaluable in helping me to secure a clearer comprehension of problems related to army tactical and strategic operations.

This present work is based upon a detailed study of the available source materials of the time, including books and essays on military science published in Germany and abroad, as well as documents and war diaries which originated in the various German military headquarters. Prominent former commanding generals and senior officers of the Luftwaffe, officers of the General Staff, and experienced troop commanders of all ranks and branches of the Luftwaffe assisted me with invaluable advice, reports, and commentaries. It must be pointed out, however, that little documentation was to be had regarding the preparations for BARBAROSSA and the course of the campaign in 1941. Therefore, a clear presentation of the events of the time was possible only by making a lengthy and laborious comparison and evaluation of the available information with the oral and written contributions furnished by my collaborators.

Insofar as was possible, every effort has been made to achieve objectivity in the presentation of the historical events of the period which reflect directly upon the leadership of Germany, and upon the services rendered during the war by all German units in Russia.

The German conflict with the Soviet Union naturally produced a great mass of military experiences of a tactical, technical and strategic nature. These experiences and the conclusions drawn from them are not merely the products of my own personal and critical evaluations, but directly reflect the recollections and opinions of many staff and front line commanders of the Wehrmacht, almost too numerous to mention, who served on the Eastern Front. Their collaboration with me in this present undertaking was the result of a soldierly sense of duty to the

memory of their comrades who died in good faith for their fatherland,
and in the hope that the useful application of these lessons and experiences
will, in the future, keep warfare from German soil.

December 1953

Hermann Flocher,
Generalleutnant a. D.

PREFACE

The great Prussian General Carl von Clausewitz has said that the specific aims of warfare are to "destroy the enemy's forces," to "occupy his country," and, ultimately, "to force him to conclude a peace on your own terms." It was precisely Hitler's inability to secure the first two of these conditions that prevented him from achieving a victory over the Soviet Union and eventually led to Germany's defeat.

The war on the Eastern Front provided each of the great antagonists with an opportunity to discover the strengths and shortcomings of the other which had not theretofore been evident. The offensive against Russia was not based on a meticulous and detailed plan by the German General Staff, but centered around a number of general directives issued by Hitler, most of which rested upon the assumption that German military power was, and would continue in the future to be, irresistible.

Perhaps in the East, more than in any other German war theater, the position of the Reich was most largely determined by the fortunes of the Wehrmacht on the ground. It was, in short, an "Army show," in which both the Luftwaffe and the Navy held supporting and subordinate roles. Because of this fact, military literature here and abroad has tended to place special emphasis upon German Army operations and to neglect the importance of the Luftwaffe in determining the outcome of events. In awareness of this, the author has devoted only such space to ground force actions as is required to lay the framework for German air operations.

In this, the first of several of his studies dealing with the Campaign in the East, General Plocher makes a critical examination of deficiencies in planning, failures to provide for unexpected contingencies, and the German High Command's dangerous underestimation of Soviet capabilities, all of which led to unpleasant and stunning surprises. In tracing the events of 1941, the author describes the optimistic opening of the war, the great early victories, and the eventual failure to secure the strategic objectives of the campaign, leading to a radical change in plans and a sobering reappraisal of the Soviet enemy. General Plocher has made ample use of the principal documentary sources available at the time, and the testimony of numerous former Luftwaffe officers who had firsthand knowledge of the events. Although several years have elapsed since this study was written, it is worth noting that no significant new materials have since come to light to alter the general tenor and conclusions of his work.

The original of this manuscript has been abridged, and several of the longer quotations have been sharply reduced in an effort to improve the narrative for the reader. Extensive editing has been carried out by the USAF Historical Division, yet a determined effort has been made to preserve the character of General Plocher's work, the essence of his commentary, and the significance of the remarks and opinions presented by others.

In conformity to general practices arising from the difficulty of finding precise American equivalents for grades and positions of German general officers, all ranks above colonel have been left in the German form.

ABOUT THE AUTHOR

Generalleutnant Hermann Plocher was born 5 January 1901. His career in the German military service began in October of 1918 as an officer candidate in the 126th Infantry Regiment. He was commissioned 1 December 1922 in the 13th (Wuerttemberg) Infantry Regiment, a unit whose junior officers included such able men as Erwin Rommel and Hans Speidel. Three years later Plocher began training as a pilot, and in 1928 went with other German officers to the Soviet Union to take special courses in aerial combat and reconnaissance during the period when such activities were proscribed in the Reich. Following his promotion to Captain on 1 April 1934 he attended the Army War College (Kriegs-akademie) in Berlin, receiving special air force training, and a year later was assigned to the Organization Branch of the Luftwaffe General Staff.

In August of 1936 Plocher, then a Major, was sent to Spain as part of the German contingent to assist General Franco, and participated actively in the Spanish Civil War. In October of 1937 he was appointed Chief of Staff of "Legion Condor." By virtue of his record, Plocher earned on 1 March 1938 an extraordinary promotion to Lieutenant Colonel.

Prior to the outbreak of World War II he was assigned to the Luftwaffe General Staff as Chief of Plans and Mobilization. He then assumed the post of Chief of Staff of the V Air Corps (redesignated 1 April 1942 as Luftwaffe Command East) on 5 January 1940 and served with this organization during its campaigns in the West and in the Soviet Union. On 1 February 1943 he took command and directed the formation of the 19th Luftwaffe Field Division, and in April, following his promotion to Generalmajor, went with his unit to Normandy. General Plocher assumed command on 1 July 1943 of the 4th Air Division, and in October became Chief of Staff of the Third Air Fleet (Western Front). Following his promotion on 1 July 1944 to Generalleutnant, he became Commanding General of the 6th Airborne Division (Western Front). On 10 May 1945 he surrendered to Canadian forces in the Netherlands.

From 1953 until the spring of 1957, Generalleutnant Plocher gave generous and valuable assistance to the USAF Historical Division's German Monograph Project in Karlsruhe, Germany, adding his contributions to those of his colleagues to round out the story of German Air Force operations during the war. In March 1957 he returned to active

duty in the new Luftwaffe where, as a general officer, he held key positions until his final retirement at the turn of the year 1961.

As a former commander of German air and ground forces and as a General Staff officer of considerable experience and ability, he is ideally suited to document the course of events on the Eastern Front, where he played such a significant role.

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Chapter 1

THE BACKGROUND OF THE WAR AGAINST RUSSIA

Reasons for Germany's Decision To Wage War

Hitler's decision to open a military campaign against the Soviet Union was his most dangerous gamble of World War II, and one which set the stage for Germany's greatest catastrophe. The question has often been asked how Germany, with its particular military, economic, and geographic resources, could have dared to attack an opponent which enjoyed so many natural advantages, for without question such an undertaking was bound to tax the Reich's reserves to the limit and to dangerously weaken its forces in other areas.

Germany was in dire need of raw materials, especially foodstuffs, for the prosecution of its war effort, and its expanding population required additional living space (Lebensraum) in which to achieve its economic and national aspirations. These needs could be satisfied in the Soviet Union, the conquest of which would also permit Germany to achieve a successful end to the war in the West.

In 1940 the Wehrmacht was clearly superior to the Soviet armed forces, but Russian rearmament would rapidly alter this relationship to Germany's disadvantage. Time was, then, a most important factor in deciding to go to war against the colossus in the East. The war against Britain was far from concluded, and the United States, then substantially supporting her, was demonstrating an increasingly hostile attitude toward the Axis powers. In such a situation a protracted war against Russia could have disastrous consequences.

Political Reasons for War

The steady expansion of Soviet power and the suspicious manifestations of Russian representatives during the many political, military, and economic conferences with Germany after 1939 served to strengthen Hitler's belief in the inevitability of war with the Soviet Union.

Among the more important political issues between the two governments were the Russian occupation of Rumanian Bessarabia and Bucovina, Russia's demand for German recognition of Bulgaria as a

part of the Soviet sphere of influence, Russian insistence upon a permanent agreement with respect to the final status of Poland, continued demands for German support of Soviet efforts to secure naval bases in the Dardanelles, and Russian insistence upon complete freedom of action in dealing with Finland. Since these demands were invariably made to coincide with periods of crisis for Germany, the conviction was naturally held in the Reich that the Russians would exploit every opportunity to act against Germany's plans and interests. On 12 November 1940, Soviet Foreign Minister V. M. Molotov inquired into the "meaning of Germany's declaration of guarantees to Rumania," much to the consternation of German political leaders, whose suspicions were later deepened and confirmed by the Soviet treaty of "friendship" with Yugoslavia.

Hitler was aware of Germany's exposed and vulnerable flank in the Balkans, and the memory of the once dangerous Salonika Front of 1918 doubtless exerted a powerful influence upon his thinking. The large number of conferences with Bulgaria, Rumania, Yugoslavia, and Hungary, in which the Germans sought to bring the Balkans under the influence of the Reich, were further indications of Germany's awareness of the potential dangers from the southeast. The obvious solution to the problem was to divert Soviet attention and interests toward Persia and India where it could strike a blow at Britain's most important sources of power, but Hitler, in his negotiations, neither supported nor pursued these ideas with the necessary firmness. Always continental in thought, he was habitually mistrustful and cautious, indeed, almost apprehensive of any global policy.

Ideological Reasons

The clear impossibility of reconciling the philosophy of German National Socialism with the political and ideological views of the Soviet Union continued to be a factor of importance.* In the persisting insurmountable antagonisms separating the two powers, the so-called Russo-German Friendship Treaty of 1939 changed nothing, for their differences were neither resolved thereby nor diminished. In Hitler's eyes, the Soviet Union had always been the ideological enemy which, because of its extortionist policies, would sooner or later attack Germany from the rear, and do so as soon as the world political situation seemed to require

*It is worth noting that President Franklin D. Roosevelt persisted in the belief that the two villains, Hitler and Stalin, would somehow resolve their differences, even after months of bloody warfare. This point of view was held by few Germans.

or Russian armaments permitted. Because Hitler thought that the Communist system in Russia had not been fully consolidated, he was convinced that the Soviet government, if attacked soon enough, would thus be unable to sustain itself against heavy external blows, and would quickly collapse.

Economic Reasons

In the conduct of its war against the West, Germany had a considerable dependence upon raw materials imported from Russia. The continuance of this supply was in part, and often almost exclusively, dependent upon the uncertain "good will" of the Soviet Union. A military occupation of European Russia would bring wheat from the Ukraine, coal and other ores from the Donets Basin, nickel from the Kola Peninsula, oil from the Caucasus, and wood from White Russia, all essential goods for war, without which a German victory would be doubtful. At the opening of the Winter Help Drive on 30 September 1942, Hitler declared, "The enormous area of Russia should be made available for the nourishment of the German people, for the assurance of their supply of raw materials, and, in a greater sense, for the maintenance of Europe."

Military Reasons for War

The Soviet attitude toward the Reich remained perpetually uncertain, and many Germans viewed the Soviet sphinx as a constant latent source of danger. Russia had been attentively and anxiously observing Germany's rise to power, and had already begun to take corresponding defensive measures, among which were the seizure of the Baltic States, Bessarabia and Bucovina, and parts of Finland. From 1939 to May of 1941 the number of Soviet divisions had increased from 65 to 158, and many of these were concentrated along the western frontiers. While such forces were ostensibly defensive in character, they nevertheless constituted a grave menace to Germany. The inference of this becomes more obvious in the light of a statement made by a Russian officer in 1945 to Field Marshal Albert Kesselring* that "Russia would have achieved a maximum level of armament and combat readiness by 1943."¹

*For brief biographical sketches of important persons who appear in the study, see Appendix II.

Thoughts Become Reality

On 29 July 1940, General der Artillerie Alfred Jodl issued at Hitler's behest precise instructions for a concentration of power in the East, a "Buildup East" (Aufbau Ost), to the National Defense Branch of the High Command of the Armed Forces (OKW). Logistical, operational, and administrative measures required for a war against Russia were then prepared by Generalleutnant Walter Warlimont, Chief of the National Defense Branch of the Wehrmacht, and sent to Field Marshal Wilhelm Keitel, Chief of the High Command of the German Armed Forces.

On 31 July 1940 Hitler informed the Commander in Chief of the German Army, Field Marshal Walther von Brauchitsch, and the Chief of the Army General Staff, Generaloberst Franz Halder, of his plan to attack Russia. Halder thereupon ordered a study on the proposed campaign to be made by Generalleutnant Erich Marcks (which was later completed by Generalleutnant Friedrich Paulus).

The War Economy and Armament Office, headed by General der Infanterie Georg Thomas, had been informed on 14 August 1940 of the Fuehrer's intention to discontinue all supply shipments--these were being made under the terms of the Russo-German trade pact--to Russia after the spring of 1941.² Appropriate steps for an expansion of the war were then taken in November, when Goering announced Hitler's decision for a buildup of forces in the East.³

Although Grossadmiral Erich Raeder, the Commander in Chief of the Navy, was apparently not apprised of Hitler's plan until late 1940 or early 1941, the matter was clarified on 8 or 9 January 1941 when the Fuehrer told Raeder that "Germany would be able to continue the war against England under completely tolerable conditions once the danger in the East had been eliminated," and that "the collapse of the Soviet Union would constitute a great relief to Japan and would thus increase the dangers for the United States in entering a war against Germany."⁴

*Admiral Raeder thought for a time that his efforts had been successful in dissuading Hitler from his plan by suggesting a penetration of Africa, Dakar, and the Mediterranean. Mein Leben (My Life), Vol. II, Tuebingen: Verlag Fritz Schlichenmayer, 1957, pp. 246-249.

As early as mid-November of 1940, when Generalmajor Otto Hoffman von Waldau informed the officers of the Operations Staff of the Luftwaffe of the details of the plan for a campaign against Russia, many of them had already surmised the existence of such a plan because of Marshal Goering's previous demand for a buildup of Luftwaffe ground forces in the East. However, photo-reconnaissance flights which were proposed as a consequence of this plan were banned by Hitler on the ground that they might incite the Russians to war prematurely. It can therefore be assumed that when Goering was informed of Hitler's decision for war on 4 January 1941, it had long been expected by senior Wehrmacht officers.⁵

Probable Duration of the Campaign

Hitler really believed that the war in the East could be concluded in three or four months, and busied himself, even prior to the attack on Russia, with plans for later operations in the Near East. Spoiled by successful "lightning wars" in 1939 and 1940, Hitler and the top commanders of the armed forces unfortunately made too favorable an estimation of the situation.

While the High Command did not expressly object to the Fuehrer's timetable, and, in early June 1941, even asked for the formulation of a clear plan "for subsequent operations to be conducted after the smashing of the Russian armed forces,"⁶ a later remark by General Halder indicates that he was "firmly convinced when Hitler began the Russian campaign in 1941 that it was with the preconceived notion, which was neither shared nor supported by the Army General Staff, that Russia could be forced to make peace in 1941."⁷

Field Marshal Erhard Milch, State Secretary of Aviation, likewise remained unconvinced that the Soviet Union could be defeated in a "Blitz" campaign.⁸ On 5 December 1942 he declared:

. . . At that time [January 1941], of course, everyone knew that the action in the East was coming. That was long before June. I had been then asked whether or not we should prepare for winter. This was months in advance. I thereupon gave the order to prepare everything for winter; the war will last several years in the East. At that time the official opinion was otherwise. I know the East, its scope, and I had been there often. I have seen much of the world and know exactly what we are risking there.⁹

The official German government viewpoint was best expressed by Foreign Minister Joachim von Ribbentrop in his boast to the Italians that if Germany and Russia came to blows the Soviet Union of Stalin would "disappear from the map within eight weeks."¹⁰ Hitler, too, spoke of a "short campaign in the East" during a conference with von Brauchitsch on 5 December 1940 at the Reichs Chancellory,^{*} but Reichsmarschall Hermann Goering (Commander in Chief of the Luftwaffe) had serious doubts about it. In a speech before a gathering of Gauleiters (Nazi District Party Leaders) at Munich, 8 November 1943, Goering commented bitterly on the supposed "brevity" of the campaign:

. . . And then came the Russian campaign! . . . at that time I had also hoped that we would not need to discontinue the campaign against England. In the beginning it was said: these wings should go to the East for the first four days only, . . . in order to increase the impact [of the German Wehrmacht]. What once went to the East never returned; it remained in the East.¹¹

Considerations Against an Eastern Campaign

Colonel Josef "Beppo" Schmid (GSC)[†] and many other Luftwaffe leaders voiced their immediate disapproval of a war against the Soviet Union. Until Hitler's decision was announced in January 1941, they had been firmly convinced that the Fuehrer would observe Germany's historic fears of a two-front war.¹² Von Waldau viewed this additional prospect of war as a dangerous and irresponsible dissipation of strength for the Luftwaffe, which then urgently required rest and rehabilitation following its commitment in Poland, Norway, the Lowlands, and France, and pointed out that victory in the Battle of Britain (then reaching its climax) would be forfeited by a voluntary abandonment of the attack through a transfer of flying units to the East.¹³ Such an event would be seen by the enemy as an absolute miracle, since it would permit British war plants to carry on without danger from German air attacks. Also the support of Germany's Italian ally had to be considered, which meant that the Wehrmacht might have to fight on a Mediterranean front, with a further dissipation of Luftwaffe power.

^{*}See Halder Diary, Vol. VI.

[†]Best known as a Luftwaffe intelligence officer. See Appendix II.

Field Marshal Milch considered the idea of a campaign against Russia to be a catastrophic mistake whereby the war would be lost altogether. He therefore urged Goering to try to prevent it at all costs and thus exert a historic influence upon the outcome of the war.¹⁴ The Reichsmarschall indeed attempted to dissuade Hitler from his plan by insisting that army material requirements would quickly take precedence over those of the Luftwaffe, thereby weakening German air power, and suggested "an attack through Spain upon Gibraltar," to which Hitler is said to have commented, "Goering, why don't you stop trying to persuade me to drop my plans for Russia? I've made up my mind!"¹⁵

The naval high command (OKM) strongly opposed a war against Russia. Raeder repeatedly drew Hitler's attention to the fact that England was the "principal enemy," whose Achilles' heel, her shipping, was being crippled and destroyed by the Axis, but that the campaign could be carried through to a successful conclusion only if U-boat construction could be stepped up. Therefore, naval leaders soundly rejected an immediate expansion of the war by an attack on the Soviet Union.

Hitler and the Wehrmacht leaders shared mutually pessimistic views of Russia's military and political intentions and believed that the Soviet Union would eventually cause trouble. Yet, despite these apprehensions, the military commanders believed that an immediate extension of the war, especially to the East, would overstrain the performance capability of German military power and its war economy. It was therefore the decision of Hitler, "as both statesman and general," that plunged the Wehrmacht, and thus the Luftwaffe, into its greatest and most formidable undertaking.

Directives and Orders for Operation BARBAROSSA

Fuehrer Directive No. 21 (OKW Directive No. 21), outlining the projected campaign against the Soviet Union, was the result of numerous studies,* map exercises, and Fuehrer Conferences. (FRITZ, the original code name for the operation, was personally rejected by Hitler

*The roles of Marcks and Paulus in planning BARBAROSSA are discussed in Tippleskirch, p. 199, and Walter Goerlitz, Der Zweite Weltkrieg (The Second World War), Vol. I, Stuttgart: Steingrueben Verlag, 1951, p. 215. See also Appendix I.

and replaced by the name BARBAROSSA, probably to stress the idea of a crusade against Bolshevism.)*

The first paragraph of Directive 21 stated that "Soviet Russia is to be crushed in a quick campaign before the end of the war with England." A short campaign against Russia was to be recognized as a necessity in the interest of the overall course of the war, based upon the optimistic belief that a "lightning campaign" was possible in the East as well as in the West.

Paragraph three outlined Luftwaffe strength as envisioned for the operation. Although the strongest possible forces were to be used for the campaign in the East, the directive required the retention of sufficient forces to defend German and allied territory, and to prosecute the war against England[†] and its shipping. In this paragraph the threatening dissipation of Luftwaffe forces can already be discerned. Section III B, "Luftwaffe," of the directive lists the tasks of the German Air Force: (1) to eliminate Soviet air forces, (2) to support German ground operations, (3) to interrupt Soviet communications, and (4) to provide paratroopers and airborne personnel if the occasion should require. ^{††}

Operations against the Soviet arms industry, especially in the Urals, were postponed until after the end of mobile ground operations, probably because any earlier attempt to carry out such missions would seriously overtax the Luftwaffe. Therefore, German air strikes were to be mainly tactical in nature, often in close support of ground forces, with the objectives of eliminating Russian air forces and disrupting Soviet communications. Because of this, Luftwaffe directives were

*See Halder's commentaries on 3-7, 12, and 24 December 1940, Halder Diary, Vol. V, Karlsruhe Document Collection. The name BARBAROSSA was taken from the name of Emperor Frederick Barbarossa (1152-1190) or "Red Beard" (a figure well known to every German school boy), who intended to restore the Roman Empire in the West, and had great success until his untimely death enroute to the Third Crusade. At that time he had already participated in one Crusade and was acclaimed as the recognized military leader of Christendom against the Infidel.

[†] Germans almost habitually use the term "England" in referring to Great Britain. Because of aircraft range limitations their air war against Britain was virtually against England alone, but in their references to English shipping and the war effort, Great Britain is clearly meant.

^{††} Paratroopers in the German Wehrmacht were under the command of the Luftwaffe.

subject to the orders and directives of the German Army High Command as shown by the Army deployment directive for BARBAROSSA, signed by von Brauchitsch on 31 January 1941. ¹⁶

Luftwaffe Directives

A copy of the Luftwaffe employment directive for BARBAROSSA has never been found, although it must have been closely identified with Directive No. 21 and the Army employment directive, and have contained the following:

(1) In conformity with the main points of effort of the Army, the Second Air Fleet, supporting Army Group Center, would be the strongest, and would include the II and VIII Air Corps and the I Antiaircraft Artillery Corps.

(2) In Army Group South the left wing (the stronger) was to be supported in the same way by the V Air Corps and the II Antiaircraft Artillery Corps under the command of the Fourth Air Fleet, while the numerically weaker IV Air Corps of the Fourth Air Fleet was to be committed to support the remainder of the front of Army Group South.

(3) In the northern battle area the First Air Fleet--with the I Air Corps and the forces of Luftwaffe Commander Baltic--would cooperate with Army Group North. In the High North, Luftwaffe operations were to be conducted with partial forces of the Fifth Air Fleet.

Significance of the Directives for the Luftwaffe

Although Luftwaffe Field Regulation 16, entitled "The Conduct of Aerial Warfare,"* entailed the idea of strategic air operations against Russia, such plans were to be postponed until the Army had reached the Volga-Arkhangelsk line. Since strategic operations were envisioned for a later date, however, plans had to be made accordingly. Strategic air warfare would oblige Luftwaffe commanders to break off their support operations early enough to make adequate preparations. If this was impossible, they would have to quickly form new, strategic air units in the rear areas. Sufficient radio, navigational, and other technical equipment, long-distance bombers (the "Ural bomber"), † long-range

*See Luftwaffe Service Manual No. 16 (L. Dv. 16), F/I/2a, Karlsruhe Document collection.

†See footnote, p. 43.

fighters for escort duty, and other logistical support would have to be granted for such a program without reservation.

Experiences in Poland and the West had taught Luftwaffe leaders to expect a decided personnel and material attrition during close support operations. The Luftwaffe therefore had to make continuous and vigorous efforts to replace its losses, to increase its close support units, and, insofar as was possible, to build up its reserves. To accomplish this, however, the German war industry would have to concede top materiel priorities to the air force, which was most unlikely in view of the heavy demands made upon the German Army.

A Luftwaffe View of Russian Military Geography

Area

At the end of 1940 the Soviet Union was the largest contiguous national land formation in the world, comprising the greater part of eastern Europe, northern Asia, and northwestern Central Asia, an area of 8,354,393.19 square miles (approximately one-seventh of the earth's surface).¹⁷ It was bounded on the north by the Arctic Ocean; on the west by the Baltic Sea, Norway, Finland, Poland, Germany, Hungary, and Rumania; and on the south by the Black Sea, Turkey, Iran, Afghanistan, India, and China.¹⁸

In the strictest sense of the word, Russia is understood to be that part of the Soviet Union which is bounded on the east by the Ural Mountains and the Ural River and on the south by Turkey, Iran, and the Black and Caspian Sea coasts, the Manych Valley, and the Caspian Sea, on the north by the White and Barents Seas and by Norway, and in the west by Finland, Poland, Germany, Hungary, and Rumania. The administrative division of the Soviet Union is not identical with this definition of territorial limits, but this area today still constitutes the political, cultural, and economic center of the Soviet Union. In geography and culture it is a transitional area between Europe and Asia.

Surface Configuration

The characteristically broad expanses of the Russian landscape appear almost monotonous in comparison with the lands of central and western Europe. Except for the peripheral areas of the Kola Peninsula (4,068 feet), the Yayla Mountains in the Crimea (5,059 feet), the Caucasus Mountains (Mt. Elbrus 18,472 feet), and the Ural Mountains (5,512 feet), the land seldom rises much above 1,312 feet above sea level.

Flat and far-reaching heights, or hilly terrain, rise about 650 feet above the extensive lowlands. These hilly areas can be seen in northwestern Karelia and the Kola Peninsula, to the east and south in the so-called Russian Highlands, the Valdai Hills, and the Timanskiy Range.*

Rivers, Lakes, and Marshes

Russia has some of the largest rivers in the world, the Volga, Dnepr, Don, Kama, and Severnaya Dvina, all well over 1,000 miles in length. Although Russian rivers are largely unregulated, most of them are connected with each other through a system of canals. In contrast to the rivers of central and western Europe, Russian rivers are characterized by weak, uniform descents (except for the Dnepr with its rapids) and by asymmetrical valleys, as seen in the Volga and Dnepr. The relatively higher elevations of western banks of Russian rivers, in contrast to their low-lying eastern banks, tend to favor forces attacking from west to east.

Most of the Russian rivers flow from north to south or from south to north; only one large river flows from east to west. This river, the Pripyat, which begins around the Mazurian Lakes region of East Prussia and northern and central Poland and meanders eastward to the Dnepr, forms a tortuous, almost insurmountable obstacle, with its immense branching of tributaries and interspersed marshy areas. It thus acts as an effective geographical divide, separating the land into a northern and a southern theater for operations, which accounts for the great gap between the combat zones of Army Group Center and the Second Air Fleet and that of Army Group South and the Fourth Air Fleet.† Such meandering streams as the Pripyat were admirably suited for Soviet defensive purposes.

Marshy areas and deltas of rivers in Russia were difficult to traverse in the summer except by boats, and were almost intolerable for man or beast because of the enormous swarms of mosquitoes and other insects. In the winter they were likewise hard to cross, even when the surfaces were frozen over. Unfortunately for the Germans, northern and central Russia abounded in such regions.

*Valdai Hills are 1,056 feet above sea level, and the Timanskiy are 850 feet.

†See Maps Nos. 1 and 3. See also Chart No. 2.

Russia was filled with large lakes, one of which, Lake Ladoga, was virtually an inland sea and by far the largest lake on the European continent.

Surface Vegetation and Its Use

The extreme North, the Murmansk coast, and the Arctic islands consist of tundra covered by lichens and moss and sometimes by dwarf-like shrubbery and bushes. South of this tundra belt lies the great forest zone, which is divided into two very different areas, the southern part which has significant cleared areas and the larger northern zone, in which tracts lying far from the rivers are still covered by vast, untouched forests in their primeval state.

In World War II these great forested areas of the East limited military operations severely and offered constant protection for Soviet defenders. They had to be laboriously combed through by the Infantry, since to by-pass them would be to risk leaving them as concentration centers for large military and partisan forces. Undeniably, such areas tied down strong forces which could well have been used elsewhere.

To the south, the area of the steppe forest--very small and largely deforested by man--gives way to the grassy steppes which sometimes assume a prairie-like appearance.

Mineral Deposits

The Soviet Union enjoys a virtual self-sufficiency in raw materials, with the exception of rubber (generally imported from the East Indies), and is especially rich in chemicals, iron, and non-ferrous metals. Nickel is found in the Kola Peninsula and in the central and southern Urals, iron and manganese in the Krivoy Rog and Nikopol areas, some low-grade iron and coal south of Mosco^w (around Tula), coal in the Donets Basin, oil in the northern Caucasus, and salt and coal in the Urals.*

Climate

A nation's climate determines its soil characteristics, ground vegetation, and the life of its people. In Russia, an armed force invading from the west encounters climatic conditions which are entirely different from those found in western or in central Europe.

*See Map No. 2.

By virtue of its tremendous north-south territorial expanse (some 2,485 miles), Russia has a share in four climatic zones:

(1) The arctic climate, found in the coastal area of the White Sea, featuring low temperatures, frozen ground, tundra, and low precipitation but relatively high atmospheric humidity.

(2) The Mediterranean climate, found only along the southern coast of the Crimean Peninsula and the northeastern shore of the Black Sea, with high temperatures, pronounced summer droughts, and winter rains.

(3) The North Temperate Zone comprising the mass of central and northern territory lying between these extremes.

(4) The subtropical dry climate, found in the southeast, in the Caspian lowlands, and in the western Caucasus, a barren and continental region.

Unlike most countries, temperatures in the Soviet Union in the winter diminish most markedly as one moves toward the East. In the summer, Russian temperatures increase noticeably in the direction of the Southeast.

Winter in the Soviet Union sets in solidly during November and December and, except in the South, is very cold (minus 31° to minus 49° Fahrenheit). The barometric axis of Europe is such that Russia experiences very long and deep snow cover and ice formations in the northern and central regions, combined with severe storms and with long-lasting ice cover on the rivers. Heaviest snows come in February and March.

Population

In October of 1940, Russia had a population of 193,200,000 persons, and a population density of 23 persons per square mile, most of which was located between the western boundary of Russia and the Volga River, especially in the Ukraine.

Since World War I this population had become increasingly urban in character, eight cities having populations of more than 400,000, while two of them, Leningrad and Moscow, had more than 3,000,000 inhabitants. An annual average population increase of about 3,000,000 persons gave

the Soviet Union a strong human base from which to carry out military operations.

The Economy

Deeply mistrustful of the West, the Soviet Union set out after World War I to achieve economic and industrial independence. In order to do this and to conceal their progress from the outside they isolated themselves. Without question they made enormous progress between the wars in industrializing their nation, especially in steel and armament plants. Powerful hydroelectric stations also permitted them to decentralize their industries considerably. Although a strip of land 62 miles wide along the western frontier was almost devoid of large installations, masses of heavy industry were located in the eastern Ukraine, at Moscow, along the Volga, in the Ural and Altai Mountains, near Lake Baykal, and east of the lake. This corresponded very roughly with the locations of densest population.

Soviet Russia has vast agricultural resources. Although there are no cereal crops whatever in the Far North region, to the south of it lies the arctic barley zone, and still farther to the south the so-called oats zone, with oats, rye, flax, buckwheat, and hemp. In the steppes large amounts of wheat and sugar beets are grown. In the far South, along the Crimea and the northern Caucasus, is found the subtropical barley zone. But, best known of all is the rich, and most important crop producing area, the black soil belt (chernozem) of the Ukraine and the central Volga. The hurried collectivization and mechanization of agriculture in Russia after 1 October 1928 cost a large part of the livestock* and reduced the yields, but possibly increased the acreages under cultivation. Most Russian farmers were deeply dissatisfied with their national economy as it was in 1941.

Soviet Routes of Communication

Soviet communication networks were extremely thin compared with networks in western Europe. Only three percent of Russian roads had any type of stone surfacing and most of the roads were absolutely

*Not to mention the eradication between 1928 and 1931 of thousands of well-to-do farmers (Kulaks) who were in disagreement with the policy of surrendering the fruits of their labor to the government, and who had therefore refused to collectivize.

FRIDAY • AUG. 30, 1996

MAXWELL-GUNTER DISPATCH 11

Historical Research Agency prepares to make "Hap" Arnold's papers available

The papers of Henry Harley Arnold (1886-1950), pioneer aviator and Commanding General of the United States Army Air Forces, were given to the Library of Congress by his wife in 1951. A major addition was received from the Office of the Chief of Staff, United States Air Force, in 1957. Custody of the collection was transferred to the Library's Manuscript Division in 1960.

In 1994, the Library of Congress and the Air Force Historical Research Agency, Maxwell Air Force Base Ala., completed an agreement for microfilming the Arnold collection and furnishing the microfilm to AFHRA. During the summer of 1994, members of AFHRA worked at the Library of Congress to arrange the collection and prepare it for microfilm. The microfilm edition was made available to AFHRA in 1995.

The AFHRA indexing staff is currently preparing a document to roll index the Arnold papers in order to make them available to the public.

The papers span the years 1903 to 1963. Most of the papers concentrate on the World War II era and the period immediately following the war. The collection contains material on almost all aspects of Arnold's adult life.

The most comprehensive documentation covers Arnold's tenure as Chief of the United States Army Air Corps (1938-1942), Chief of the AAF (1941-1942), and as Commanding General of the AAF (1942-1946). The collection is divided into series and subseries.

The *family papers series* consists of correspondence

between Arnold and his family. The *journals and notebook series* includes journals from Arnold's early flying days and notebooks kept by Arnold when he attended several of the major wartime conferences of the allied leadership.

Arnold's correspondence is divided into several subseries and consists of military correspondence, reports, and memoranda. It includes correspondence between Arnold and Orville and Wilbur Wright as well as reports by American military observers in Europe about the evolution of German, French and British aircraft. Congratulatory and condolence letters are arranged in chronological order for major events in Arnold's life.

General correspondence includes documents of a military or semi-official nature and a serial file numbered from 1 through 714 dealing with Arnold's professional and personal activities after his retirement.

Military documents, messages, correspondence, memoranda, and reports filed in accordance with a decimal filing system used by the Army during World War II make up the *decimal file*. It includes material documenting the roles of African-American aviators during World War II and mentions the role of Maxwell Field Ala. as home of Air Corps Tactical School and Headquarters, AAF Eastern Flying Training Command.

Incoming and outgoing official cables and other messages between Arnold's headquarters and other offices are filed in the *message subseries*.

It also contains a chronological file of Arnold's incom-

ing and outgoing messages filed under his name.

The *official file subseries* includes military reports, memoranda, correspondence, and other documents designated by numbered files. It contains a variety of reports, logs, and extensive documentation from the investigation of the Pearl Harbor attack and the role of the AAF before and after the attack.

Official military reports related to air warfare topics are contained in the *reports subseries*. General reports concern the overall status of American military air power. Specialized reports relate to topics such as atomic energy, American air warfare campaigns during World War II, and estimates of German war potential.

The *subject file* deals with official, professional and private matters such as military aircraft production, Argentine Conference of allied leaders in Newfoundland, and important military affairs during World War II.

Among the *miscellaneous series* are photographs, financial papers, biographical material, printed material, and other items that further reflect Arnold's historical sensitivity. Much more, including speeches, writing, post retirement correspondence, and more AAF documents are included.

This valuable collection, on microfilm, gives the AFHRA a most complete documentation of World War II aviation and considerable insight into the life of the Air Force's only five-star general.

(Courtesy of the Air Force Historical Research Agency)

Youth centers host open house

BY RUSS LOCKHART
42ND SERVICES SQUADRON

Base parents and their children got a chance to see Maxwell-Gunter Youth Activities firsthand and visit with staff and instructors during the youth centers annual open houses. More than 450 people attended the open houses held Aug. 15 at Maxwell and Aug. 22 at Gunter, according to youth activities officials.

"It was a success," said Robert Richert, Maxwell Youth Activities director, of the open house. "It was nice to welcome all the new families to the youth center. We saw some old faces and were glad to see them back for another year."

Marty Fisher, Gunter Youth Activities director, said her open house was "certainly a success, we had a lot of sign-ups for our sports and classes. We got everyone in the class they wanted."

During both open houses, families met youth activities staff and class instructors and received welcome program information from the Family Support Center. Also on hand were representatives from community activities like Cub Scouts, Boy Scouts, Brownies and Girl Scouts. Woody Johnston, city of Montgomery Highway Safety coordinator, attended the Maxwell open house to discuss bicycle rules of the road, helmet usage on base and other safety issues.

Parents were also able to register their children for fall sports, instructional classes and before and after school programs at both centers. For those unable to attend an

Sports offered include soccer at Maxwell and Gunter, fall baseball at Maxwell, and bowling, football and cheerleading at Gunter. At Maxwell, people registering for soccer are being placed on a waiting list. "We have the biggest enrollment in soccer ever, more than 170 youth have signed up," said Richert. "The baseball program is slowly growing. So far, 20 youth have registered. That's good for an instructional program, because the main thrust of it is for the kids to get better, which will enable them to participate more in the spring. So, we're planning to go ahead with the program."

Fletcher Jones, Gunter youth sports director, said, "Registration indicates we'll have more soccer teams than last year. But we still have room for more youth to register. Our football program, as usual, is strong; the Termites are full, while the Crickets and Pee Wees have a few slots left." Registration for soccer, football and cheerleading ended last week. Those registering after the deadline will be placed on a waiting list.

Instructional classes are a favorite of base youth. "A number of spots are still open in most of our classes," explained Richert. Classes include dance, piano, tumbling, karate, computer and dog obedience. Ages 3 and older can take dance instruction in tap, ballet, jazz and tumbling. Class meets Mondays and Thursdays. Times are determined by age and skill level. Ages 6 and older can take beginning and intermediate piano classes. Instructors and each student will work out class day and time. Parent-ot gymnastics class for ages 18 months to 3 years old is an introductory class using mats and beam. The youth and

er classes for ages 6 and older meet Tuesdays, Wednesdays and Thursdays. A dog obedience class is available when a minimum of 10 students is enrolled.

Gunter offers dance, piano, gymnastics and karate classes. Ages 3 and older can take dance instruction in ballet, jazz and gymnastics. Class days and time will be determined as interest warrants. Ages 6 and older can take beginning and intermediate piano classes. Instructors and each student will work out class day and time. Gymnastics instruction in basic tumbling, balance beam, vaulting horse and single bar exercise for ages 3 and older meets Mondays, Wednesdays and Saturdays. The youth and adult Hapkido karate class for ages 6 and older meets at 5:30 p.m. Tuesdays and Thursdays.

All classes begin the week of Labor Day. Fees must be paid monthly in advance. Karate uniform, recital outfit and piano books are required.

A fast-growing program at both centers is the before and after school program. "We're still taking applications for our before and after school program," said Donita Schnupp, Maxwell Before and After School Program coordinator. "We have 15 slots remaining of our 60 allocated spaces and I expect them to be filled within the week."

Fisher said more than 10 slots out of the 36 available spaces are still open in the Gunter Before and After School Program.

Maxwell Before and After School Program is open to Maxwell Elementary School students and to children who attend elementary schools off-base, while Gunter is for Morningview Elementary and other local elementary

unimproved. Her railroad network was somewhat better, but throughout the entire Soviet Union only 52,000 miles of railroad tracks had been laid by 1941. Yet this was sufficient to make it Russia's most reliable means of transportation. Because of this fact, interdiction of Soviet rail lines was one of the prime objectives of the German Luftwaffe.

Upon the seas the Soviet merchant marine linked Russia with the outside world as well as with other parts of the Soviet Union. In 1938, the Russian merchant service carried 800,000 tons of shipping. Ninety percent of her entire foreign trade moved through Murmansk, Leningrad, the Black Sea ports, and Vladivostok. Although Russia had a rapidly developing air transportation system, it was inconsequential compared to the merchant marine.

The Soviet Form of Government

The Soviet federation included 16 soviet socialist republics: the Russian, Ukrainian, White Russian, Uzbek, Turkmen, Tadzhik, Kazakh, Kirgiz, Georgian, Azerbaijanian, Armenian, Moldavian, Estonian, Latvian, Lithuanian, and the Karelo-Finnish.* The greater part of the land and population of the Soviet Union are included within the Russian Republic.

The Ukraine probably represented the strongest mainspring for national independence movements, although it was, of course, economically, politically, and militarily closely bound to the rest of the Soviet Union. Autonomy of the republics was (and is) largely theoretical, since autonomy remained essentially limited to certain aspects of cultural life. The Soviet federation knew no national state. The support of the state was the proletariat, for whom the Soviet Union was supposed to be the great "fatherland of all working peoples."

*Only seven soviet socialist republics are listed by the author: the first six and the Transcaucasian Soviet F. S. Republic (by 1941 no longer a political entity). Of the above-listed republics, all but the Karelo-Finnish Republic are still republics of the U. S. S. R. (Karelo-Finnish Republic is now "autonomous.") The Moldavian S. S. R. was forcibly brought under Soviet control on 28 June 1940 when it was wrested from Rumania. Estonia, Latvia, and Lithuania were seized by Soviet troops 15-17 June 1940.

Conclusions for the Luftwaffe

The Luftwaffe's combat zone was to be roughly within the area bounded south to north by the mouth of the Danube River, Rostov-on-the-Don, Moscow, Tallinn (Reval), Memel (Klaipeda), and Leningrad, a territory of 579,150 square miles. It remained to be seen whether Luftwaffe logistics, aircraft, and planning would be equal to such a vast aerial undertaking.

The Wehrmacht, starting from a 995-mile-wide front, extending from the Danube estuary to Memel, had to advance against a front more than 1,240 miles wide, stretching from Rostov to Leningrad, and also had to open an additional front north of Leningrad, extending more than 620 miles from Lake Ladoga westward along the White Sea to the Barents Sea near Murmansk, and east of Petsamo (Pechenga)* to Norway. In terms of space alone the task was formidable.

The Collection of Intelligence Data

One of Germany's most difficult jobs was to secure intelligence information regarding the Soviet Union. Matters were complicated considerably by Russia's self-imposed isolation from the world. During the German-Polish and Russo-Polish war of 1939, little information was collected. Even the German air attachés on duty in Russia were unable to uncover anything of real value. Collecting intelligence material was made even more difficult after the signing of the Russo-German "Friendship Pact" of 23 August 1939, when the High Command of the Wehrmacht, as a matter of principle, forbade its agencies to assemble data on their "new ally." Soviet officers serving in Germany gave no assistance whatever, since they remained immutably silent.

Large numbers of reports came into German possession during the Russo-Finnish War of 1939-40. Viewed in retrospect, however, these reports served mainly to mislead German commanders, who overlooked the fact that the limited objectives of that war necessitated only the commitment of Soviet troops from the Military District of Leningrad.

After 1940 the German air attachés in Moscow, Tokyo, Ankara, Stockholm, Helsinki, and Washington were given the special assignments

*A valuable Finnish nickel mining center seized by the Soviet Union in 1939 and renamed Pechenga.

of ferreting out information regarding the Soviet Union, its military, political, and industrial progress and strength. Radio monitoring units were also established and enlarged in Bulgaria, Rumania, Hungary, the Protectorate (of Bohemia and Moravia), Poland, East Prussia, and Finland. Some of the most reliable information was compiled by these stations. In March of 1941 German agencies were burdened down with the additional task of collecting data for the campaign in the Balkans (Yugoslavia, Greece, and Crete). Photo-reconnaissance units working out of Werder* on the Havel River, and later out of Fritzlar† carried out successful photographic missions after October of 1940. Later a number of such organizations collected information on Russian industrial installations, troop and air stations, border fortifications, and supply depots, especially in European Russia, the Baltic States, and the Finnish-Karelian area. In the course of these operations only one plane was lost, a Ju-86, and this was due to bad weather. The crew was captured by the Russians near Vinnitsa and freed a few weeks later by advancing German troops.

In April of 1941 the Russians suddenly announced that a German group would be permitted to visit a number of aircraft and other defense plants in the Soviet Union. The visiting group of specialists, headed by Col. Heinrich Aschenbrenner, Air Attaché in Moscow, soon discovered that the myth of Soviet deficiencies in the area of workmanship was completely false. They also found out that Soviet industry had achieved a great degree of independence. Even in individual plants considerable self-sufficiency had been effected, and installations were widely dispersed.‡ The German contingent was probably invited specifically to receive a warning from the Soviet Union, a message which, according to Colonel Aschenbrenner, was unmistakable in intent:

*Werder is located about seven miles southwest of Potsdam in Brandenburg.

†A small community in Upper Hesse, about fifteen miles southwest of Kassel, principally known in Germany as one of St. Boniface's most important missionary sites.

‡Slow workers in Soviet factories were encouraged to increase their production by a clever system of piecework known as Stakhanov, derived from the name of a Russian miner who responded to Stalin's 1935 speech by exceeding his required tonnage quota of coal. This led to a "Stakhanov year" in 1936 and the founding of "Stakhanov clubs" by obedient workers who had exceeded their work quotas.

After the inspection of [Fighter] Aircraft Factory No. 1 at Moscow's Central Airport, an unequivocal warning was imparted to us by none other than the brother of the People's Commissar for Economics, Mikoyan,* who was busy as chief engineer in Factory No. 1, and after whom the famed Russian MIG fighters are named. There is not the slightest doubt that this occurred at the order of the highest [Soviet] authority. Mikoyan explained to me literally: "We have now shown you everything that we have and what we can do; and whoever attacks us, we destroy!" I passed this statement on, word for word, with corresponding commentaries to all duty stations concerned, without, however, so much as finding the slightest response.

Hitler reacted to the report of the armament commission with the following words: "Well, there you see how far these people are already. We must begin immediately." That our report would have a reaction of that kind, we had of course not expected, let alone wanted.¹⁹

German intelligence reports indicated that in general the Russian air forces, despite their numerical strength, were inferior to the Luftwaffe. The bulk of Soviet air units were in European Russia, except for heavy bomber units, and most of these were stationed at fields (many of them new) in the Baltic States and in what was formerly eastern Poland, with principal areas of deployment around Kovel, Lvov, Dubno, Sarny, Grodno, Bialystok, Kobrin, Slonim, Kaunas, Wilno, Daugavpils, and Siauliai. These airfields were designated in the following manner: (1) main airfields, which corresponded somewhat to German peacetime air bases, with permanently constructed facilities available, situated near large cities, with very large-- 1 1/4 miles square and larger--landing fields; (2) secondary air bases, conforming roughly to German home airfields, but without permanent installations or rail connections; and (3) advance airfields, situated close to the front, which were usable only as the weather permitted. Clusters of secondary and advance airfields were generally controlled by, and from time to time logistically supported by, a main airfield.

*Artem Ivanovich Mikoyan, aircraft designer and brother of Anastas Ivanovich Mikoyan, then People's Commissar for Economics, now Deputy Premier of the U. S. S. R.

The greater part of the Russian combat aircraft were obsolete before BARBAROSSA began, but a conversion of all combat units to modern planes was already in progress. This was especially advanced within the fighter units, which had been hitherto chiefly equipped with the I-15 (Chato), the I-16 (Rata), and the I-153 (Chaika) aircraft,* and which were now being supplied with the latest MIG and LAGG† models. By the summer of 1941 about 200 to 300 I-18 fighters,†† with alleged speeds of 372 miles per hour, were to be delivered to Soviet units. Russian fighters produced after the I-16 and I-153 were generally armed with four fixed machine guns, mounted in the fuselage, and two 20 mm. wing cannon (at that time they had no cannon which could be fired through the propeller spinner).

Bomber units in the Soviet Union were usually equipped with SB-3 and DB-3 aircraft.** Since the Russians intended as a primary objective to complete the conversion of all older organizations (especially those equipped with SB-2's) to these aircraft types, German commanders expected no substantial numerical increase in Russian bombers. In conformity to Russian standards, the conversion was quite slow.‡0

According to intelligence estimates the Soviet Union had 7 air divisions, with a total of 7,300 aircraft, in European Russia. These were found mainly in the Military Districts of Kiev, the West, and

*All radial-engine, single-seat fighters which flew in the Spanish Civil War. The I-15 biplane and the I-16 low-wing monoplane were 1932 Polikarpov designs, while the I-153 was a more powerful 1938 version of the I-15 having retractable landing gear. Their top speeds ranged from 224 m. p. h. in the I-15 to 300 m. p. h. in the I-16. Spanish Loyalist pilots named the I-15 Chato (the Flat-nosed One), the I-153 Chaika (the Gull), and the I-16 Mosca (the Fly). The latter plane was more widely known, however, by the name Rata (the Rat), which was given to it by Spanish Nationalist and German Legion Condor pilots. All of these planes were of mixed construction style and no match for the modern German fighters.

†The LAGG-3 fighter was a single-engine, single-place monoplane designed by S. A. Lavochkin, V. Gorbunov, and M. Gudkov.

††Also known as the MIG-1 and I-61. Used in 1941, but soon replaced by MIG-3's.

**SB-3's were fast, twin-engine, three-place, midwing monoplane bombers (an improved version of the SB-2); the DB-3's were long-range, twin-engine, three-place monoplane bombers.

Leningrad, which had 1,300, 1,650, and 1,400 planes respectively.* German military leaders assumed that an additional 3 air divisions, of 2,000 planes, were stationed in Asia. Because of Germany's tie with Japan, however, they did not believe Russia would dare transfer units from that region to Europe.

Intelligence agencies could piece together only rough approximations of Soviet anti-aircraft strength. They deduced that by June 1941 the Russians had 300 heavy anti-aircraft batteries (1,200 guns), 300 light batteries (1,200 guns), about 150 anti-aircraft machine gun units (900 machine guns), and about 100 searchlight units with corresponding listening equipment. Very heavy concentrations of anti-aircraft artillery were located at Odessa, Moscow, and Leningrad.²¹

Even according to the most pessimistic reports, German leaders believed that the Luftwaffe would be absolutely supreme in quality and numbers over all battlefields in European Russia. Furthermore, the Soviet Union's abandonment of strategic air concepts in favor of close support operations, and the obsolescence of Russian bombers, indicated that Germany would be relatively safe from Soviet air attacks, while Russia would be vulnerable to the Luftwaffe.

The Soviet war economy, despite its favorable location, was not expected to be capable of fulfilling the requirements of the nation's armed forces in case of an all-out war.

German Preparations and Security

Under the provisions of Directive No. 21⁴ preparations for Operation BARBAROSSA proceeded under maximum security. Planning

*2,000 of these planes were fighters, only about 300 of which were modern MIG types. It should be mentioned that the Russians had at least 10,000 training and practice aircraft which were put to good use as liaison and courier planes. See photographs Generalleutnant a. D. Walter Schwabedissen, The Russian Air Force in the Eyes of German Commanders, USAF Historical Studies No. 175, Maxwell AFB: Historical Division, ASI, June 1960.

⁴Section IV, which was used with Security Order (Fuehrer Order) No. 1, date unknown, prescribed in detail the conditions under which one might secure access to any secret information. See Field Marshal Keitel's Document Book No. 1 (extract), G/a, Karlsruhe Document Collection. See also Appendix I.

staffs were intentionally kept as small as possible, and only those officers who had been sworn to secrecy and had a "need to know" were brought into the discussions and groundwork. Operations against England were, at all costs, to retain the appearance of normalcy in order not to betray the air concentration in the East.

So rigid were the security regulations surrounding the operation that neighboring staff organizations often did not know what the other group was doing. In southern Poland, the Chief of Staff of the V Air Corps (leader of Planning Staff "P" preparing for BARBAROSSA) kept running into the Chief of Staff of the First Panzer Group, a personal acquaintance of long standing. They even lived in the same hotel. For reasons of security, however, both officers, when conversing, made use of various "white lies" to explain their presence in southern Poland. Fourteen days later before the opening of the campaign, they learned, much to their surprise, that they, as chiefs of staff, were under orders to collaborate particularly closely with each other.

Officers to be concerned with the planning of the campaign against the Soviet Union were informed that the decision for war had been made because of Russia's implacable political demands, all of which were unacceptable to Germany, and because of the dangerous buildup of Russian forces along the western frontiers of the Soviet Union.

In early January 1941, a conference was held by Generaloberst Halder and attended by a number of senior commanders and staff officers, including Generalleutnant Hans-Georg von Seidel, Quartermaster General of the Luftwaffe. Plans were then laid for the organization of Luftwaffe ground units and auxiliary units for the renovation of existing airfields, for the establishment of technical and special installations, for the construction of new fields, and for the stocking of supply bases and fields.

One of the principal tasks of operational planning staffs was the transfer of units from their bases in other theaters to the eastern staging area. Luftwaffe units in the West were then secretly directed to diminish the scale of their operations against Britain. This had to be done with extreme care to avoid betraying their intentions, especially in "spy-laden" Brussels and Paris, where every movement was likely to be reported to the enemy. Because of the reduced air activity over Britain and the necessity to build up reserves for the East, only the most promising and least hazardous objectives were assigned to the remaining western units. Special care was taken to avoid losing new aircrews by assigning them routine type missions until they had gained combat experience. Although

by the end of May only a few German units were still flying against Britain, chiefly those not intended for early action against Russia, the transfer of German air units and the significance thereof went largely unnoticed by the British. As early summer approached, the battle over England was broken off.

Cooperation with the various German Army Groups was the immediate objective of planning staffs, so that the fighting power of the Soviet Union could be quickly destroyed and the country occupied by the Wehrmacht. Only about three months remained, however, until the attack deadline, a very brief period indeed. All Luftwaffe units involved were therefore not able to complete their plans in good time, and the Fourth Air Fleet, for example, was preoccupied with German operations in the Balkans and in Crete until 17 June, a scant four days before the beginning of BARBAROSSA.

German Airfield Construction

Airfields in eastern Germany, Poland, the Protectorate (of Bohemia and Moravia), and allied territories were improved and expanded, particularly those designated for early combat operations in BARBAROSSA. The Reichs Labor Service (Reichsarbeitsdienst or RAD) units were especially capable in accomplishing these tasks.

Airfields were particularly poor in southern Poland, and great efforts were required to bring them up to standard in time for the opening of the campaign. Foreign labor was used at many of these fields, but the Poles proved to be far less productive and technically capable than German workers,* and were always security hazards.

Lines of Communication

Adequate communication lines were virtually nonexistent in the parts of Poland seized by Germany in 1939, and even in that part of Poland which had been part of Germany prior to the Treaty of Versailles.

*Poles residing in areas which had belonged to Germany before 1919 often looked down upon those living in "old Poland," who had a much lower standard of living. Because of the general backwardness of Poland, Hitler, and indeed many other Germans, were fond of using the term "Polish" as a synonym for anything that was crude or primitive in character.

Since 1919 East Prussia had been connected with Germany only by the submarine cable which extended from Leba (Pomerania), and by two telephone lines along the railroad route.

Auxiliary and main trunk telephone lines were established by special advance teams from each air force and air fleet. Technical signal equipment for the various air corps was completely replenished through the generous assistance of General der Nachrichtentruppe Wolfgang Martini, Chief of the Luftwaffe Signal Communications.

Preparations by Headquarters of Air Administrative Commands

Air Administrative Commands (Luftgaukommandos) were thoroughly organized for the Russian war, and furnished administrative, logistical, and operational support for specific air corps selected for roles in the campaign. These Air Administrative Commands were often staffed by willing, but inadequately trained E-officers (Ergaenzungsoffiziere),* who had, as a rule, only a brief tactical and technical preparation for such positions. The more important of these posts were eventually filled by active regular Luftwaffe officers.

The mission of an Air Administrative Command was to improve the existing facilities in German and allied countries, to seize Polish airfields and supply installations, and to bring them up to standard and integrate them with the German Luftwaffe network. Progress was greatly facilitated by the action of Luftwaffe generals such as Field Marshal Kesselring, who intervened directly in the preparations when necessary in order to eliminate "red tape" and to hasten the completion of the work. In the course of the Russian campaign at least 105 airfields were built by the II Air Administrative Command alone.

*Former German Army officers with World War I service (usually lieutenants), who were given temporary commissions (generally as captains) in the new Wehrmacht to fill special new position vacancies. With no predecessors, they had to master all assignments on their own. Few qualified physically or otherwise for combat company or battery assignments. Their commissions had little to do with their former training, or whether they had ever, in fact, served in an air unit. They were paid in the grade of entry, and received no pensions. Moreover, they had a distinguishing mark on their uniforms to set them apart from other officers. Very willing to serve, their tasks were thankless at best, and many of these officers were unequal to them. See D/III, Karlsruhe Document Collection.

Air Administrative Commands for Special Duty

Luftwaffe Administrative Command staffs proved themselves in the West, against France, despite many initial defects. As "extended arms" of Luftwaffe Administrative Commands they were to maintain and supply Luftwaffe units, equip the Luftwaffe ground organization, provide for initial repair of captured airfields, and support air units in reconnoitering new airfields. Although these positions required the highest officer personnel qualifications, one often had the impression that regular stations, obliged to furnish officers for these special staffs, used this opportunity--in a complete lack of appreciation for the importance of the mission--to "get rid of" their undesirable officers. All of the map exercises and conferences could not compensate for basic human deficiencies and a lack of experience in supply operations.

Every Air Administrative Command Staff for Special Duty was ordered to cooperate with an air corps.* With their command posts situated closely to those of the air corps which they supported, an excellent working relationship usually resulted. Materially the problems for such special duty staffs were much greater. Motor vehicles, most of which were unsuited for Russian campaign requirements and were in poor mechanical condition, had to be hastily reconditioned. Great efforts were therefore made to utilize all available workshops prior to the attack to correct these problems.

Luftwaffe Personnel

The campaign in the Balkans and Greece had caused rather heavy personnel and materiel losses for Luftwaffe units, especially the VIII Air Corps. Among the bulk of the aircrew losses were many experienced combat veterans, men who could not easily be replaced. The replacement of aircrews for BARBAROSSA was numerically guaranteed, to be sure, but these positions could only be filled by new aircrews, lacking experience in both combat and formation flying. Their enthusiasm would naturally go a long way toward the creation of a solid striking force, but without adequate experience, considerable losses had to be expected.

Objectives in Russia

Operations in Russia were to take place within three large combat zones and an additional smaller zone. The northern and southern wings

*See Chart No. 2.

of the Wehrmacht were to capture the objectives of Leningrad in the North and the Ukraine in the South. Meanwhile the forces of Army Group Center were to hold the middle of the line intact. Moscow was at first only a remote objective, far less important than Leningrad, the birthplace of active Communism. If the Russians could be forced to withdraw to the East, relinquishing the industrial complexes along the Don and Volga Rivers, the German armed forces could press home their advantage.*

Germany's political leaders could not overlook the important economic goods offered in the southern war area and the psychological victory which would result from the destruction of Leningrad. The major question in the campaign, however, devolved upon the point of whether the German commanders, in their zeal to capture this region, would fully understand the separation of the significant from the even more significant.

*See Maps Nos. 1, 2, and 3.



Figure 1
Generaloberst Hans-Juergen Stumpff
Commander-in-Chief Fifth Air Fleet



Figure 2
Generaloberst Alfred Keller
Commander-in-Chief First Air Fleet



Figure 3
Field Marshal Albert Kesselring
Commander-in-Chief Second Air Fleet



Figure 4
Generaloberst Alexander Loehr
Commander-in-Chief Fourth Air Fleet

Chapter 2

DEPLOYMENT OF GERMAN AND SOVIET AIR FORCES, JUNE 1941

Deployment of the Luftwaffe in the East

The mission of the Luftwaffe in the eastern theater was to destroy Soviet air forces on the ground and in the air and to give direct and indirect support to the German ground forces. Deployment of the Luftwaffe was closely adapted to the deployment of the German Army, in accordance with the Army's strategic objectives.

The field army of the Wehrmacht was divided into several major parts: Army Group South, Army Group Center, Army Group North, and Army Command Far North, to each of which an air fleet, or a portion thereof, was attached.*

Within the assembly area of Army Group South (Field Marshal Gerd von Rundstedt) was the Fourth Air Fleet under Generaloberst Alexander Loehr (with headquarters just north of Rzeszów). The right wing of the Fourth Air Fleet, consisting of the IV Air Corps (General der Flieger Kurt Pflugbeil), was deployed in eastern Rumania with its command post at Iași. The left wing, comprising the V Air Corps (General der Flieger Robert Ritter von Greim), lay in the area of Lublin-Zamość in southern Poland, with its command post at Lipsko, just south of Zamość. Also concentrated in southern Poland was the II Antiaircraft Artillery Corps of General der Flieger Otto Desselloch.

The Second Air Fleet (Field Marshal Kesselring), with its headquarters at the sport school at Warsaw/Bielany,[†] was situated within the deployment area of Army Group Center (Field Marshal Fedor von Bock). Its right wing, the II Air Corps, under the command of General der Flieger Bruno Loerzer, deployed in the Brest-Deblin area to the east of Warsaw, operated from a command post located at the casino of Otwock,

*See Map No. 3 and Chart No. 2.

†A small community on the west bank of the Vistula River, north-northwest and slightly over four miles from the center of Warsaw.

about 25 miles southeast of Warsaw. The left wing, the VIII Air Corps (General der Flieger Wolfram Freiherr von Richthofen) was placed in the region of the Suwalki Point, with its command post located on the north shore of Lake Wigry, east of Suwalki.* The final unit, but by no means the least important, of the Second Air Fleet was the I Antiaircraft Artillery Corps (FlaKkorps) under the command of Generalmajor Walter von Axthelm. It was assembled in the area southeast of Warsaw, with its command post at Bohukaly, about 9 miles northeast of Brest-Litovsk.

Within the assembly area of Army Group North (Field Marshal Wilhelm Ritter von Leeb) was the First Air Fleet, commanded by Generaloberst Alfred Keller, which operated out of its headquarters at Insterburg (now Chernyakhovsk), East Prussia. The First Air Fleet was comprised of the I Air Corps (General der Flieger Helmuth Foerster), stationed in eastern East Prussia, with headquarters at the grammar school at Gumbinnen (now Gusev), and the Luftwaffe Commander Baltic (Colonel Wolfgang von Wild), with headquarters at Metgethen, Samland district, East Prussia.†

In the Far North the post of Luftwaffe Commander Kirkenes was established to support operations in that area. Its headquarters was situated at the airfield at Kirkenes and was originally a detached unit (under the command of Colonel Andreas Nielsen, GSC), although it was later a part of the Fifth Air Fleet (Generaloberst Hans-Juergen Stumpff), which had its headquarters at Oslo.††

*Sometimes called the Suwalki Tip. This area was located just east of and immediately adjacent to the southeastern corner of the former German province of East Prussia. Most of this area is now encompassed by the boundaries of the Polish state.

†The German Province of East Prussia was captured by the Soviet forces in 1944 and 1945. Since then it has been divided between the Polish and Russian states in accordance with the de facto situation and the agreements of Yalta and Potsdam. The northern half has been incorporated into the Soviet Union as a part of the Russian Soviet Socialist Republic, while the southern half has been incorporated into Poland. Place names and economic relationships have therefore been altered completely by this change.

††See Figures 1-4.

Luftwaffe Assignments

The initial deployment area of the Luftwaffe in the East extended behind a German and allied army front approximately 995 miles wide, and faced an enemy front 1,490 miles in width, extending from Sevastopol to Lake Ladoga, Leningrad, and Kronshtadt by way of Rostov-on-the-Don and Moscow. The Karelian front formed an additional combat zone for the Luftwaffe to a depth of 215 miles (the entire Finno-German front extending about 620 miles).

Fourth Air Fleet*

The Fourth Air Fleet, in cooperation with Army Group South, was to proceed from Rumania and southern Poland toward the Crimea, the Sea of Azov, and the Don and Dnepr Rivers. Its IV Air Corps was to lend support not only to the German Eleventh Army advancing from Rumanian territory, but also to the Rumanian Third and Fourth Armies. This corps' front was about 370 miles wide; the distance from its bases at Focşani, Rumania, to the target area at Rostov was around 620 miles, and to objectives in the Crimea approximately 310 miles. The V Air Corps' mission was to support the Sixth and Seventeenth Armies, and especially the First Panzer Group of Army Group South in their advance from southern Poland against Kiev and Rostov. The initial front of the corps was about 215 miles in width; and the distance from its bases around Krakow in southwestern Poland to Rostov-on-the-Don some 930 miles.

The Luftwaffe ground organization in the deployment area of the Fourth Air Fleet was controlled by the XVII and VIII Air Administrative Command Headquarters at Vienna and Breslau (later at Krakow) respectively. These headquarters had to provide supplies for the units and, together with the 4th and 40th Air Administrative Command Staffs for Special Duty, were to build up and enlarge ground organizations in newly occupied territory during the course of the advance.

The tasks of the Luftwaffe Mission in Rumania were as follows: (1) organizing and directing active and passive defenses of the oil industry (drilling, pumping, refining, storage, and transportation), so vital to Germany's conduct of the war; (2) reorganizing and training the Rumanian

*See Map No. 1. See also Charts Nos. 2 and 3.

Air Force, both aircrews and antiaircraft artillerymen, in the latest German concepts in aerial warfare; (3) creating a Luftwaffe ground organization on Rumanian soil to receive German air units deploying for BARBAROSSA; (4) activating a Luftwaffe combat administrative command in Rumania for the impending operation and broadening the area of the command within the framework of the German advance to the East; and (5) promoting friendly relationships between German and Rumanian air forces in the hope of eventually establishing a firm alliance.*

Second Air Fleet[†]

The Second Air Fleet was to advance with Army Group Center out of northern Poland in the direction of Moscow. Since this area was the crucial point of the entire Eastern Front, the Second Air Fleet was especially well equipped with flying units. Its II Air Corps, on the right, was ordered to support the Fourth Army and, more particularly, the Second Panzer Group of Army Group Center. On the left wing the VIII Air Corps was to cooperate with the Ninth Army, but more specifically with the Third Panzer Group of Army Group Center. It should be noted that the initial front of these two air corps--between Brest-Litovsk and the area south of Suwalki--was only some 186 miles wide. The distance from Warsaw to Moscow, however, was about 680 miles.

Breakthroughs of border fortifications and further advances by the Second and Third Panzer Groups were to be supported by the I Antiaircraft Artillery Corps with its mobile and rapid-fire weapons.

Operating from its headquarters at Posen^{††} the II Air Administration Command had the task of organizing, maintaining, and supplying a Luftwaffe ground organization in the newly occupied parts of the central sector. The 2nd and 20th Air Administrative Command Staffs for Special Duty were at the disposal of the command for the accomplishment of these assignments.

*See Appendix I.

[†]See Map No. 1. See also Charts Nos. 2 and 4.

^{††}A German city and province until 1919. It then became a part of Poland. After the Polish campaign of 1939 it was reannexed to Germany. It is now a part of Poland and called Poznań.

First Air Fleet*

The First Air Fleet, in support of Army Group North, had to assist the army operations proceeding from East Prussia in the direction of the Dvina River and Leningrad. The I Air Corps, attached to the First Air Fleet, was to cooperate with the Sixteenth and Eighteenth Armies and, in particular, the Fourth Panzer Group of Army Group North. The initial army group front was about 125 miles wide; but the distance from Koenigsberg to Leningrad was about 528 miles. The coastal flank was to be guarded by the Luftwaffe Commander Baltic, which was assigned the task of attacking Soviet naval vessels and supporting ground force operations in connection with the assaults upon the Baltic islands of Saaremaa, Muhu, and Hiiumaa.

All ground organizations, including supply and maintenance units for the support of Luftwaffe units in Combat Zone North, were under the I Air Administrative Command at Koenigsberg. On hand for the reconstruction and development of new ground organizations in the captured territories were the 1st and 10th Air Administrative Command Staffs for Special Duty.

Fifth Air Fleet†

Units of the Fifth Air Fleet, operating under the command of the Luftwaffe Commander Kirkenes, based in northern Norway and Finland, were assigned the mission of supporting the advance of ground forces of Army Commander Norway against Murmansk and the Murmansk railroad, especially in the Kandalaksha sector. There was also a possible need for stronger forces to be used against the transport of Anglo-American goods across the Arctic Ocean. The terminals of these shipping movements were the harbors in Kolskiy Bay, particularly Murmansk, and the ports along the shores of the White Sea, especially Arkhangelsk, which became the most significant objectives for German air operations in the Finnish combat area. The overland breadth of the operational front was about 215 miles, while the distance from the home air base at Banak (at the southern tip of Porsanger Fjord) to Arkhangelsk was about 560 miles.††

Motorized elements of the entire Luftwaffe ground organization in the East, including anti-aircraft artillery and signal services, were deployed by rail and motor convoys, a movement which was in great part completed

*See Charts Nos. 2 and 5.

†See Charts Nos. 2 and 6.

††See Map No. 1.

by 15 June 1941. Flying units were brought up to their prepared fields before 20 June in individual flights or in small, three-plane formations (Ketten), avoiding for security's sake all the larger urban areas. Units of the VIII Air Corps, which until a few days before "D-Day" were employed in the Balkans and Crete, were also successfully transferred to the new deployment areas in the East. On 21 June 1941 the Luftwaffe was in place for its most difficult operation.

Actual Luftwaffe Strength in the East, 20 June 1941

Immediately prior to the attack on Russia, the German Air Force had 2,000 combat planes in the East, consisting of 29 1/3 bomber groups (880 aircraft), 9 1/3 dive bomber groups (280 planes), 20 fighter groups (600 aircraft), 2 twin-engine fighter groups (60 planes), 2 ground attack groups (60 aircraft), and 12 long-range reconnaissance squadrons (120 aircraft). In addition, there were 230 noncombat planes in 5 air transport groups (150 planes) and 8 liaison squadrons (80 planes).

Fourth Air Fleet Strength

The Fourth Air Fleet, in support of Army Group South, had 600 combat aircraft in its organization. This included 12 bomber groups (360 planes), 7 fighter groups (210 planes), 3 long distance reconnaissance squadrons (30 aircraft), 2 air transport groups (60 planes) and 3 liaison squadrons (30 planes). There were also Army air units (Heeresflieger-Verbaenden) in the area of the Fourth Air Fleet, consisting of 5 long distance reconnaissance squadrons (50 aircraft), 14 close reconnaissance squadrons (140 aircraft), and 5 liaison squadrons (50 planes).

Antiaircraft artillery under the Fourth Air Fleet command was made up of 1 corps artillery staff, 3 regimental artillery staffs, and the units under these commands; 13 mixed antiaircraft battalions; and 4 light antiaircraft battalions.

Second Air Fleet Strength

Approximately 910 combat aircraft were available to the Second Air Fleet, assigned to support Army Group Center. This strength consisted of 8 bomber groups (240 planes), 8 1/3 dive bomber groups (250 planes), 9 fighter groups (270 aircraft), 2 twin-engine fighter groups (60 planes), 2 ground-attack groups (60 planes), and 3 long distance reconnaissance squadrons (30 aircraft). Also attached to them were 2 air

transport groups (60 aircraft), and 3 liaison squadrons (30 aircraft). Army air units in this combat area were comprised of 4 long distance reconnaissance squadrons (40 aircraft), 11 close reconnaissance squadrons (110 planes), and 3 liaison squadrons (30 planes).

The Second Air Fleet had 1 antiaircraft artillery corps staff, 3 antiaircraft artillery regimental staffs, 16 mixed (light and heavy) battalions, and 7 light antiaircraft artillery battalions.

First Air Fleet Strength

This air fleet, supporting Army Group North, was the weakest of the three major air commands on the Eastern Front. About 430 aircraft were in this organization and ready for action on 22 June 1941. Its units included 9 bomber groups (270 planes), 3 2/3 fighter groups (110 planes), 5 long distance reconnaissance squadrons (50 aircraft), 1 air transport group (30 aircraft), and 2 liaison squadrons (20 aircraft). The army flying organizations in this area had 4 long distance reconnaissance squadrons (40 aircraft), 11 close reconnaissance squadrons (110 planes), and 3 liaison squadrons (30 aircraft).

Antiaircraft artillery strength in this zone consisted of 3 antiaircraft artillery regimental staffs, 8 mixed (light and heavy) battalions, and 3 light antiaircraft battalions.

Fifth Air Fleet Strength

On the extreme left of the German front was Army Command Far North (or High North), supported by the Fifth Air Fleet. This organization was clearly the weakest of all the front units. The Fifth Air Fleet possessed only 60 aircraft in all, divided as follows: 1/3 of a bomber group (10 aircraft), 1 dive bomber group (30 aircraft), 1/3 of a fighter group (10 aircraft), and 1 long distance reconnaissance squadron (10 planes). An army air organization situated in the area of Army Command Norway consisted of a close reconnaissance squadron of 10 planes.

A single mixed (light and heavy) antiaircraft artillery battalion was assigned to Army Command Norway.

Luftwaffe Strength and Space

On 22 June 1941 German combat aircraft, except for those belonging to replacement groups, were deployed as follows: 190 for home defense,

370 in the Mediterranean, 660 in the West, 120 in Norway (not counting units to be used there for BARBAROSSA), and 2,000 in the East, a total of 3,340 combat aircraft in the entire German Air Force.

It was a question whether the Luftwaffe in the East had sufficient range and power to strike targets in "Blitzkrieg" fashion beyond the Dnepr River. Judging by past standards, one could not expect more than 70 percent of the combat planes to be operational, and generally not more than 60 percent could be figured. The industrial centers in the lower Volga, in the Caucasus, and in the Urals and Siberia would therefore for all practical purposes remain out of the war zone.

Deployment of Soviet Air and Antiaircraft Artillery Forces

German intelligence agencies assumed the Soviet government to have about 7,000 combat aircraft in European Russia on 21 June 1941, and another 2,000 in Asiatic Russia.* According to an undetermined (possibly American) source, the Soviet air strength was deployed as follows:

Army Budenny - in the South

A total of 8 air divisions were assigned to this area, each division consisting of 3 to 5 air regiments of 80 aircraft each.

Army Timoshenko - in the North

This area had 2 air divisions, or about 480-800 aircraft in all.

Army Voroshilov - to the Rear of Timoshenko†

Approximately 960-1,600 aircraft, organized in 4 air divisions were concentrated under this command.

*The German estimates based on 80 aircraft per air regiment and 3 to 5 air regiments per air division produce totals (in European Russia) varying from 5,420 to 9,200 planes. German leaders assumed 7,000 to be the probable total in this area.

†Semën Mikhailovich Budenny, Semën Konstantinovich Timoshenko, and Kliment Efremovich Voroshilov, all Marshals of the Soviet Union.

The Moscow Area

Here, 7 air divisions were concentrated to defend the capital.

The Caucasus Region

Although not immediately needed for defense, 2 air divisions were located in this general area, rounding out the total number of 23 air divisions in European Russia. An additional 10 air divisions were supposed to be situated in the "Far East."¹

Operation Barbarossa Is Delayed

Hitler had toyed with the idea of going to war against Russia in the autumn of 1940, but because of clearly insurmountable technical problems which would have precluded a deployment of the Luftwaffe in sufficient force, he quickly abandoned his notion. The plan was then rescheduled for May of 1941, but again events forced a postponement. One of these was an elementary natural occurrence, a late thaw in Russia; the other was a political incident with military consequences in Yugoslavia.

The Coup d'etat in Yugoslavia

During the early morning hours of 27 March 1941 Prince Regent Paul of Yugoslavia was overthrown by Yugoslavian Air Force General Dušan Simović,* and the young King Peter II, still a minor, was raised to the throne. Although ostensibly dedicated to a policy of neutrality, he immediately ordered a general mobilization along the borders of his new realm. This changed the entire political situation. Aware of the necessity of security in the South for his impending Russian campaign, Hitler reacted with lightning speed. About 1300 on 27 March, in the presence of von Ribbentrop, Keitel, Jodl and other leaders, the Fuehrer informed the top Wehrmacht commanders that Yugoslavia as a nation was to be destroyed and that it was politically important that this be swiftly accomplished.[†]

OKW Directive No. 25, comprising the oral directives of the conference, was signed by Hitler on the evening of 27 March and disseminated

*It is interesting to note that, as in 1914, a Serb set the stage for war in the Yugoslavian area.

†See Keitel's notes on this conference, G/VII/7, Karlsruhe Document Collection.

to responsible heads of the German Army, Navy, and Luftwaffe.* This proclaimed that the coup d'état in Belgrade had altered the international political situation, because of which Yugoslavia would have to be immediately dealt with as an enemy and destroyed as quickly as possible. Therefore, the Commander in Chief of the Luftwaffe, in the early hours of 28 March, ordered 7 bomber groups, 3 dive bomber groups, and a twin-engine fighter group to be assembled by 30 March in the Vienna area, under the command of the Fourth Air Fleet which was assigned to Generaloberst Loehr. Its mission was to attack Belgrade and the ground organization of the Yugoslavian Air Force.

Hitler's decision also entailed a five-week postponement of BARBAROSSA.¹ General Halder remarked that the Yugoslavian intervention became a strategic problem since it delayed the attack upon Russia by about two months.²

The Late Thaw

But the beginning of BARBAROSSA was delayed not only by the Yugoslavian coup d'état, which obligated strong German air and ground forces to a new theater of war. Extraordinary weather conditions in the Soviet Union resulted in a very late thaw. Until the end of May the ground was boggy, with roads and unpaved airfields virtually unusable. These adverse conditions seriously retarded the rapid extension of German highway and road networks, the expansion of German airfields, and the construction of immense communication lines. Although these poor weather and terrain conditions permitted the German High Command and its troops to anticipate some of the natural forces against which they would be pitted in the vast Russian arena, the two-month delay of Operation BARBAROSSA was to have a tremendous--perhaps a decisive--impact upon the course of the entire campaign.

*See Directive No. 25, G/b, Karlsruhe Document Collection.

¹Keitel's notes mention a four-week delay. G/VII/7, Karlsruhe Document Collection.

Chapter 3

THE BATTLE FOR AIR SUPERIORITY

The several army groups of the Wehrmacht on the eastern frontier opened their surprise attack upon the Soviet Union at 0330 hours on 22 June 1941. German armored forces were to shatter the Russian front north and south of the Pripyat marshes, after which isolated Soviet forces were to be individually attacked and destroyed, as close to the frontier as possible. A withdrawal of Soviet armies into the interior of the country was to be prevented at all costs.¹

The Luftwaffe's primary mission was the destruction of Soviet air forces in western European Russia. All Russian operational airfields in close proximity to the border were to be attacked at once by all available air forces. Operations against Russian air and air force ground organizations were then to be continued until Soviet air power had been crushed. Army command staffs, recalling the Luftwaffe's successes in former campaigns, recognized the need to employ the bulk of available air combat units during the first days of the operation for the quick destruction of the Russian Air Force. If air superiority or, even better, air supremacy, could be achieved over Russia, the German Army could conduct its offensive without noticeable interference from Soviet aircraft, thereby reducing the ground force losses.

Information on the distribution of enemy air forces had been obtained prior to the campaign through high-altitude photographic reconnaissance performed by the reconnaissance group of the German Air Force High Command and by other intelligence methods, particularly the radio intercept services. This information had been made available as target data at all German tactical airfields in the East, each Luftwaffe command staff receiving data for the area in which its operations would most likely take place.

Following the basic patterns of the Polish and Western campaigns, squadrons of the German Air Force crossed the Russian border in the early dawn of 22 June 1941, concentrating their massed attacks upon Soviet air forces and air force ground installations.

The Luftwaffe's battle for air superiority in the East was begun against a numerically vastly stronger enemy. Nevertheless, the German

Air Force, favored by an abundance of good quality aircraft and favorable weather, launched continuous high-altitude and low-level attacks upon Soviet airfields, destroying hundreds of planes. It also shot down virtually all of the hostile aircraft which it encountered in the air. Bomber units flew as many as four to six missions daily, dive bombers, seven to eight, and fighters, five to eight, according to the distances from their respective bases to the front.

No explanation could be found for the failure of the Soviet command to take adequate air defense measures, which, in view of the political situation and the previous German use of air power, should have been warranted. Such obvious steps as the dispersal of fighter units situated on airfields close to the border, the transfer of bomber units to the interior, and the provision for antiaircraft defenses of air bases had been badly neglected.

The first attack caught complete air units upon the ground, unprotected.^{2*} Within a few days the greater part of the Soviet air forces were destroyed. In the weeks that followed, the Russian Air Force appeared to be paralyzed; only small units, appearing at very infrequent intervals, participated in combat actions, and most of these were uncoordinated and unsystematic. The possibility of Soviet flying units halting or even delaying the swift advance of German Army groups, or of threatening the German homeland, was eliminated. Within a few days it became clear that the technical superiority of Luftwaffe aircraft, the relatively higher level of technical and tactical training of German airmen, and the high morale and aggressiveness of individual German aircrews were more decisive factors in combat than the actual numerical strength of these units might have suggested. By accomplishing its primary mission, the Luftwaffe contributed materially to the great victories of the German Army in the East during the opening weeks of the campaign.

Combat Situation East, 22-29 June 1941

On the first day of the attack Reichsmarschall Goering reported that only a few Russian aircraft had flown over East Prussia, some 20 enemy sorties penetrating to the Tilsit-Insterburg line. Of nine attacking enemy bombers, five were shot down by German fighters. Other sorties over the Reich were flown from the vicinity of Bialystok-Pultusk, Brest-Litovsk, and Kholm, but no bombs were reported to have been dropped.

*See Figures 5 and 6.



Figure 5
Soviet aircraft destroyed at Kaunas, Lithuania,
by the Luftwaffe, 22 June 1941



Figure 6
Soviet planes destroyed at Kaunas, Lithuania,
by the Luftwaffe, 22 June 1941

German air reconnaissance generally confirmed previous reports on the deployment of Russian air forces. No special camouflaging of planes or airfields was yet noticeable, and Russian aircraft were frequently parked "in rows on the fields or the edges thereof" in conformity to peacetime regulations. Apparently no surprise attacks had been expected. Thus individual combat reports carried the news that "extraordinarily large numbers of aircraft have been destroyed or damaged upon the ground." The attacks against the Russian bases had indeed proceeded as planned. Early on 22 June, German airmen, flying in the first attack wave and fully exploiting the factor of surprise, struck Soviet airfields near the border and other "specific individual targets," hitting 31 airfields, 3 suspected billets of high-level staffs, 2 barracks, 2 artillery positions, a bunker system, and an oil depot. In addition, Goering reported that a special operation had been carried out against the seaport of Sevastopol. The Luftwaffe's overall commitment in the first wave consisted of some 637 dive and conventional bombers and 231 fighters. Of these, only two were missing. Thus far the Russian fighter defense had proven to be unaggressive, turning away to flee when fired upon at long range, while no other well-directed air defense was in evidence. Towns, such as Brest-Litovsk, were fully lighted at night, indicating that the Russians had done little in the way of preparing for blackouts.³

During the first two days of the war, while the Luftwaffe continued its attacks upon Soviet air and air force ground installations, photo-reconnaissance uncovered a large number of hitherto unknown airfields, heavily occupied by enemy air units. Attacks upon these fields were so successful that on 29 June the High Command of the Armed Forces (OKW) was able to report the destruction of 4,017 Soviet aircraft, against a loss of only 150 planes for the Germans. Goering announced that in the first week of the campaign the Russians had lost 4,990 aircraft, while the Germans had lost only 179.⁴ General Halder, Chief of the Army General Staff, commented on these victories on 22 and 24 June, noting that the "Russian aircraft shot down . . . [included] entire bomber squadrons flying without fighter escort."⁵

The 3rd Fighter Wing, commanded by Major Guenther Luetzow,* was cited by the High Command of the Luftwaffe on 9 July for a particularly

*Luetzow attained the rank of Colonel and has been credited with 103 aerial victories. Holder of the Knight's Cross with Oak Leaf, Swords, and Diamonds, he fell on 22 April 1945.

meritorious action. When an airfield, occupied by elements of his wing, was attacked by 27 Soviet bombers, the unit took to the air and shot down the entire attacking force in 15 minutes, without losing a single plane.⁶

Generalmajor von Waldau, Chief of the Luftwaffe Operations Staff, wrote in his diary on the evening of 22 June 1941: "the timing [of the air attack] was a complete success," opening the way for operations against the entire Soviet Air Force. Although he questioned the incoming reports of the day which claimed that more than 800 Russian aircraft had been destroyed by nightfall, he nevertheless believed that a decisive victory had been achieved. Clarification of the strategic situation was then of primary importance, but von Waldau believed in leaving the details in the hands of the air fleet commanders.⁷ On 3 July he was able to make a better appraisal of the situation. He observed that Soviet military forces were quantitatively greater and better than preattack data had indicated. Surprised that the Russians had had some 8,000 planes ready for action in the western area, he was equally astounded to discover that 1,800 of those planes had been destroyed by the Luftwaffe on the first day of the war, with relatively negligible German losses.^{8*}

Combat Situation East, June - October 1941

Field Marshal Kesselring (commanding the Second Air Fleet) wrote after the war "thanks to the tactical air planning and to the tireless, willing effort of the units, it was possible on the strength of excellent photo-reconnaissance to achieve 'air superiority' within two days." According to Kesselring, Goering had not at first believed the reports of the opening week which came in from the Eastern Front, claiming that some 2,500 Russian planes had been destroyed upon the ground and in the air. Goering had the figures checked, only to discover that the actual count ran 200 to 300 planes higher than Kesselring had claimed. Operations of the German Army would not have progressed as smoothly and as rapidly without the Luftwaffe "prelude." Kesselring described the destruction of squadrons of "clumsy" Russian medium bombers on 23 June 1941. Arriving at regular intervals, in tactically weak formations, they were easily downed by the German fighters. Furthermore, the Luftwaffe had thereby succeeded in destroying the basis for the Russian bomber fleet buildup so that during

*See von Waldau's diary, Karlsruhe Document Collection.

later campaigns Russian bombers scarcely put in an appearance, an achievement of the German Air Force in the East which was never really appreciated.⁹

Winston Churchill later noted the similarity of the Russian Air Force's misfortune on the first day of the campaign (albeit on a far greater scale) to the earlier fate of the Polish Air Force.¹⁰ General Kurt von Tippleskirch,* in his postwar history, attested to the great effectiveness of the Luftwaffe in support of ground operations and its strong influence upon enemy morale. Noting the passiveness of the Russian air forces, he added that the German Air Force had not succeeded in annihilating the enemy air forces as it had in previous campaigns, apparently because of the vast extent of territory involved and the demands made upon its forces for the support of the ground fighting.¹¹

Tippleskirch recognized the "advantages" of the Luftwaffe in direct and indirect support of the Army, but he completely misunderstood the effect of the struggle for air superiority upon ground operations. The Soviet air forces had to remain inactive during the first months of the campaign in the East because they had been nearly destroyed and could not attack German ground forces on a large scale. It is true that the complete destruction or the continuing neutralization of remaining Soviet air forces had not succeeded. The reason was that the bulk of the Luftwaffe now had to begin to carry out its second mission--its future main task--the direct and indirect support of the army.

It would have been correct for the Luftwaffe to have continued the fight against Soviet air forces with all available power, for they should not have been allowed to recover after the initial knockout blow. But this would have meant not only commitments against the enemy air forces in the air and on their bases but also against Russian production, the factories of the air armament industry. The latter was impossible, however, because of the inferior range of German twin-engine bombers and the lack of a long-range four-engine bomber capable of making regular assaults upon aircraft plants,[†] especially against industrial installations in the Moscow

*General der Infanterie Kurt von Tippleskirch, who headed the Fourth, Fourteenth, Twenty-First Army Commands, and finally Army Group Vistula.

†General Walter Wever, Chief of the Luftwaffe General Staff, 1935-36 (killed in an air crash in 1936), advocated a four-engine bomber force in the 1930's. He called the bomber needed for such operations the "Ural bomber." For an interesting discussion of this problem see Richard Suchenwirth, Historical Turning Points in the German Air Force War Effort, USAF Historical Studies No. 189, Maxwell AFB: USAF Hist. Div., RSI, June 1959, pp. 40-44.

and Voronezh areas, which, at the time, had not yet been evacuated to the East. Only during September and October 1941, after capture of the territory around Kiev and Smolensk provided a jump-off area, were a few attacks made upon the aircraft industry at Voronezh by the Second and Fourth Air Fleets. But these were simply independent operations, initiated by the air fleets concerned. A large, planned operation, such as those envisioned under the German principles for "The Conduct of Aerial Warfare," ordered and controlled by the Commander in Chief of the Luftwaffe, never took place. Even after winning the take-off bases, so badly needed because of the limited operational range of German bombers, no strong, destructive, daylight attacks could be flown because: (1) sufficient forces were not then available for such operations; (2) long-range escort fighters, essential for daylight attacks, were also unavailable; and (3) the Soviet aircraft industry had by then already been transferred to the East, especially those plants producing specialized items such as optical instruments.

The failure to strike the Soviet aircraft production centers permitted the undisturbed Russian plants to steadily replace the enormous losses of the first weeks of war. In addition, hostile air activity gradually increased in certain areas, and by late summer became troublesome to German ground operations and helped to cause appreciable Wehrmacht losses. It was impossible for the Luftwaffe to perform simultaneously its two assigned missions, the achievement of air superiority and support of the ground forces, since the German air units in the East were numerically weak and the operational territory was so vast. In attempts to perform both missions at the same time, the effectiveness of one effort or the other was found to diminish. Yet at the beginning of the Russian campaign the Luftwaffe successfully accomplished its primary mission of annihilating the Soviet air forces at hand and securing air superiority (almost air supremacy). This was due to the superior equipment, training, and aggressiveness of the German Air Force, and the willingness of its personnel to make great sacrifices.¹²

The second mission (supporting the ground forces), which required all the air power available, began about 25 June. Sorties against Soviet air forces and their ground installations were then flown only occasionally and incidentally, and only when the steadily increasing Russian air activity became too bothersome for the German ground forces or caused them unbearable losses. Because of this primary mission of supporting the Army, operations of the German Air Force became increasingly involved with ground operations and finally completely dependent upon them. Consequently, it is necessary to study the Wehrmacht ground operations, with which the

Luftwaffe was so intimately involved, and without a knowledge of which the air operations cannot be understood.*

*See Map No. 3.

Chapter 4

FOURTH AIR FLEET OPERATIONS LEADING TO THE
ENCIRCLEMENT BATTLE OF KIEVAdvance of Army Group South to the Dnepr River

Army Group South (comprising 26 regular and 4 light infantry divisions, 4 motorized divisions, and 5 armored divisions), commanded by Field Marshal Gerd von Rundstedt, began its advance on 22 June with orders to destroy Soviet forces west of the Dnepr River in Galicia and the western Ukraine, and to establish bridgeheads east of the Dnepr in front of and south of Kiev.^{1*} Its left flank (Sixth and Seventeenth Armies and First Panzer Group) was to drive forward to Kiev, seize the Dnepr bridges, and open the way for continued operations east of the river. Its right flank (Eleventh Army and Rumanian and Hungarian units) was to remain in position during the initial advance period. This force, commanded by Generaloberst Eugen Ritter von Schobert, was ordered to contain as large a Soviet force as possible and to defend the vitally important Rumanian oil deposits. Aggressive action for the right wing was planned for a later stage.

Opposing these forces were two strong Russian groups under Marshal Sēmen Mikhailovich Buděnyy. Of these forces, 11 infantry divisions, 1 cavalry division, 2 armored divisions, and 7 motorized-mechanized brigades were deployed in Bessarabia, with the rear elements east of the Dniester and the bulk stretched in a thin line along the Prut River. Another Russian group of 27 infantry divisions, 17 cavalry divisions, 3 armored divisions, and 4 motorized-mechanized brigades was deployed on the frontier between Chernovtsy and the Pripyat River. In the rear were 1 armored division, 12 infantry divisions, 3 cavalry divisions, and 3 motorized-mechanized brigades situated as far back as the Sluch River and the headwaters of the Bug.²

The Russians were tactically surprised by the German attack, which quickly captured the Bug River bridges intact and penetrated Soviet border defenses at all key points. The Sixth Army (left wing of Army Group South) under Field Marshal Walter von Reichenau advanced across

*See Map No. 4.

the Styr River, where it and the First Panzer Group* of Generaloberst Ewald von Kleist were halted by fierce Russian armored counterattacks, first from the south and then from the north.³ After bitter tank battles around Lutsk and Dubno (northeast of Lvov) the Russians were pushed back. The Seventeenth Army (center of Army Group South) under General Karl-Heinrich von Stuelpnagel soon encountered very strong enemy forces in well-developed positions northwest and west of Lvov (Lemberg) which it was at first unable to dislodge.

On 2 July 1941 the Eleventh Army (right wing of Army Group South) attacked toward Mogilev on the Dniester, the Rumanian Third Army advanced toward Chernovtsy, and Hungarian units seized Kolomyya, making contact with the southernmost units of the Seventeenth Army which had reached the Zbruch River after heavy fighting. Since strong Russian forces, particularly armored forces, had been concentrated south of the Pripyat marshes, it is probable that the Soviet command had expected the main German attack to come from the Gouvernement Général (Poland), probably on the assumption that the German command would concentrate against the Ukraine.⁴ Army Group South with its First Panzer Group had not yet secured full operational freedom, but was compelled to use all of its armies to force back the enemy. Heedless of losses, the Soviet command had resisted tenaciously and had repeatedly extricated its forces from threatened envelopment.

The Sixth Army and the First Panzer Group arrived at the Sluch River about 4 July, with the Seventeenth Army on their right and rear along the Zbruch River, and Hungarian forces farther to the south. The Eleventh Army and the Rumanian Third and Fourth Armies were in the Bucovina and north Bessarabia areas. On 5 July Army Group South resumed its offensive. The left wing (Sixth Army and First Panzer Group) breached the Stalin Line at Novograd-Volynskiy, and the Seventeenth Army (center) did so at Bar. The first large-scale encirclement battle in the South now began to take form around Uman.⁵ Protected to the east by a part of the Sixth Army, the First Panzer Group (now pushing ahead north of Uman) wheeled to the southeast through Boguslav and pushed to the south as far as Pervomaysk, preventing the withdrawal of sizable Soviet forces to the east and southeast. Contact was soon made with elements of the right wing of Army Group South, which pushed rapidly ahead to Pervomaysk, closing the ring around Uman. When the encirclement battle ended on 8 August, the High Command of the German Armed Forces

*See Figure 7.

⁵See Maps Nos. 4 and 9.



Figure 7
German armored column advancing into
Russia, Summer 1941



Figure 8
Fourth Air Fleet staff in Russia, Summer 1941
L. to R.: Col. Hermann Plocher, Maj. Alarich Hofmann, Maj.
Karl-Heinrich Schulz, Col. Richard Schimpf, Generalmajor
Guenther Korten, General der Flieger Ritter von Greim, General-
major Walter Sueren, Generaloberst Alexander Loehr, General
der Flieger Kurt Pflugbeil.

reported the capture of 103,000 prisoners, including the commanding generals of the Soviet Sixth and Twelfth Armies, 317 tanks, and 858 guns.

While protecting its northern wing against attacks by the Soviet Fifth Army from the area of Korosten, the German Sixth Army continued its advance to the east, threatening to envelop Kiev, the ancient capital of the Ukraine, on the west bank of the Dnepr. Meanwhile (about 25 August), the First Panzer Group brought practically all the territory west of the Dnepr River bend as far as Kherson under German control and established two bridgeheads across the Dnepr at Dnepropetrovsk and Kremenchug.

Farther south the Russians had evacuated Bessarabia in time, but part of the forces were pocketed in the Kirovograd area and destroyed; the rest withdrew across the Dnepr. Odessa was invested by the Fourth Rumanian Army, but was not taken until 16 October because the Rumanian forces were too weak to attack.

Meanwhile, a crisis had developed south of Kiev. On 7 August, while the battle at Uman was still in progress, a newly arrived Soviet force of 2 cavalry divisions, 1 armored division, and from 3 to 4 infantry divisions attacked across the Dnepr at Kanev. In swinging southeast, the First Panzer Group had left a gap between it and the Sixth Army. Into this gap poured the Russians, who then drove forward as far as Boguslav, seriously threatening the communications of both German forces. Weak German rear elements barely halted the enemy's advance, and only after several critical days could units be moved in from the north and south to counterattack and drive the Russians back across the Dnepr.

Operations of the Fourth Air Fleet

The mission of the Fourth Air Fleet (Generaloberst Alexander Loehr)* in support of Army Group South's operations was as follows:†

- (1) Attack the Soviet air forces, achieve air superiority, and thereby prevent any counter-air action against the German Army units.
- (2) Render direct and indirect support to the army group, concentrating on the left flank as the Sixth Army and First Panzer Group advanced

*See Figures 4, 8, and 9.

†See Maps Nos. 6, 7, and 8.

to the Dnepr at Kiev to prevent the withdrawal of strong Russian forces across the river.

(3) Attack and eliminate the Soviet Black Sea Fleet and its bases.

(4) Interdict Russian merchant shipping on the Black Sea and the Sea of Azov.

The IV Air Corps (General der Flieger Kurt Pflugbeil), a part of the Fourth Air Fleet, was linked with the operations of the Rumanian Air Force and cooperated in protecting the vital oil fields from Russian air attack, supported the operations of the Eleventh Army and the Rumanian Third and Fourth Armies, and attacked the Soviet naval bases around the Black Sea.

The V Air Corps under General der Flieger Robert Ritter von Greim was assigned the task of operating from the Zamość-Lublin area against Russian air forces, particularly fighters, and of securing air superiority within the first few days of the campaign. After the third or fourth day, the First Panzer Group and the Sixth Army of Army Group South were to be supported in their rapid drive on Kiev, with the air corps assuming responsibility for their rear flanks. Air support was also to be given to the Seventeenth Army in case a critical situation should arise during its push toward Kiev from the south.

The II Antiaircraft Artillery Corps (Flakkorps) under General der Flieger Otto Dessoch was to provide antiaircraft protection, particularly for the First Panzer Group whose ground operations it was to support whenever necessary.

The staff of the Luftwaffe Mission in Rumania under General-leutnant Wilhelm Speidel was responsible for the air defense of the oil-producing area around Ploesti, the oil storage and shipping installations at Constanța, the bridge over the Danube at Cernavodă (the most important point of the oil pipeline), the oil shipping port of Giurgiu on the Danube, and the airfields of the Luftwaffe Mission. The strength of the Russian air forces in the southern area was estimated at eight air divisions.

Operations of the IV and V Air Corps

During the early hours of 22 June 1941 units of the IV and V Air Corps attacked the Soviet operational airfields which had been reported in their areas. Intelligence data obtained prior to the campaign revealed

particularly heavy concentrations of Soviet air power in the V Air Corps area, especially around Brody-Lutsk-Dubno, Lvov, Stanislav-Tarnopol, Terebovlya, and in the area of Belaya Tserkov-Kiev-Ovruch-Zhitomir-Berdichev. The V Air Corps could thus assume that its first opposition would come from some 448 single-engine Russian fighter and ground-attack aircraft and 282 twin-engine bombers, with most of the fighters being based on airfields close to the frontier.⁵ For supplies the Soviet air forces in the area depended upon equipment depots at Lvov and Kiev-Postvolynski. In the IV Air Corps zone the main concentrations of Soviet air power had been identified around Beltsy (Balti in Bessarabia) and Odessa.

The Russians were completely surprised by the Luftwaffe's attack. By employing all units to the utmost--Luftwaffe bomber units flying from three to four missions daily and fighter units carrying out six to seven missions a day--the Russians were dealt a decisive blow. On 9 August the general commanding the Soviet Sixth Army told his German captors: "The Russian air losses were terrible in the first days and the Russian Air Force has never recovered from this blow."⁶ From 22 to 25 June 1941, units of the V Air Corps alone attacked 77 Russian airfields in 1,600 sorties, destroying 774 Soviet planes on the ground and 136 in the air.^{7*}

In these operations, the small SD-2 bomb,[†] an item not always in adequate supply, was used extensively by the 51st Bomber Wing. It proved to be an efficient fragmentation bomb, particularly against live targets, troop concentrations, and moving vehicles, and also had excellent effects upon aircraft on the ground. The next larger bomb, the SD-10, was withdrawn from use for a long period because of several accidents resulting from collisions of the released bombs, which then detonated prematurely immediately under the aircraft. Consequently, 110- and even 550-pound bombs had to be used against these targets, although the desired broad fragmentation effect could not be attained with these bombs, even with the use of normal quick or super-sensitized detonators.

*See Figure 10.

†The SD-2 bomb was a small, antipersonnel bomb, loaded with approximately 4 1/2 pounds of high explosive, and fragmenting roughly into 250 pieces. See "Abwurfmunition und Fliegende Koerper" ("Bombs Dropped from Airplanes and Flying Bodies"), C/VI/w, Karlsruhe Document Collection.



Figure 9

Combat situation conference in Russia, 1941, Fourth Air Fleet
L. to R.: Col. Werner Moelders, Commanding 51st Fighter Wing,
Generalmajor Guenther Korten, Generaloberst Alexander Loehr.



Figure 10

Soviet airfield at Mlinov, 8 miles northwest
of Dubno, Poland, June 1941

On the first day, V Air Corps units also attacked the main telegraph office and army telephone exchange in Lvov, a divisional telephone exchange reported in Lutsk, and the air equipment depot at Kiev-Postvolynski. Favorable weather conditions as far east as the Dnepr River brought generally clear skies and good visibility for these actions.

On 23 June units of the IV Air Corps attacked Nikolayev, northeast of Odessa. Reconnaissance discovered a total of 62 airfields, of which 51 were occupied by 1,270 aircraft, concentrated mainly in and around Kiev, Stanislav, and Odessa.

For a few days both air corps of the Fourth Air Fleet continued to pit most of their strength against the Russian air forces. Their attacks were so devastating that after the third day of warfare air operations could be shifted mainly to direct and indirect support of the ground forces. The Commander in Chief of the Luftwaffe made the following report on 6 July concerning the successes on the left flank, the area of main effort: "In the battle against the Soviet Union, the V Air Corps in the period 22 June - 3 July destroyed more than 1,000 aircraft on the ground."⁸ Generaloberst Halder, Chief of the Army General Staff, remarked on 30 June in his war diary that "the Luftwaffe is reinforcing its forces in front of Army Group South and in Rumania." He noted further that very great air victories had been achieved against the Soviet air forces and the withdrawing enemy columns in front of Army Group South, and that "on this day [30 June 1941] over 200 enemy planes were shot down. The enemy is reportedly already using antiquated four-engine models."⁹

The situation report of the High Command of the Luftwaffe (including the first consolidated report of the success of the Fourth Air Fleet) claimed that "in Combat Zone South units of an air fleet command" shot down 41 aircraft and destroyed 45 more on the ground on 30 June, and the air fleet, while supporting the ground forces from 22 to 30 June, destroyed 201 tanks, 27 bunkers, and 2 armored fortifications.¹⁰

The V Air Corps Support of the Advance to the Stalin Line

After 23 June, the left (northern) wing of Army Group South received the definite support of German air units. Enemy forces concentrating about Lvov were thrown back to the east, to their weakest position, between Kristinopol and Sokal. The Styr River was reached by the First Panzer Group. On 26 June the Russians mounted an exceedingly strong tank attack, including 52-ton tanks, from the Kholoyuv-Brody line against the First Panzer Group's open flank. Units of the V Air Corps

went into action in continuous, low-level attacks against this threat and against large motorized forces reported to be concentrating in the Toporov-Brody area. According to reports of the First Panzer Group, this action, carried out in a crucial moment, stopped an attack which was then under way by an entire Russian motorized corps and created conditions which permitted the First Panzer Group to continue its advance.

The Sixth Army had driven strong enemy elements into the densely wooded Lutsk-Rovno area where they constituted a serious threat to the army's northern flank, especially since these enemy forces were controlled by the Soviet Fifth Army. On 1 July, after a number of minor skirmishes, strong Russian forces struck across the highway known as the Panzer Road North (Vladimir-Volynskiy-Lutsk road) at Klevan and Olyka and drove deeply into the flank and rear of the First Panzer Group. The situation was critical. Concentrated attacks by the V Air Corps, however, inflicted such severe casualties upon the Russian forces in the Dubno-Rovno-Lutsk area as to break the effective power of the enemy. The V Air Corps destroyed 40 tanks and 180 other vehicles, and damaged and clearly put out of commission innumerable motor vehicles, including tanks.* General-major von Waldau commented in his diary on 15 July that, while motoring from Dubno with Col. Hermann Plocher (then Chief of Staff, V Air Corps), he had seen "hundreds of Russian tanks, many of which [were] super-heavy, lying south of Dubno," and that "the equipment of the Red Army amazes us again and again."¹¹

Early in the course of the campaign the German High Command realized that the Russians, with surprisingly methodical planning, intended to break contact and offer renewed resistance further to the rear in the Stalin Line or behind the Dnepr River. To prevent, or at least delay, such a movement, V Air Corps units increased their attacks upon all identified and reported withdrawal movements on roads and railways. These attacks were directed against traffic and troop transit centers, such as Lvov, Brody, Zolochev, Zhitomir, Berdichev, Staro-Konstantinov, Belaya Tserkov, and Kazatin; they also struck some high-level headquarters and thus seriously interfered with Soviet operations. Particularly effective action was achieved against Russian retrograde movements on 30 June when Lvov was captured. Roads east and southeast of the city were jammed with traffic, often moving in columns of two or three abreast on a single road.

*See Figures 11 and 12.



Figure 11
Soviet tanks destroyed by the Luftwaffe
near Dubno, Poland, 1941



Figure 12
Soviet tank burning after German air attack,
Dubno, Poland, 1941

Interdiction of railroad traffic was highly important and essential in preventing the regrouping and transfer of Russian troops and materials.* At the same time, rolling stock was to be delayed for later capture by German troops to facilitate the movement of supplies over Russian rail lines. Initially, railroad interdiction operations were conducted only west of the Dnepr, concentrating in the Shepetovka-Kazatin-Kiev-Korosten area. Day and night these attacks were carried out by entire Luftwaffe units or, during inclement weather, by flights of a single aircraft. By 9 July rail traffic west of the Dnepr was substantially blocked. According to the captured Commanding General of the Soviet Sixth Army, this reduction of rail traffic made it almost impossible after the fifth day for the Russians to supply their troops. In southern Galicia, in the Gusyatin area, the leading and rear elements of a string of railroad trains were destroyed on 5 July, enabling the SS "Viking" Division (5th SS Panzer Division, largely recruited in the Scandinavian area) to capture on the following day 30 undamaged, loaded trains.¹²

In regard to the success of railroad interdiction operations, Halder observed on 11 July that "the Luftwaffe now appears to have succeeded in cutting the Russian railroads even in the far rear area" and that the number of sections with marooned trains were increasing. He also considered the heavy rail traffic below Kiev to be due to congestion from a large-scale Soviet evacuation of economic resources rather than movements of troops. Halder thought that the Russians were probably trying to by-pass the obstructions by withdrawing via Odessa or to the north, but he noted that serious obstacles (such as 34 isolated trains south of Cherkassy) were already present on the lower Dnepr.¹³ On the following day Halder recorded: "Air reconnaissance shows the results of our harassing attacks on the enemy rail system in the rear"; there were large traffic jams on the railroads south of Kiev, in the region south of the Orsha-Smolensk line, between Vitebsk and Smolensk, and heavy antiaircraft defenses were located around Vitebsk and Berdichev.¹⁴ On 13 July the German Wehrmacht reported that the Luftwaffe had already "prevented any possibility of a large-scale counterattack by destroying the enemy railroad system."¹⁵

Besides the heavy casualties inflicted by the continuous attacks upon highways and railroads, the resultant delay of all movements hindered the Russians from carrying out a more timely withdrawal to the east.

*See Map No. 6.

†A report of General der Flakartillerie Rudolf Bogatsch.

At the Goryn River the First Panzer Group was delayed an unexpectedly long time because its units had become badly mixed, supply difficulties had arisen, its flank was threatened from the north, and its widely extended forces had to be closed up from the rear. Nevertheless, the Commanding General of the V Air Corps attempted by discussion with the army commander of the forward moving ground forces to accelerate the advance so that the ensuing favorable situation could be exploited to secure operational freedom. This effort was unsuccessful, as was his request to the Commander in Chief of the Luftwaffe for dive bomber units to facilitate more effective air support for the First Panzer Group.

Breaching the Stalin Line

Little time was lost at Polonnoye-Novyy Miropol in breaking through the Stalin Line toward Berdichev on 6 July, but exceptionally strong bunker positions delayed until 9 July the breakthrough at Novograd-Volynskiy, where, after sustained attacks against the emplacements, artillery positions, and approaching Russian reinforcements, the line was breached and the advance begun upon Zhitomir. Heavy Soviet counterattacks, particularly against the 9th Panzer Division in Berdichev, were shattered by sustained bomber attacks.

On 15 July Generalmajor von Waldau noted that the Sixth Army, and the First Panzer Group which preceded it, had experienced "the severest fighting" after crossing the border, where they had been ceaselessly attacked by Russian armored and infantry forces. The need for constant defensive action against steady Soviet penetrations into rear area communications prevented any territory from being taken until the situation was secured in two major tank battles at Rovno-Dubno and later at Zhitomir-Berdichev. Von Waldau asserted that the Luftwaffe should claim much of the credit for the success of these battles because its close fighter cover of German tank spearheads prevented effective Soviet counter-air measures and eliminated all threats to the flanks.¹⁶

Following the breach of the Stalin Line, Russian retrograde movements increased, and the V Air Corps* continued to concentrate upon moving columns and railroads. The Dnepr bridges at Cherkassy, Kanex, Kiev, and Gornostaypol were attacked for the first time. Despite 42 hits upon 6 bridges, complete destruction of the structures was not achieved, partially

*See Figure 13.



Figure 13

Combat situation conference in Russia, 1941, V Air Corps
L. to R.: Col. Hermann Plocher, Chief of Staff, Generalmajor Otto
Hoffmann von Waldau, Chief of Luftwaffe Operations Staff, Maj.
Fritz Kless, Operations Officer, V Air Corps.

because the heaviest bombs could not be loaded aboard the bombers owing to the poor condition of the runways.

On 12 July the Luftwaffe began interdiction operations east of the Dnepr River to prevent the advance of Russian reinforcements. On 14 July the rail junction at Bakhmach was attacked with good results. During these railroad interdiction operations some 1,000 railroad cars, many of them in the stations and loaded with ammunition, were destroyed.¹⁷

On the following day Halder mentioned General Bogatsch's report that the Luftwaffe had noticeably interrupted rail traffic in the Leningrad area, between Smolensk and Moscow, around Bryansk, especially in the southern area, and had damaged the bridges at Kiev, while the bridge at Cherkassy had sustained very serious hits.¹⁸

Besides rail interdiction operations, strong attacks were carried out against vehicular traffic moving in as many as four columns abreast and against troop traffic centers in the Proskurov-Staro-Konstantinov area. Exceptionally heavy losses were inflicted upon the Russians by the SD-2 bombs.

By 16 July armored units reached the Irpen River in front of the city of Kiev and established a small bridgehead south of the Zhitomir-Kiev road. Because of an order from the Fuehrer requiring the rear elements of the First Panzer Group to provide cover against enemy operations from Kiev and to abstain from immediate attacks upon the city,¹⁹ no effort was made to seize the Kiev bridges over the Dnepr by storm. Reverses to the weak lead elements and the threat of Russian attacks on the flanks of the widely extended units did not allow further risks. The concern of the highest command echelons with these problems is evident from an entry in Halder's diary which indicates that Hitler did not want the armored units of Army Group South to be vainly sacrificed.²⁰ His concern was unfounded, however, since the Sixth Army infantry was still in the area of Novograd-Volynskiy and making progress (albeit slowly because of Soviet pressures from the Pripyat swamp area) in the direction of Korosten.

At this time Army Group South decided to postpone its plans to establish a bridgehead east of Kiev, and to drive instead toward the south in order to halt the withdrawal of Russian forces still situated west of the Dnepr River. To accomplish this, the III Corps of the First Panzer Group was to cover the left (northern) flank of Army Group South, while the Sixth Army advanced toward the southeast, its left wing along the Dnepr. Simultaneously, the remainder of the First Panzer Group was to drive southward toward Uman to envelop Soviet units in front of the German Seventeenth

Army, and to assist the Sixth and Seventeenth Armies in destroying the remaining Soviet Army units west of the Dnepr.

These latter operations were supported by units of the V Air Corps, Fourth Air Fleet. As anticipated, the movement of bombs, fuel, and other supplies destined for German air units became increasingly difficult. In the area from which they were now operating (after advancing their bases from Lublin and Zamosc) there were very few passable roads. At first all supplies were moved exclusively by air, using Junkers Ju-52 transports. The advance movement of V Air Corps bases and supply services depended upon: (1) the speed of construction of the permanent main signal communication line and lateral lines, (2) the speedy reconnoitering and preparation of new airfields, or the adaptation of existing Soviet air bases (Soviet airfields along the fringes of the Pripyat marsh area frequently had very wet surfaces), and (3) the load capacity of the roads over which the forward movements would take place.* Excessive traffic frequently jammed these roads, often delaying for days the various supply columns and ground force troops. The Chief of Staff of the V Air Corps and his supply officer repeatedly flew over the supply routes searching for fuel supply columns. They landed alongside moving columns of armored and motorized troops and, by asserting the authority of their offices, intervened to insure that the vital fuel columns were given the proper priority accorded by their written traffic authority.

Owing to the continuous action, the operability of German flying units depreciated steadily and considerably. Only a few serviceable aircraft were available for reconnaissance. Frequently, integration of Army-Luftwaffe operations resulted in army group reconnaissance coinciding with that of the Luftwaffe, and the thought of combining army and Luftwaffe long-range reconnaissance recurred many times. But no definite decision on the matter was made and no express orders were issued.† These deliberations are shown in the war diary of General Halder, in which he relates that, while talking with Field Marshal von Bock (Army Group Center) on 10 July about air reconnaissance, it was noted that the long-range squadrons assigned to Bock's forces (except for those with the tank forces) "still have 3 machines ready to fly in one squadron and none in the others. Only two serviceable planes are available for night reconnaissance. Therefore, the Luftwaffe offers to combine the army and Luftwaffe reconnaissance. I [Halder] urgently advised against it and referred to the conflict between

*A responsibility of the 4th Air Administrative Command for Special Duty.

†See Generalleutnant (Ret.) Hermann Plocher, "Air Reconnaissance and Antiaircraft Defense," Karlsruhe Document Collection.

the Commanders in Chief of the Army and the Air Force on this question prior to the start of the offensive. "21

Russian Air Operations until Mid-July 1941

Those elements of the Soviet air forces escaping destruction in the first days of the campaign attacked chiefly the German armored spearheads and supply columns, trying thereby to delay the German advance. Their high-altitude and low-level attacks were directed primarily against bridges and bridge sites near such places as Lutsk, Dubno, Rovno, Ostrog, Polonnoya, Ovyi Miropol, Novograd-Volynskiy, and Zhitomir. With dash and obstinacy the Russians repeatedly attacked points known to be heavily defended by German forces, where Luftwaffe fighter and anti-aircraft artillery concentrations inflicted heavy losses upon them.²²

IV Air Corps Operations on the Right Flank of Combat Zone South

On 22 June 1941 and during the next few days there was little ground combat activity in the Rumanian area. The only exception occurred on 22 June when a German infantry division launched a surprise attack across the Prut River at Skulyany (Sculeni) north of Iasi (Jassy) and established a bridgehead.

As in the main concentration area of the Fourth Air Fleet on the left (northern) flank of Combat Zone South, counter-air operations were also carried out at dawn on 22 June by IV Air Corps units, mounting successful and sustained attacks from their Rumanian bases against Soviet airfields, especially those around Beltsy (Balti) and other places which had been reconnoitered. Within the next few days, all enemy airfields which air reconnaissance reported to be manned were brought under Luftwaffe attack. In the Crimea and the Odessa-Nikolayev area especially strong concentrations of Soviet air forces were detected and reported.²³

Russian fighter units were mainly concentrated in the Iasi-Beltsy-Kishinev area and were repeatedly engaged in battle by German fighters, which inflicted heavy losses upon them. On 25 June alone, 44 Soviet fighters were shot down against a loss of two German planes. Continual reconnaissance was maintained over the Black Sea ports, and the Soviet Black Sea Fleet was located and kept under constant surveillance. Most of these naval forces, particularly the larger ships, remained at Sevastopol. Large numbers of freighters were usually at the port of Odessa. In a special operation, IV Air Corps bombers repeatedly mined the ports of Nikolayev, Odessa, and Sevastopol.

When, on 2 July, the Eleventh Army concentrated its forces and, moving from the bridgehead at Iasi, launched an attack across the Prut, the IV Air Corps shifted its main effort from counter-air to direct and indirect support of the army. Henceforth, the air corps operated continuously in support of the ground forces in their advance through Beltsy to Mogilev on the Dniester and later toward Kishinev, assisting the Rumanians on their way to Odessa. Simultaneous with the German Eleventh Army movements, the Rumanian and Hungarian forces also opened an assault, each supported by its own air units.

In addition to the direct support of the ground forces, IV Air Corps units attacked all rail and highway traffic in the Odessa area, the lower reaches of the Dnepr, and the Zaporozhye-Dnepropetrovsk-Mogilev-Podolskiy area in order to prevent the arrival of fresh Soviet forces and materiel, and later to hinder the eastward withdrawal of the enemy over the Dnepr and Dniester. Primary targets were the rail, vehicular, and ponton bridges across the two rivers, such as the Dniester bridges at Bendery, Rybnitsa, and Soroki, and the Dnepr bridges at Zaporozhye and Dnepropetrovsk. About mid-July German and Rumanian troops crossed the Dniester and advanced to the east and northeast under the continuous support of IV Air Corps units.

Battle of Encirclement at Uman

Covered on the north by the Sixth Army, the First Panzer Group pivoted late in July from the Belaya-Tserkov area toward the southeast, in the direction of Pervomaysk, while the Rumanian Third Army and the northern wing of the German Eleventh Army advanced eastward through Balta. The Seventeenth Army continued its frontal assault to the east, while the Sixth Army was given the assignment of defending the northern flank of Army Group South to the west and northwest of Kiev.

Again committed to the area of main effort, the V Air Corps was to assist the First Panzer Group in a quick drive southeast and, if necessary, support the advancing Seventeenth Army. At the same time, Russian rail and vehicular communications in the rear areas and east of the Dnepr River were to be attacked and counter-air operations continued. This was indeed a big order for the limited forces available. Pressures of time required ever more urgently the full employment of all Luftwaffe forces for the exclusive task of supporting the army in all sectors of its operational area. As a result, the conduct of aerial operations grew progressively into complete conformity with ground force actions. The Luftwaffe, because of its speed and versatility, became more and more the sole means for relieving critical ground situations.

The Russian retrograde movements continued, indicating that the Soviet high command intended to withdraw all available forces across the Dnepr River in order to establish a new line of defense. The bulk of V Air Corps units, therefore, continuously attacked Russian columns west of the river and repeatedly interrupted rail traffic, particularly in the Kremenchug-Cherkassy, Kanev-Mironovka, and Smela-Znamenka areas. East of the Dnepr all railroads in the Konotop-Glukhov-Gorodishche-Priluki-Bakhmach area were also attacked to prevent the arrival of Russian reinforcements and materiel.²⁴

Continuous rainfall and heavy thunderstorms turned roads and paths into quagmires, so that German ground movements were considerably slowed and in some cases made impossible. Thus only by the regular sorties against Soviet railroads and highways by V Air Corps units were the German forces able to inflict heavy losses upon the enemy. Ruthless attacks by bombers and fighters, usually at low altitudes and often carried out under exceedingly difficult conditions, in rain and with low cloud ceilings, slowed the Russian withdrawal, but could not prevent the escape of some Soviet elements to the east.*

By 22 July the ring around the Russian forces at Uman was contracted. Again and again German bombers and dive bombers successfully attacked to prevent enemy breakouts and to repel relief attacks launched from outside the encirclement. In systematic attacks dive bomber units broke the resistance of the encircled forces, particularly in the Uman-Golovanevsk-Novo-Arkhangelsk region.†

In spite of extremely difficult supply problems, Luftwaffe fighter units could be transferred to airfields within favorable striking distance of their targets. Very quickly these units achieved air supremacy over the pocket area and shot down at least 157 Russian aircraft. During the battle of encirclement itself, approximately 420 motor vehicles and 58 tanks were destroyed and 22 batteries put out of action. The large quantities of other weapons, vehicles, and materiel of all types destroyed in the battle could not be estimated. These successes demonstrated the decisive part played by the fighter, bomber, and dive bomber units of the V Air Corps in annihilating the entrapped Russian forces at Uman, the first large-scale battle of encirclement fought in the southern area of the Russian front.

*See Figure 14.

†See Maps Nos. 4 and 7.



Figure 14
Effects of German SD-10 fragmentation bombs
on retreating Soviet forces near Kiev, 1941

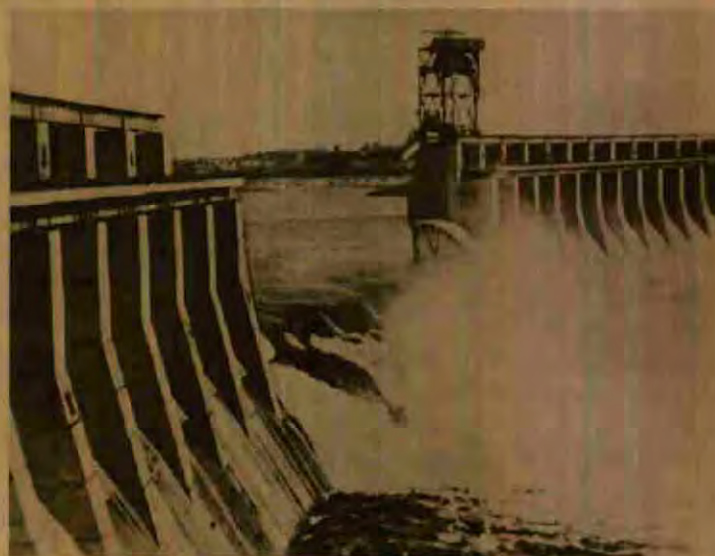


Figure 15
Bridge at Zaporozhye, Russia, taken by German
armor with air support (V Air Corps), 19
August 1941, shown after its demolition

Meanwhile, the Sixth Army had continued its attack and forced the Russians back along a line from Kiev to Korosten. Very slowly the army gained ground to the east. But serious doubts arose concerning the security of its northern flank. The obscure, trackless, marshy, and wooded terrain undoubtedly presented the Soviet Fifth Army with favorable opportunities for surprise attacks against the deep flank of the German Sixth Army. Furthermore, the partisan threat was daily becoming worse, and could not be overlooked. Yet the numerous requests, applications, and demands of the Sixth Army for air support had to be rejected, even in urgent situations. The scant air power available had to be used in the decisive Uman area. It was, therefore, only natural that much friction and discord developed between Sixth Army and V Air Corps.

Finding themselves in serious combat situations, German Army units urgently called for dive bomber and bomber support, and from all quarters came the complaint that the fighters were not around and were not protecting the ground forces from the incessant nuisance raids of Soviet ground attack and bomber aircraft. This constant appeal to the Luftwaffe for air support and the necessity to refuse it (hitherto always readily provided) in favor of the concept of concentrating forces for a major effort severely strained the mutual confidence of command and troops between the ground forces and the Luftwaffe. Complaints became the order of the day. Even Army Group South and the Fourth Air Fleet often had to decide which ground units were to be supported and by what air units.

However, it was impossible for the few fighter forces available in this gigantic operations zone, extending from Korosten through Kiev and from Kremenchug to Zaporozhye, to protect all ground forces. It could not be satisfactorily explained to unprotected and unsupported ground units that the only fighter wing in the entire area, the 3rd Fighter Wing, based at Byelaya Tserkov, could not simultaneously protect the Sixth Army in the Korosten-Kiev area, the Seventeenth Army at Uman, and the First Panzer Group at Zaporozhye. Units felt that they were being neglected, and refused to consider the importance of the principle of power concentration, except when they themselves were in the area of main effort. Every unit wanted fighters overhead and bombs dropped ahead of its front.

Appropriate training in this respect for commanding officers of all ranks and for the troops as well was absolutely necessary, but such indoctrination should already have been given during peacetime and not have to be tried for the first time during a critical war situation.

The V Air Corps supported the XXIX Corps (Sixth Army of Army Group South) in its drive toward Kiev from the south (approximately 4-7 August 1941) by neutralizing Soviet field fortifications, individual enemy bunkers, and artillery positions south and southwest of that city and by hampering Soviet reinforcements moving westward across the Dnepr. During this period the Russians were extremely active in the air and their efforts to concentrate air power in the area were clearly noticeable. The large Luftwaffe air base at Belaya Tserkov, the German front line infantry, and all bridges within Combat Zone South were ceaselessly attacked by Soviet warplanes. In spite of numerical inferiority, the Luftwaffe 3rd Fighter Wing intervened again and again, and successfully provided cover for German ground troops in the area.*

The V Air Corps Halts the Soviet Advance at Boguslav and Kanev

After the encirclement battle at Uman it was a question of destroying the Russian forces still west of the lower Dnepr and of establishing a bridgehead across the river from which operations could continue. For this purpose the First Panzer Group was to drive on to Dnepropetrovsk and Nikolayev and seize any intact bridge over the Dnepr. The Eleventh and Seventeenth Armies (the right wing and center, respectively, of Army Group South) were to follow to the east and southeast and mop up the area west of the Dnepr. The Sixth Army's mission of providing cover for the north flank of Army Group South in the Kiev-Malin-Korosten area remained unchanged. In this operation the V Air Corps was to provide support for the First Panzer Group and continue counter-air and rail interdiction operations.

In the midst of preparations for this operation, when some movements were already under way, the Russians launched a tank and cavalry attack across the Dnepr south of Kiev at Kanev on 7 August, at first in approximately divisional strength, surprising and breaking through the extremely weak outposts and supply installations in that sector. That the Russians planned to drive through Boguslav to Belaya Tserkov in order to break the German envelopment of Kiev was revealed when a simultaneous Soviet attack was made from the north at Malin. Sixth Army elements, consolidated as Army Group von Schwedler,† were dispatched against this serious threat. The 11th Panzer Division of the First Panzer Group, already driving southeast, was turned around and again sent northward.

*Major Guenther Luetzow, Close Air Commander North, controlled the III Group, 77th Dive Bomber Wing and Groups I and III, 3rd Fighter Wing.
 †Named for General Viktor von Schwedler, Commander of the Army Group.

But the divisions which were to seal off the penetration were still far from the scene, and Russian pressure became stronger. An army bakery company and a veterinary company held out at Boguslav under the greatest difficulty and with outstanding courage. From Belaya Tserkov heterogeneous units, improvised for the emergency, were brought without heavy weapons to Boguslav and sent into action. From the airfield at Belaya Tserkov, itself already under heavy Soviet air attacks, light and heavy antiaircraft artillery units were thrown platoon by platoon and gun by gun into action in the area of penetration. Between Boguslav and Korsun-Shevchenkovskiy there was not a single German soldier. A serious crisis threatened. In this situation the V Air Corps, on its own initiative, attacked with every unit available and annihilated the Soviet tank and cavalry forces which had broken through. After Army Group von Schwedler arrived on the scene the V Air Corps was assigned the task of supporting von Schwedler's counterattack.

The action of the flying units was truly dramatic. They knew scarcely any details about the real situation, since there was no time for reconnaissance work before going into action and a normal transmission of orders was not possible. Organizations and their aircrews could only be told that strong Soviet tank and cavalry forces had penetrated into the Kanev-Korsun-Shevchenkovskiy-Yanovka-Boguslav area with the probable intention of breaking through toward Belaya Tserkov. All Luftwaffe units were committed. Each sought its own targets, tanks being given priority. On 7 August, bombers, dive bombers, and fighters took off individually and in three-plane flights (Ketten), and were able to carry out determined, low-level bombing, dive bombing, and strafing attacks despite severe weather conditions of rain, winds, and low ceilings (165-260 feet). Landing only to refuel and reload with bombs and ammunition, these planes continuously attacked every enemy observed in the breakthrough area, achieving excellent results. At the same time, the aircraft reconnoitered so that an overall picture of the situation could gradually be formed. During the first three days alone the Luftwaffe destroyed a total of 148 motor vehicles and 94 tanks, and with improving weather its attacks tended to have a lasting effect, especially around Yanovka.

The enemy ceaselessly continued to try to bring in new forces from the Kanev-Zolotonosha sector in order to press his attack. Therefore German dive bombers continued to attack the bridges at Kanev; one bridge was destroyed and a ponton bridge south of the city eliminated for a long period by numerous direct hits.

After four hard and exhausting days of fighting, the composition of the attacking Russian force became clearer. It was the Soviet Twenty-Sixth Army, comprising three fresh infantry divisions, two depleted infantry divisions, two cavalry divisions, and one or two armored divisions.

Under pressure by the reinforced Army Group von Schwedler, now on the scene and counterattacking, and by the steady attacks of the Luftwaffe dive bombers, the Soviets were forced backward south of Kiev in the vicinity of Kanev. Still they attempted to force a breakthrough to the west by a ruthless commitment of their forces, but were decisively frustrated in this effort by German air attacks, which inflicted extremely severe losses upon Russian units. Luftwaffe fighters were particularly successful against occasional very strong enemy air attacks, shooting down 139 Soviet planes, while bombers of the V Air Corps successfully attacked hostile operational airfields on the east bank of the Dnepr.

On 13 August the Russian command began to withdraw its remaining troops at Kanev across the Dnepr, thus abandoning its offensive plan. In unbroken waves, German dive bombers now struck at the Soviet troops massed at the Kanev bridges, where on 15 August the Russians suffered particularly heavy personnel and materiel losses. By then the bulk of the enemy which had penetrated into the Boguslav-Kanev sector had been destroyed and the remainder thrown back across the Dnepr. Small elements were able to make their way to Cherkassy.

According to the report of Army Group von Schwedler, only the sorties of the V Air Corps stopped the already accomplished Soviet breakthrough for the two long, tense days until army reinforcements arrived. Thus the air corps had averted a serious crisis which otherwise would have had far-reaching consequences for the entire operation in the Ukraine. The commitment of the Luftwaffe in the Kanev area was thereby over and its interrupted task* could be resumed. The continuation of the operation of Army Group South was now possible without too detrimental a loss of time as a result of the unstinting, unflagging, and brave efforts of all units of the V Air Corps.

*The V Air Corps was to support the First Panzer Group advance to the Dnepr to cut off Soviet forces still west of the river and also to continue counter-air and rail interdiction operations.

Air Operations During the Mop-Up West of the Lower Dnepr

Beginning on 17 August bomber units were used in day and night sorties against the traffic center of Dnepropetrovsk, the main targets being the railroad station, thoroughfares, and bridges. These attacks were designed to delay an orderly retreat of strong enemy forces and to prevent the establishing of defenses by the Russians on the eastern banks of the Dnepr.*

The Fourth Air Fleet had specified that Dnepropetrovsk was to be the sector of main effort for Luftwaffe fighter forces. Although the constant action of the past several weeks had considerably reduced the fighting strength (to a total of 44 fighters in all of the V Air Corps units), nevertheless these achieved considerable success, for the Commander in Chief of the Luftwaffe reported that on 17 August fighter units (the I and II Groups, 3rd Fighter Wing and the III Group, 52nd Fighter Wing) of the V Air Corps downed 33 Soviet aircraft and destroyed three others on the ground. Of those shot down, 29 were bombers, mostly DB-3's and SB-3's. And to make the German air victories more impressive, on 30 August Major Luetzow's 3rd Fighter Wing shot down its 1,000th Russian plane.†

Inadequate supplies of fuel and ammunition and excessive distances to targets complicated V Air Corps operations during this period. The distance problem later compelled the air corps to base some units on the Krivoy Rog airfield, where supply conditions were especially bad. Fuel and ammunition could be brought in only by air. The terrain and distances which the services of supply had to surmount steadily grew to gigantic proportions. In most cases, supply columns found that the extremely bad roads made it impossible for them to keep pace with the advance of tactical units. Movements were completely impossible in the sticky mud which resulted from a few hours of rain upon the famous black soil of the Ukraine.†† And the railheads were still too far west, for, despite feverish efforts to restore destroyed sections of track, much delay occurred after each advance before railheads could be moved forward to the proximity of front line troops.

*See Map No. 8.

†Lt. Col. Count Schoenborn, Close Air Support Commander South, controlled the I Group, 77th Dive Bomber Wing, Group II of the 3rd Fighter Wing, and Group III of the 52nd Fighter Wing.

††An old Ukrainian proverb goes: "In summer one bucket of water makes one spoonful of mud; in autumn one spoonful of water makes a bucket of mud."

Despite the fact that German flying officers detailed for duty at Lipetzk in the Soviet Union from 1926 to 1931 had continually reported that German motor vehicles were fully unsuited for the sand and mud conditions of Russia, the German Armed Forces entered the Russian campaign with completely inadequate vehicular equipment. Most German cars and trucks were suited only conditionally for the road and terrain conditions encountered in the East, and during the mud seasons most of them were entirely useless. The German troops attempted to help themselves out of this predicament. With the aid of voluntary Russian laborers* and working in improvised shops, they repaired captured Russian vehicles (especially the very good 1 1/2-ton cross-country model), with which they organized their own supply columns. These measures, however, were no more than an expedient.

Disregard of the early reports and the failure to draw proper conclusions from them in equipping the Wehrmacht must be considered as serious mistakes of the German command, mistakes which in 1941 and later were to work strongly to the disadvantage of the mobility of both the Luftwaffe and German Army units in Russia.

On 19 August the 9th Panzer Division captured the dam at Zaporozhye and established a bridgehead on the east bank of the Dnepr, but shortly thereafter the division was forced to give up the bridgehead.† On 26 August the 60th Motorized Division succeeded in seizing the ponton bridge at Dnepropetrovsk and also in establishing a bridgehead on the far shore.

To achieve closer cooperation with, and more effective close-air support of, the First Panzer Group through the creation of more rapid command channels, the organization of Close Air Support Commander South†† was established under the V Air Corps, with instructions to operate directly with the First Panzer Group against Soviet preparations for a counterattack in front of the bridgehead held by the 60th Motorized Division. Meanwhile, bombers attacked all highways and railroads leading westward to the bridgehead, and took a heavy toll of the Russian forces already approaching, thus weakening Soviet striking power before the counterattack could begin.

*So-called Hiwis (Hilfswilliger or Hilfsfreiwilliger), volunteer auxiliaries, generally foreigners, brought in for driving, construction, and other similar tasks.

†See Figure 15.

††Nahkampffuehrer Sued or Nafu Süd. See footnote p. 69.

Because of the round-the-clock German air attacks a real easing of the situation was achieved. The enemy pressure decreased noticeably so that after 28 August a substantial expansion and reinforcement of the Dnepropetrovsk bridgehead became possible.

Meanwhile, the Seventeenth Army had concentrated its forces until by 31 August it was ready to cross the Dnepr at Deriyevka, east of Kremenchug. A diversionary attack, which was already begun at Cherkassy to deceive the Russians, led them to concentrate their forces near Cherkassy and to use their air forces for a considerable time in a determined effort against this attack.

The office of Close Air Support Commander North* was established by the Sixth Army (north flank of Army Group South). His task was to delay the withdrawal of the Soviet Fifth Army over the Dnepr from the area north of Kiev by attacking troop traffic centers and columns on the roads leading eastward. These west-to-east movements of the Soviet forces were first positively confirmed on 19 August by night air reconnaissance. Generaloberst Halder observed in his diary that "this possibility" had been expected "for days."²⁵ In addition to units of the Close Air Support Commander North, the bomber units of the V Air Corps were also committed against these roads. The attacks were always successful, although the enemy attempted to minimize his heavy losses by marching at night or in small bands on secondary roads and in extended order.

In a surprise attack the German 111th Infantry Division seized the timber bridge over the Dnepr east of Gornostaypol, sent armored units across, and established a bridgehead in the direction of Oster; its advance was first halted at the Desna River. The loss of this very important bridge induced the Soviet command to make a strong commitment of its air forces. The bridge site was continually attacked by Russian bombers and fighters, mostly at low altitudes (as low as 30 feet), using bombs, machine guns, and "Molotov cocktails." The fighters assigned by the V Air Corps to protect the bridge and river crossing--despite a very low level of operational readiness (averaging only eight planes per group)--were able to protect the bridge, and by 24 August had shot down 33 aircraft. On that date a local fog at the Belaya Tserkov airfield prevented fighter aircraft from taking off for their advance fields at Gornostaypol. But favorable weather within the operational area of the Soviet air units and at the Gornostaypol bridge enabled Soviet Rata (I-16) fighter aircraft to attack the bridge at altitudes of about 30 feet and to drop gasoline containers to

*Nahkampffuehrer Nord or Nafu Nord. See footnote, p. 66.

ignite it. Apparently the antiaircraft fire of the Army units at the bridge was too weak to provide adequate protection. Aware that only a few fighter aircraft were available, and with knowledge of the poor weather conditions, the responsible German ground forces command should have immediately provided stronger antiaircraft defenses for this important bridge. Because of the low-level approach of the attacking planes, a more successful defense should have been possible by massed heavy antiaircraft artillery fire, especially in view of the low cloud cover. The loss of the bridge adversely affected further river crossing operations and considerably delayed the attack by the Sixth Army.

On 1 September the Seventeenth Army, effectively supported by the Close Air Support Commander South, established a bridgehead across the Dnepr at Kremenchug. Fighter units successfully defended the river crossing and downed 12 Soviet aircraft on the first day. These units also attacked Soviet ships, including monitors, antiaircraft batteries, and barges, armed motor boats on the Dnepr, and batteries on the east bank of the river. The Seventeenth Army acknowledged the excellent protection of the river-crossing points by the German fighter forces and gave them the greater part of the credit for the successful defense of the positions.

Soviet air units assaulting the Kremenchug bridgehead were attacked with highly favorable results at their airfields and bases around Kharkov, Poltava, and Kiev by bomber units of the V Air Corps. For the next few days German air units operated continuously against enemy troop movements and concentrations which had been detected opposite the bridgehead, and contributed substantially to the expansion and defense of the bridgehead, which was to serve as the southern point of departure for the next major operation: the encirclement of the armies under Buděnyy at and east of Kiev.

During this period, on the southern flank of Army Group South, the IV Air Corps supported the advance of the Eleventh Army across the Dniester and later across the lower reaches of the Dnepr at Borislav. The Fourth Rumanian Army invested Odessa, and many of the IV Air Corps' attacks were directed against the evacuation of Russian troops and materiel from Nikolayev and Odessa. The operations of 18 August were particularly successful when more than 30,000 tons of shipping (warships and merchantmen) were sunk or damaged at Odessa.²⁶ The harbor installations at Sevastopol were likewise attacked repeatedly with bombs and mines. The harbor of Novorossiysk was mined.

In early September the IV Air Corps concentrated its efforts upon supporting the Eleventh Army (on the extreme south flank of the German

Eastern Front) in its crossing of the Dnepr, an especially difficult operation in the open terrain with only a single ponton bridge available for such a wide stream. Strong enemy air attacks against the crossing sites caused but little delay. The starting point for an attack on the Crimea had been won through the energetic support of the IV Air Corps.

The Situation in the South at the Beginning of September

Supported by the Fourth Air Fleet, Army Group South had seized the territory west of the Dnepr from numerically superior Soviet air and ground forces and had established bridgeheads at Borislav, Dnepropetrovsk, and Kremenchug, which became the starting points for the next operations. By versatile leadership and the closest collaboration with the various Army command headquarters, the Fourth Air Fleet and its component units, the IV and V Air Corps, had vigorously and successfully supported the ground troops. In many critical situations the swift and flexible Luftwaffe had been the sole and final assistance in averting serious threats to ground operations, indeed, even in turning such threats into victories. Often the principle of concentrating power at key points had to be accomplished with the utmost determination against the strongest enemy resistance. In opposition to individual--and, understandably human--wishes and demands, the Luftwaffe leadership, conscious of its responsibility, would permit no splintering or dissipation of its numerically weak, constantly shrinking, combat strength.

When, for example, General der schnellen Truppen* Breith, upon return from a visit to Army Group South, reported that the liaison between the armored troops and the Luftwaffe (Generaloberst Greim and his V Air Corps) was not always in accord,²⁷ he seems to have made a biased report. The present author is very well acquainted with the situation at that time. It was not that the liaison between the armored forces and the Luftwaffe was not in harmony; it was because the total Luftwaffe strength deployed in the area of Army Group South was simply too weak to handle all of the demands made on it, and, in addition, the combat readiness of the Luftwaffe had seriously declined because of its steady combat activity.

Successful use of air power at points of main strategic significance was the decisive factor in the summer campaigns of 1941. Von Waldau noted on 14 August that the Fourth Air Fleet had skillfully conducted its operations and that its practice of assigning missions daily had proven to be correct, although the number of demands made it "far from easy" to select the most essential tasks.²⁸

*General of the Mobile Troops (lit. "fast troops") Hermann Breith.

Employment of Antiaircraft Artillery in Combat Zone South

The II Antiaircraft Artillery Corps under General der Flieger Dessloch was deployed in the operational area of the Fourth Air Fleet. The corps was to provide: (1) antiaircraft protection for the mobile units of the ground forces, primarily of the First Panzer Group; (2) support for the Army units, above all, the armored corps and divisions, which were fighting to break strong enemy opposition by attacking pockets of resistance, fortifications of all kinds, and tanks; and (3) protection of airfields, particularly those used by bombers and dive bombers.

The antiaircraft artillery units which were assigned to the Luftwaffe commanders with the army groups or armies (Koluft)* had first of all to provide antiaircraft protection for the army units. Only in an emergency were they to be employed in ground combat.

From the beginning of the campaign all units of the II Antiaircraft Artillery Corps were deployed with the advancing armored and motorized infantry columns so that they could protect the armored spearheads, which the enemy again and again attempted to stop with his bombers and ground-attack aircraft. Moreover, the antiaircraft artillery units--employed in ground fighting--provided valuable arms support for the ground forces by reducing bunkers and pockets of resistance, particularly in the breakthrough of the Soviet border positions, the Stalin Line, and the fortifications at Kiev. They contributed materially, often decisively, to the steady advance of German motorized and armored units.

With the crippling of the Soviet air forces the need for defense against hostile air attacks declined and the use of antiaircraft artillery in ground fighting increased considerably. This artillery, which was used more and more as an armor-piercing weapon, achieved particular success in the tank battles in the Dubno-Rovno-Lutsk area, in the severe tank fighting at Zhitomir and Berdichev, and in the encirclement battle of Uman. Hundreds of destroyed tanks pointed the way to the antiaircraft artillery batteries. The original main task of antiaircraft artillery units, that of air defense, was steadily displaced by that of ground combat, which

*Koluft or Kommandeur der Luftwaffe (Commander of the Air Force) was a German Air Force commander who was assigned to the headquarters of an army group or army as an adviser of the headquarters operations staff on all matters pertaining to the employment of assigned air units, and was also the superior officer of personnel in those Luftwaffe units.

eventually became its primary mission. This was an immediate result of a shortage of effective armor-piercing arms in the Army and the overall mission of the Luftwaffe to support the ground forces.

The great success of the antiaircraft artillery in Combat Zone South is shown by some of the reports which were made from a large number of "exceptional performances" mentioned in situation reports of the High Command of the Luftwaffe. These reports reveal clearly that the principal use of the antiaircraft artillery units had shifted from air defense to almost exclusive ground fighting in support of the Army:

(1) According to the report of 17 July, between 22 June and 15 July the II Antiaircraft Artillery Corps brought down 92 planes and destroyed 250 tanks and 51 bunkers. These successes were achieved as follows: the "General Goering" regiment destroyed 67 aircraft, 193 tanks, and 22 bunkers; the 6th Antiaircraft Artillery Regiment destroyed 17 planes, 4 tanks, and 23 bunkers; and the I Battalion, 7th Antiaircraft Artillery Regiment accounted for 8 aircraft, 53 tanks, and 6 bunkers.

(2) The 23 August report enumerated the total successes of the II AA Corps during the battle for Uman as follows: 53 aircraft shot down; 49 tanks, 93 trucks, 59 machine-gun nests, and 7 observation posts destroyed, as well as 1 infantry battalion, 1 infantry company, and 3 artillery batteries; 1 heavy battery, 1 gun, and 140 motorized vehicles captured; and 1,155 prisoners taken in 35 successful engagements.²⁹

Lastly, the antiaircraft artillery contributed materially to the victories of Army Group South and the Fourth Air Fleet in the Bessarabian and western Ukrainian zones of operations.

Combat Assignment of the Luftwaffe Mission in Rumania

Since October 1940, Generalleutnant Wilhelm Speidel had commanded the Luftwaffe Mission in Rumania, first as Chief and later as Commander in Chief. On 24 June 1941 Generalmajor Bruno Maass replaced Speidel's first chief of staff, Col. Gerhardt Bassenge, GSC, who joined the Operations Staff of the Rumanian Air Force as the Luftwaffe adviser.

When the Russian campaign began, the original functions of the Luftwaffe Mission in Rumania ceased and its combat assignment under BARBAROSSA became its urgent new task. Placed under the command of the Fourth Air Fleet shortly before the campaign opened, its mission was to serve as an advance or field Luftwaffe administrative command,

responsible for developing a ground organization (which already had been started during the preparations for Operation BARBAROSSA) and an aircraft warning system, and for defending the vitally important Rumanian oil-producing areas. To carry out this work the mission staff was expanded and reinforced with qualified personnel.

For the development and expansion of the ground organization to serve units of the IV Air Corps, the Fourth Air Fleet assigned the 40th Luftwaffe Administrative Command Staff for Special Duty (Generalmajor Hermann Ritter von Mann),* which later in the course of the advance was employed in the southern Ukraine and the Crimea.

The following air defense areas were established to protect the oil-producing and processing installations in Rumania under the direction and responsibility of the Luftwaffe Mission in Rumania: the Ploesti area with oil wells and refineries, Constanța with oil storage and shipping installations, the Danube River bridge at Cernavoda (the most vulnerable point of the oil pipeline), the oil shipping port of Giurgiu on the Danube, and the airfields of the mission itself.

German forces available to the mission were one antiaircraft artillery divisional headquarters staff; several antiaircraft artillery regiments; several, frequently changing, additional antiaircraft artillery battalions; air signal units (especially aircraft warning services); an air defense brigade with special units for extinguishing oil fire; Luftwaffe construction units; and the command staff of the 52nd Fighter Wing. The III Group of the 52nd Fighter Wing was equipped with Messerschmidt Me-109's and was later replaced by I Group of the 2nd Training Wing, also an Me-109 unit. The total strength of Luftwaffe forces deployed in Rumania comprised about 50,000 men.

Rumanian fighter units were not assigned to the Luftwaffe Mission in Rumania, but German air defense areas included in many instances Rumanian antiaircraft artillery units, and tactical arrangements were made for cooperation between German and Rumanian fighter units. Rumanian antiaircraft artillery was included within the German aircraft warning network, which the signal officer of the Luftwaffe mission, Colonel Prinz,[†]

*Hermann Ritter von Mann Edler von Tiechler, Generalleutnant 1 November 1940.

†Probably Otto Prinz, who was later Inspector of Armed Forces Signal Communications Headquarters, High Command of the Armed Forces (Inspizient der Wehrmacht Nachrichten Kommandanturen, OKW). Generalmajor 1 September 1943.

had developed and considerably extended in Rumania and Bulgaria since the spring of 1941. But the civilian air defense was an exclusive responsibility of the Rumanian authorities. From his headquarters at Ferme Lupescu, immediately north of Bucharest, the mission commander (General Speidel) directed the operations of the units assigned to him. In the course of these actions an advance command post was organized at the forward airfield at Tiraspol from which Speidel directed the employment of his forces, while the chief of staff carried out the routine affairs at the Ferme Lupescu headquarters. ³⁰

The scope, nature, and effect of Soviet air attacks against Rumanian territory are indicated in the following selected reports of the High Command of the Luftwaffe:

(1) The report of 26 June stated that more than 50 Soviet sorties were flown over Rumania "in the report period," with Constanța as the principal target, and that after several attacks on preceding days, the city was attacked four times on 25 June and at dawn of the following day, causing slight damage. One Russian formation of 20 to 30 aircraft making a dawn flight against Ploesti flew erroneously toward Constanța, where it was dispersed by German fighters, losing 17 of its planes. Soviet aircraft, operating from 23,000 feet, dropped 17 demolition bombs upon Bucharest, damaging a few houses and injuring some of the populace. ³¹

(2) The 14 July report noted that the Astra, Romana, and Orion oil refineries on the southern outskirts of Ploesti were attacked upon the afternoon of 13 July by six Soviet aircraft flying at 6,500 feet. The attack destroyed 5 large and 6 small lubricating oil storage tanks and 12 loaded railroad tank cars, and so seriously damaged 1 oil distillation plant that it would remain inoperable for a short time. Fighters shot down four of the attacking aircraft. Near Tulcea, three Soviet aircraft were sighted during the afternoon, and at night enemy aircraft penetrated to Galați, Iași, Tulcea, and south of Constanta, but no bombings were reported. ³²

(3) On 10 August, Soviet aircraft, operating between 9,800 and 13,000 feet in clear skies, thrice attacked Cernavodă, dropping some 17 bombs upon the city. The Danube bridge was the apparent target since two bombs struck the bridge structure, lightly damaging the stringers and a pier of the bridge and igniting an oil pipeline. Traffic was interrupted principally by the fire damage. A factory producing screws also received slight damage. At 0557 of the same morning, in slightly cloudy weather, seven Soviet SB-2 bombers attacked the harbor at Constanța from an altitude of 1,600 feet, but the 25 bombs released were dropped prematurely

into the sea because of heavy antiaircraft artillery fire. They were not intercepted by German fighters. A formation of 10 Soviet DB-3 long-range bombers was sighted some 25 miles east of Constanța, but it jettisoned its bombs and withdrew at 0612 because of coming under attack by German fighters. During these attacks Russian pilots evinced a skillful use of weather and lighting conditions for defense, and showed an adroit ability to change altitudes to advantage.³³

(4) A summary of events, printed in the report of 26 October, showed that from 22 June to 21 October 1941 units of the Luftwaffe Mission in Rumania had shot down 143 enemy aircraft (73 by fighters, 69 by antiaircraft artillery fire, and 1 by other units). Mission fighters also destroyed 4 tanks.³⁴

Flights over Rumania by individual, and sometimes by several, Soviet reconnaissance aircraft and bombers were also carried out on days not covered by the foregoing reports. The penetrating enemy aircraft usually turned away immediately upon encountering antiaircraft artillery fire and avoided combat with German and Rumanian fighters whenever possible. The Russians' training in night flying was obviously very poor. Furthermore, the Rumanians complicated Soviet night air operations by using cleverly devised dummy installations with decoy fires and other deceptive features. A small lake north of Bucharest which was suitable as a navigational point had been drained to deprive Soviet airmen of such a favorable opportunity for orientation. When the German operations against the Crimea began in the autumn of 1941, the hitherto almost daily Russian air attacks diminished considerably. The number and effect of the few Soviet air penetrations were no longer worthy of mention because the Russians at this time concentrated all their air power in the bitter struggle for the Crimea.

Von Waldau recorded in his diary on 15 July that "in the Rumanian zone all efforts of air attacks against the fuel depots of Constanța and Ploegsti failed. The bulk of the penetrating Russians were shot down."^{35*} Thus, from the first day of operations all enemy air objectives in Rumania, despite almost daily air attacks, were protected successfully without suffering great damage, and as a consequence, the entire oil production and the defenses thereof could proceed essentially as planned without limitations. The decisive result of this achievement was the safeguarding of regular fuel deliveries to Germany for its conduct of the war. German losses in these operations were slight.³⁶

*Von Waldau is probably glossing over the rather minor losses, such as those indicated in the report for 14 July 1941. Some material damage was indeed caused in the raids of 13 July.

Chapter 5

SECOND AIR FLEET OPERATIONS LEADING
TO THE BATTLE OF KIEVArmy Group Center Operations

The first great objective assigned to Army Group Center (Field Marshal von Bock) under the provisions of the High Command of the Armed Forces (OKW) Directive No. 21 of 18 December 1940 (Operation BARBAROSSA),* was the following:

In the operational area divided by the Pripyat marshes into a northern and a southern half, the main concentration of effort is to be formed north of this [marsh] area. Here two army groups are to be committed.

To the southern of these two army groups--center of the entire front--falls the task of routing the enemy forces in White Russia by especially strong armored and motorized units breaking out of the area around and north of Warsaw.¹

On 22 June, Army Group Center consisted of 31 infantry, 7 motorized infantry, 1 cavalry, and 9 armored divisions.² Army Group Center planned to exploit the favorable curve of the boundary projecting toward Warsaw by employing a large-scale pincer movement to envelop and destroy the Soviet forces concentrated in the Bialystok-Minsk area. For this purpose, the Second Panzer Group (Generaloberst Heinz Guderian) was to advance from the Brest-Litovsk area in a flanking movement from the south, while the Third Panzer Group (Generaloberst Hoth) was to advance from the Suwalki Tip in a flanking movement from the north. The Fourth Army (Field Marshal Guenther von Kluge) was to follow up the Second Panzer Group, and the Ninth Army (Generaloberst Adolf Strauss) was to follow the Third Panzer Group.

Army Group Center was opposed by Soviet forces which were almost equal to it in strength. These forces, under Marshal Semën

*See Appendix I and Map No. 3.

Konstantinovich Timoshenko, were composed of 36 infantry, 8 cavalry, and 2 armored divisions and 9 motorized mechanized brigades. The larger part of these forces was concentrated in the border area of Bialystok, while approximately one third lay as far back as the Minsk area.³

The armies and panzer groups of Army Group Center began their advance into Russia at 0330 on 22 June, their movements proceeding as planned. In the double battle of Bialystok and Minsk, the first battle of encirclement in the eastern theater, strong Soviet forces were destroyed, although some elements succeeded in escaping to the east from both pockets. The High Command of the Armed Forces reported on 11 July that 328,898 prisoners--including several senior general officers--had been taken and that 3,322 tanks, 1,809 guns, and large quantities of other war material had been captured.⁴ With this success Army Group Center had burst open the gate to the center of the front.

Armored units then continued eastward and broke through the Stalin Line, which was anchored on the Dnepr and Dvina Rivers and supported by the strongly fortified settlements of Rogachev, Mogilev, Orsha, Vitebsk, and Polotsk. By-passing Mogilev on both sides, the Second Panzer Group forced its way on 11 July across the Dnepr and on 16 July took Smolensk in an attack from the south. The Third Panzer Group advanced through Vitebsk to Yartsevo, and with its right wing closed the ring to the north and northeast around the Soviet forces near Smolensk, except for a narrow gap only a few miles wide to the east.

This led to the second great battle of encirclement (named for its focal point, Smolensk) which continued for nearly four weeks.* The battle was fought in an area bounded on the west by the Dnepr and extended in a great ring around Smolensk, commencing at Bykhov and passing along the upper Sozh River north of Roslavl and through Yelnya and Belyy to Velikiye Luki. In the individual battles around Mogilev, Orsha, Polotsk, and Smolensk the Soviet forces were wiped out. On 5 August the last resistance collapsed in the steadily contracting pocket. Again the Russian prisoners numbered in the hundreds of thousands, while thousands of tanks and guns were also added to the booty.

While the fighting in the Smolensk area was still in progress, Guderian's Second Panzer Group fought at Roslavl against strong enemy

*See Maps Nos. 5 and 9.

forces attempting to break open the Smolensk pocket from the south and southeast. Finally, between 9 and 24 August the enemy was compressed in the Gomel-Klintsy area by elements of the Second Panzer Group and the Second Army⁵ and for the most part destroyed. Soviet forces near Mozyr were thrown back to the east, and after heavy fighting in the Velikiye Luki area the northern wing of Army Group Center made contact at Kholm with the southern wing of Army Group North. Meanwhile, the infantry corps had closed up on the central front of Army Group Center and in the vicinity of Yelnya the army group had to go over to the defensive. Until the end of August very strong Soviet forces attacked this protruding bulge in the front with the intent of retaking the Smolensk area. In general, these powerful, threatening Russian counterattacks could be repulsed by hard fighting,⁶ but early in September strong enemy pressure forced the withdrawal of the Yelnya salient.

A land bridge between Army Groups Center and South was effected as a result of the successful encirclement battle of Gomel during the latter half of August.* Until then, the Pripyat marshes, which separated the groups, had been a constantly threatening area, a gap serving as a favorable assembly area for dispersed enemy forces and partisan bands.

Thus the German Army created the conditions which were necessary for the later and great encirclement movement far to the east of Kiev which closed in a gigantic ring around the armies of Marshal Budëhny.

Operations of the Second Air Fleet

Mission of the Second Air Fleet

When Germany launched its attack against Soviet Russia, Field Marshal Kesselring's Second Air Fleet (II Air Corps [General der Flieger Loerzer] on its right and the VIII Air Corps [General der Flieger von Richthofen] on its left) was required to coordinate its operations closely with those of Army Group Center.[†] Commensurate with the principle of concentrating forces at key points, the Second Air Fleet was the strongest air fleet in the eastern theater. Its mission was to eliminate Soviet air

*See Maps Nos. 8 and 9.

†See Figures 16 and 17.



Figure 16
Arrival of Field Marshal Kesselring to inspect
Second Air Fleet units in Russia, 1941



Figure 17

Combat situation conference in Russia, 1941, Second Air Fleet
L. to R.: Col. Ewers, Adjutant, Field Marshal Kesselring, Col.
Hans Seidemann, Chief of Staff, and Lt. Col. Klaus Uebe.



Figure 18

Fortress of Brest-Litovsk after destruction
by the Luftwaffe, 1941

power, thereby achieving air superiority or supremacy, and to support the ground operations of Army Group Center, particularly those of the Second and Third Panzer Groups.⁷ Opposing the Second Air Fleet were two Soviet air divisions in the border area, backed by seven others farther to the rear, some identified and some presumed. Especially strong concentrations of air units were reported in the Kobrin-Slonim-Grodno-Bialystok area.

Despite the strength of the Second Air Fleet it could not fully carry out both of its tasks during the first days of the campaign. Thus, the first and most important task for the bulk of the air fleet units was to secure air superiority and, if possible, air supremacy. Kesselring later commented that it had been clear to him "that even these tasks could not be completely accomplished at once, but only one after the other."⁸

Initial Air Operations

For tactical ground reasons the High Command of the Armed Forces (OKW) had, contrary to the wishes of the Luftwaffe which could not make a night formation flight, ordered the attack to begin at 0330. For that reason there existed a danger that the Soviet air forces, warned by the early ground attack, would take off in the early dawn of 22 June 1941 in order either to throw themselves against the German units on the ground and in the air or at least to evade German air attacks by moving to alternate fields in the rear.

To cope with either or both of these possibilities, appropriate instructions were issued. Lt. Col. Paul Deichmann, Chief of Staff of the II Air Corps,^{*} later related that the Luftwaffe yielded to the Army's objections and accepted the "unfavorable" attack time, which was bound to give the Soviet air units a 40-minute advance notice. In order to prevent Soviet exploitation of this warning, however, the II and VIII Air Corps (Second Air Fleet) adopted a somewhat dangerous plan of operations. Three Luftwaffe planes, manned by crews with night flying experience, attacked each Russian airfield upon which fighter aircraft were based.

^{*}Also Chief of Staff of the German Supreme Commander South (Kesselring) 1942-43, and, after World War II, Project Control Officer of the USAF Historical Division German Monograph Project in Karlsruhe, Germany. See biographical section.

Flying at maximum altitudes over "unsettled marsh and forest areas," these aircraft crossed the border and arrived undetected over the enemy fields to bomb them at the very moment the German Army opened its initial assault. These air attacks were intended to cause such confusion at the enemy fighter bases that the take-off of aircraft would be delayed. The attacks were a complete success. "Only at one field," Deichmann observed, "was a fighter unit met which was just taking off. The bombs fell in the midst of the . . . unit so that the aircraft lay destroyed in take-off formation at the end of the field." During the first few days of the campaign the II Air Corps thus met the Soviet fighter defenses and systematically destroyed "all aircraft" on fields within a 185 mile radius.^{9*}

The precisely prepared operational plans for the first day of the air attack, including target assignments and arrangements for continuous attacks against every enemy aircraft located, made it possible to achieve within the first three days in the combat zone of Army Group Center air superiority which, although limited in time and space, was soon extended to outright air supremacy. The apparently incredible reports that approximately 2,500 enemy aircraft had been destroyed were doubted by most people, including Goering, but a careful check, made after the German ground forces had occupied the terrain, proved conclusively that the actual figures were even higher than had been reported.¹⁰ Thus the first task of the Luftwaffe, the neutralization, paralysis, and destruction of Soviet air forces, had been achieved by the unprecedented tactical victories of German air units.

Beginning on the third day of operations in Combat Zone Center, the direct and indirect support of the ground forces became the primary task of the Second Air Fleet, taking precedence over all other operational demands, even those of a strategic nature.

*This evidence is supported by General v. Richthofen who wrote in his diary on 22 June: ". . . the single-engine fighter and dive-bomber pilots could not yet fly in formation. . . . Thus certain aircrews experienced in night flying . . . attacked the Soviet bases with bombs at the moment when German ground forces opened their attack. The confusion produced was so great, . . ." that no enemy air units had taken off before the German bombers arrived. See von Richthofen diary, Karlsruhe Document Collection.

Influence of II and VIII Air Corps on the Battles of Encirclement at Bialystok and Minsk

On 22 June the enemy had been completely overwhelmed in Combat Zone Center: his border positions were broken through at all points and every bridge over the Bug River was taken intact. On the right wing of Army Group Center an attack was launched by the Fourth Army and the Second Panzer Group. The principal river crossing over the Bug took place within the effective range of the guns of the fortress and citadel of Brest-Litovsk. Although the fortifications were obsolete, the thick walls of the fortress still offered sufficient protection for a number of batteries which could exert a considerable effect upon German troops crossing the river. Furthermore, since the armored units had orders to push forward to the east after crossing without taking time to reduce the fortifications on both banks, the Russian batteries posed a serious threat. For that reason, at daybreak on 22 June, the II Air Corps (Second Air Fleet)--ordered to work closely with the Fourth Army and, more especially, the Second Panzer Group--was to eliminate or at least neutralize the enemy batteries in the area of the fortress of Brest, especially those in the citadel.

Still another danger existed for the armored elements advancing on the north flank. Here, north of Brest-Litovsk, in the otherwise nearly level terrain, a conspicuous commanding range of hills extended to the east and west, paralleling the line of advance of the armored units. These hills were reported to be strongly fortified and emplaced with numerous gun batteries, thus forming a potential flanking danger to the advance of the Second Panzer Group. Rocket batteries (Nebelbatterien) had been provided to combat these artillery positions, but these batteries could only reach the western side of the hills.¹¹

In order not to endanger the first points of the armored spearheads to the east, the appropriate ground forces command requested the II Air Corps to eliminate or continually keep out of action the Russian batteries in the Brest fortress area and in the hills to the north. Based upon experiences in the campaign in France, especially in the crossing of the Meuse River near Sedan on 13 May 1940 and later, Guderian (Second Panzer Group) did not attach much importance to single concentrated attacks against known battery positions, but requested instead that a number of dive bombers, even if only a few, be kept constantly in the air over the two danger zones to immediately attack any battery that opened fire.

Although this tactic contradicted standing operating procedures for dive bomber units (normally they would be employed in close, concentrated attacks of annihilation), the II Air Corps decided for once to commit its dive bombers as the panzer group requested. The bombers were to pin down and keep silent all enemy batteries, since this was more important than the destruction of only a part of the enemy gun positions. Furthermore, the dive-bomber flights were ordered to attack every enemy target located, particularly the artillery, before returning to base after being relieved by another flight. In this exceptional operation complete success was achieved, for the enemy batteries remained silent during the entire period.

The German armored group advanced swiftly, with the infantry divisions of the Fourth and Ninth Armies following closely behind. Bitter fighting continued only around Brest-Litovsk, where the important citadel still held out for several days and blocked the railroad and highways over the Bug and Mukhavets Rivers with small arms fire.^{12*} General Deichmann later commented that a few days after the successful crossing of the Bug at Brest, a regimental commander of the 45th Infantry Division arrived at the air corps command post at Biala Podlaska and requested help in capturing an encircled Red Army commissar school at Brest, which defended itself stubbornly and hampered the forwarding of supplies to the Second Panzer Group. Both regimental and divisional resources and attacks by corps dive bombers (then able to carry only 1,100-pound bombs) had proven inadequate for destroying the school's fortifications and thereby breaking the garrison's resistance. As a solution the air corps then used heavy bombers, one of which was manned by a specially selected crew and carried a bomb weighing nearly two tons which had been brought up from the rear. This bomb tore open the fortification and capitulation soon followed.^{13/}

*See Figure 18.

/The High Command of the Luftwaffe reported the success of this special attack on 30 June 1941. Five bombers scored six direct hits with 1,100-pound demolition bombs (SD-500) on the right (north) side of the citadel on the morning of 28 June, but the garrison's resistance remained unbroken. Late in the afternoon seven bombers dived upon the fort, one of them dropping an SC-1800 bomb weighing almost two tons and the others dropping twelve 1,100-pound bombs (SC-500), all of which struck the target and forced the garrison to capitulate. See Oberbefehlshaber der Luftwaffe, Abt. Ic, Geheim Kdos, Lagebericht Nr. 660, 30.6.1941 (C. i. C. of the Luftwaffe, Intelligence Branch, Top Secret, Situation Report No. 660 of 30 June 1941), p. 18. Karlsruhe Document Collection.

The Second Panzer Group, followed by the Fourth and Ninth Armies, reached Slonim and the Third Panzer Group reached Wilno on 24 June, the same day on which Napoleon I had taken Wilno and Kaunas in 1812. In continuous sorties the II Air Corps supported the advance of the Second Panzer Group, while the VIII Air Corps smashed all resistance to the more northerly Third Panzer Group.

On 25 June, despite constant resistance by Russian tank units, German armored forces took Slonim and Baranovichi and sealed off from the south the Soviet forces in the Bialystok-Wilno-Minsk-Baranovichi area. In the meantime, other German ground forces closed ranks toward the northeast and captured Bransk, Bocki, and Hajnovka. In repeated counterattacks, using motorized forces, the Russians sought to break through the envelopment, especially in the region of Grodno, near Kuznica, east of Osowiec, and at Slonim. German motorized troops, advancing by way of Kobrin to Kartuz-Bereza, continued on to Byten, some 19 miles south of Slonim.¹⁴

The High Command of the Luftwaffe reported on 28 June that most of its bombers and dive bombers were committed against the Soviet forces caught in the Bialystok-Zelva-Grodno area and that these enemy forces, some apparently disbanding, were seeking refuge in the forests to the east or south, but were being hampered in their withdrawal by roads blocked with destroyed vehicles and vast forest fires in the areas around Suprasl (northeast of Bialystok) and Bolshaya Berestovitsa (east of Krynki).¹⁵

In order to evade the destructive attacks of the Luftwaffe, the enemy withdrew mainly at night. By day he divided his retreating forces into very small units, which fell back, exploiting the generally very difficult terrain and often proceeding cross-country far from roads and pathways. The Luftwaffe's bombing attacks frequently came too late, since the enemy, warned by the appearance of the reconnaissance plane, went into the forests before the bombers arrived.

This form of retreat compelled the High Command of the Luftwaffe to adopt a new operational procedure, the so-called armed reconnaissance. Flying on a broad front in flights of three planes or in formations of five to six, the bombers did their own scouting and immediately attacked every enemy target seen.

The impetuous advance of the German armored groups created deep, open, and either unprotected or weakly protected flanks which formed a lasting danger to the Wehrmacht. Again and again strong

enemy forces attacked the flanks; again and again critical situations resulted which could be cleared up only by the swift and versatile Luftwaffe. Thus on 24 and 25 June strong bomber and dive-bomber units of the VIII Air Corps continuously attacked and smashed Soviet armored units in the Kuźnica-Odelsk-Grodno-Dabrowa area, destroying numerous tanks and motorized vehicles. Von Richthofen wrote in his diary that when strong Soviet tank and cavalry forces from Bialystok and Lunna attacked the VIII and XX Army Corps (Ninth Army) near Grodno and Kuźnica on the afternoon of 24 June, the "commitment of the entire air corps followed." By evening the Soviet attack was halted, with 105 tanks destroyed. "All crews had abandoned their tanks in terror during the attack, [and] horses without riders, broken loose from the wagons, galloped about the land." Von Richthofen also noted that the morale of the German XX Corps, west of Grodno at Nowy Dwór, was excellent and confident, and that the support by the air corps was "greatly appreciated." 16

A serious crisis also arose at Lida. The enemy had successfully counterattacked and formed strong bridgeheads over the Neman River at Mosty, Orlya, Bolitsa, and Ruda, from which he began an attack toward Lida, with his main effort at Ruda. Only weak security forces opposed him. The Soviet attack quickly gained ground and thereby became a serious threat to the flying units of the VIII Air Corps, which had been moved up to the area around Lida. If the Third Panzer Group had been forced by the counterattack to divert elements for the protection of its extended flank, this would have been a great defensive victory for the Soviet forces. Therefore, the main point of attack by the VIII Air Corps was immediately transferred against this dangerous Russian operation.

The air units based at Lida, including a ground-attack group, fought primarily to protect their own bases. Dive bombers attacked all enemy forces which moved north over the Neman. Because of the difficult terrain, the forward boundary for bombing attacks by the twin-engine fighters and bombers was the Neman. Large enemy elements, especially artillery, were destroyed before they could join in the fighting. The flying units in front, based around Lida, were able to continue to attack successfully despite deterioration of the weather. Sufficient time was thereby gained by the action of the VIII Air Corps to permit the V Army Corps to be brought up to help beat off the menacing Soviet attack. The early advance of the ground-attack units of the air corps had worked with success, increased the number of possible sorties, and thus raised the effectiveness of this arm to the highest degree. The decisive aid of the Luftwaffe helped to achieve a defensive victory, and the Third Panzer Group retained freedom of action in its further advance.

The long-range reconnaissance squadrons of the Second Air Fleet and its II and VIII Air Corps, together with the reconnaissance units attached to the army group and the armies, carried out continuous air reconnaissance embracing the entire operational zone of Army Group Center and the Second Air Fleet in which the most important target areas were covered by overlapping aerial photographs. An air photo of Orsha taken during the first days of the campaign showed, among other things, a large number of vehicle-like objects drawn up in many rows close to a large hangar-like building. On the strength of this air photo, the II Air Corps received a personal order from Goering that combat vehicles stored at Orsha were to be immediately attacked with all forces. According to a High Command of the Luftwaffe (OKL) report of 25 June, a supply depot, observed north of Orsha on the preceding day by long-range air reconnaissance, was occupied by some 2,000 tanks and combat vehicles.¹⁷ This was also mentioned by General Halder in his diary entry for 26 June 1941.¹⁸

Although II Air Corps' headquarters believed that the vehicles to be attacked were not combat vehicles but possibly agricultural machinery or something of a similar nature, the explicit orders of Goering, nevertheless, had to be carried out. Accordingly, the supposed tank depot (possibly repair shop)--the aggregation of vehicles and the large hangar next to it--was attacked on 27 June by all available forces. On the following day the Luftwaffe High Command reported a successful attack by 20 bombers upon the motor vehicle park at Orsha, hitting "four hangars and striking among the parked vehicles at the freight station," as well as the bombardment of "a large building" northwest of these targets.¹⁹ When Orsha was later captured, it was discovered that the "tank depot" reported by air reconnaissance and attacked by the bomber unit was merely a collecting point for horse-drawn vehicles. Most of the equipment stocked in the large building (saddles and items for cavalry and horse-drawn vehicles) had been destroyed. This operation has been mentioned, first, to show that even the highest leadership of the Luftwaffe, the Commander in Chief himself, directly intervened in the operations orders of the higher and intermediate Luftwaffe operations staffs. Secondly, it illustrates how an insufficient evaluation of a reconnaissance report as an alarm message was transformed into an incorrect employment of fighting forces.

The ring about the enemy forces at Bialystok was closed and the first "pocket" in the East was formed by the rapid advance of the Fourth and Ninth Armies. Despite the strongest commitment of the Luftwaffe, it and the armies initially succeeded only in delaying the exit of the Soviet forces to the east. But when the ring closed, the II and VIII Air Corps of the Second Air Fleet were employed repeatedly against violent and desperate Russian attempts to break out to the east and the southeast.

On 1 July the Russian forces in the pocket were destroyed or captured. The armored groups, whose wings had again pushed to the front, supported by relays of flights of all of the flying units of the Second Air Fleet, encircled anew in the Minsk-Novogrudok area the enemy forces which had escaped from the Bialystok pocket and the new Soviet forces which were found west of Minsk.

In the fighting against the retreating enemy infantry and motorized columns, it had soon become evident that the commitment against so-called highway traffic centers was not as effective as it had been in the more highly developed West. Although during the campaign in the West the entrances and exits of a community were frequently closed and the through traffic blocked by dive-bombing attacks, this procedure was not to be followed in the East because Soviet settlements--villages and even the smaller cities--were laid out in an unplanned and dispersed fashion and generally consisted of single wooden or earthen houses. Massive stone buildings were to be found only in the centers of the medium- and large-sized cities.* The Soviets could simply march or drive around these debris obstacles without traffic jams occurring at a highway junction. Favorable and more effective, however, were the attacks launched against crossing sites over smaller rivers or even over brooks, especially when these streams rose during periods of high water in the spring or autumn or even after heavy thunderstorms.

On 27 June the two armored groups closed the second great pocket just west of Minsk. Four Soviet armies were encircled and nearly destroyed. In an order of the day, Field Marshal von Bock of Army Group Center emphasized that the success of this battle of annihilation was possible only through the support of the Second Air Fleet (which had fought in close cooperation with the army group).

While the continuous support of the Third Panzer Group by von Richthofen's close support corps (VIII Air Corps) in the fighting on the northern wing of Army Group Center encountered no difficulties because of the corps' special composition, organization, and equipment, which enabled it to perform its mission well, conditions on the southern wing of the Second Air Fleet (II Air Corps) were considerably less favorable.²⁰ Here, in the first few days in the combat zone of the II Air Corps the armored spearheads pressed rapidly ahead to the east, driving along two roads. At first substantial enemy forces to the sides of these roads

*See Figure 19.



Figure 19
Russian village showing the common
dispersed character of houses

remained completely unmolested. Then, in incessant and often extremely bitter fighting, the infantry divisions of the Fourth Army gradually mopped up the Soviet elements in the by-passed territory.

The close-ground-attack units of the II Air Corps were employed immediately in front of Guderian's armored spearheads in order to break at once any resistance that developed.²¹ The limited range of these units made it necessary to move their bases quickly to points close behind the armored group, for only thus was it possible to achieve a close cooperation between the armored forces and their supporting units. The fighters also had to be brought forward early to provide at the same time protection for the support units, since an eventual revival of enemy air activity had to be reckoned with, despite the devastating losses suffered by Soviet flying forces in the early days of the campaign.

It now turned out that it was impossible for the II Air Corps to direct the bomber units and the long-range reconnaissance aircraft (which for logistical reasons were based farther to the rear), carry out the supply of all units, maintain contact with the Fourth Army and the Second Panzer Group, and at the same time insure constant close cooperation between the close-support air units (often based over 60 miles farther to the front) and the individual armored corps.

After a few days of action, therefore, it proved necessary to provisionally establish a so-called close-support air commander (Nahkampffuehrer), Col. Martin Fiebig, who henceforth directed the light units (with the help of a small operations staff acting under orders of the II Air Corps) and cooperated closely with Guderian's armored group and its air corps.

In indirect support of the ground forces, the Luftwaffe made successful attacks from 26 June upon the railroads lying in the zone of operations, those leading to this zone, particular railway junctions, and especially the rail routes of Minsk-Borisov-Orsha and Minsk-Molodechno and the rail junctions of Orsha, Zhlobin and Osipovichi. Close by, occupied Soviet airfields were successfully attacked again and again, in particular the airfields in the Minsk-Bryansk-Smolensk-Polotsk area, during the early morning and late evening hours of 29 June, and a major effort against the airfields around Gomel was made on 2 July.

In the combat area of the encirclement battles it was often extremely difficult to distinguish between friend and foe. Often the enemy could be recognized only because he left his vehicle upon the approach of German aircraft and tried to reach the nearest woods.

Because of the difficult terrain, the constantly changing ground situation, and the frequently poor contact between ground forces and air units, the German ground forces were easily in danger of being bombed by mistake. Despite the precautionary measures ordered, such errors were not completely avoided. Guderian wrote that on 1 August, while he was on the line of advance of the 23rd Infantry Division, he had been involved in an attack by German bombers which inflicted "serious losses" upon nearby personnel.²²

The attack zones which had been initially established by the higher operations staffs of the Luftwaffe and Army (no bombs were to be dropped on the German side of these lines) proved to be ineffective in the rapid, widely dispersed movements of the armored forces. The bomb lines were too rigid and became obsolete too quickly to be useful. Fortunately the forward German ground units had been repeatedly ordered to identify themselves upon the approach of German aircraft by displaying swastika flags, ground signal panels, smoke signals, and Very pistols, a procedure which was always possible during periods of German air superiority.²³ This practice became difficult only when enemy air activity revived and when the Soviets also made use of German recognition signals.* Therefore many attacks upon Soviet troop concentrations and columns did not take place because the approaching German flyers were unable to make positive identification of the troop units. Moreover, severe losses often occurred when Luftwaffe aircraft dived low enough to determine the target's identity. Frequent changes in flare signals were therefore an absolute necessity.

The establishment of the enemy's identity was facilitated considerably by the increased use of Luftwaffe signal service liaison troops, as well as by fighter-control and dive-bomber-control units which operated with the most advanced ground troops. By their assistance the objectives and required time of attack could be radioed to the flying units. Thus combat Luftwaffe planes were brought in proximity to the targets, or directed to new objectives when the ground situation had suddenly changed.

*Soviet troops were avid users of German identification signals. German prisoners were often interrogated to determine precisely what signs were in current use, and these procedures were then put into practice among Soviet forces. Sometimes Russian troops were dressed in German uniforms. See Generalleutnant Klaus Uebe, Russian Reactions to the German Air Force, USAF Historical Studies No. 176.

But it was demonstrated again and again that the ground forces needed to be thoroughly trained in the strict use of the recognition signs. The anxiety, frequently well founded, that the signals might also become known to the enemy, who would exploit them for his own attacks, often led to a disregard of their use.

The crossing sites of the retreating enemy over the Neman, Berezina, and Shara Rivers and the congestion of Soviet troops and vehicles of all kinds at these points were attacked with favorable results again and again by strong Luftwaffe forces. Before any operation against railroad and highway bridges was carried out an agreement with the controlling army staff in this sector of the front was urgently needed in order to clarify which bridges should not be destroyed because of their value for the smooth advancement of German armored and other ground units. In such cases, the attack must be limited to missions against the enemy forces jamming the bridges. An outstanding success was the destruction of the large railroad bridge at Bobruysk, which was doubtless of special importance to the Russians for the supply of new forces and materiel of all kinds.²⁴

If the Russian was already a master of rapid, though mainly primitive, repair of destroyed railroad bridges and sections of track, his performance in repairing the Bobruysk bridge was particularly impressive. In 24 to 36 hours over 1,000 skilled workmen, laboring under the direction of the People's Commissar for Communications, restored the bridge so that it could be crossed. Western railroad specialists, for safety considerations, would certainly have refused to permit trains to proceed over such bridges, but the Russian, in his stubbornness and with his disdain for human life, traveled over them without hesitation.

While the Second and Third Panzer Groups, supported by the close support forces of the Luftwaffe, advanced on both flanks of Army Group Center, German bombers attacked on a greater scale and with good effects the roads and railways and the railway junctions in the Mozyr-Roslavl-Smolensk-Vitebsk-Polotsk-Daugavpils area.

Halder remarked in his diary that the Luftwaffe now appeared to have interdicted the Russian railroads, even those far in the Soviet rear: "The number of track sections occupied with standing trains is increasing satisfactorily." He noted that this continuing work had resulted in a great number of freight cars being shunted onto sidings to the east of Gomel (Unecha) as well as on lines situated to the west and southwest of this center. Many of these were "loaded with wagons and tanks." Halder believed that this situation indicated either an attempt to provide

dispersed mobile units with new materiel or an attempt to move the mobile units.²⁵

On 30 June the High Command of the Luftwaffe reported on the German Air Force participation in the encirclement battle at Minsk, noting that strong units of bombers and dive bombers attacked the fleeing enemy, concentrating on the areas north of Ruzhany (southeast of Volkovysk), at Derechin (east-northeast of Volkovysk), and Novogrudok. Their objectives were "columns and river crossings," with rail interdiction operations in the Russian rear, the main efforts being launched against the junctions of Smolensk and Polotsk.²⁶

At this point, the Soviets attacked with strong air forces in an attempt to stop Guderian's armored forces from crossing the Berezina at Bobruysk and later the Dnepr. On 30 June large daylight air battles were waged over the Bobruysk area, where Soviet air forces sought to check the German crossing. In the aerial combat over this sector the Russians lost 110 aircraft.²⁷ Guderian, observing these air battles, attested to the excellence of the cooperation of Col. Werner Moelders* and his airmen, but complained that the liaison with the II Close Air Support fliers under General Fiebig did not work quickly enough. Guderian also noted that air reconnaissance had detected fresh Soviet forces assembling in the Smolensk-Orhsa-Mogilev area.²⁸

In regard to the armored group commander's criticism of Fiebig, it should be noted that smooth and close cooperation between the armored units and Fiebig's command could not have been properly performed in the brief period of the command's existence (since the end of June 1941). In the field of signal communications, especially, there must still have been malfunctions and breakdowns, since the command and troops had insufficient experience in this special duty of giving direct support to the ground forces. Moreover, suitable radio equipment was still lacking. Fiebig's performance was further upheld in a later comment by Kesselring, who declared that "experiences must naturally be acquired first," but that Fiebig had "developed into a close-support air commander comparable to von Richthofen."²⁹ It should also be observed that by this time the ground

*An extremely able officer who entered the service in the mid-1930's. He was the top fighter ace among German airmen in the Spanish Civil War (1936-1939), and in June of 1941 was the top fighter ace in the German Air Force and commander of the 51st Fighter Wing, attached to the II Air Corps.

troops had become outrageously spoiled by the continuous employment of Luftwaffe units in direct support on the battlefield. Von Richthofen noted in his diary on 5 July that the Army refused to realize that the Luftwaffe could not be dribbled out to all places, but must be concentrated at major points.* Every sortie required time. Planes had to be refueled, loaded with bombs, and then flown to the new objective. Everyone in the Army wanted to take over the Luftwaffe, but the Army was completely unaware of the potentialities of air power.³⁰

Second Air Fleet Support of the Army During the Encirclement Battle at Smolensk

After the encirclement battle at Minsk, the Second and Third Panzer Groups pushed toward a new Soviet enemy which apparently intended to defend the Dnepr-Dvina (rivers) line. The next task of Army Group Center was to strike this foe, destroying as much as possible in a new battle of encirclement in the Smolensk area. To carry out this task, Army Group Center depended above all upon getting Guderian's Second Panzer Group across the Dnepr under any circumstances. The II and VIII Corps were to support the Dnepr crossing near Mogilev on 12 July by a sudden concentrated daybreak attack. The VIII Corps, with its operations staff and a part of its units, was situated in the area of Lepel, with other components around Molodechno.

It was determined in a detailed conference, held at Second Panzer Group headquarters at Borisov, that all forces of the Second Air Fleet were to be concentrated under the direct command of the II Air Corps. Units of the II Close Support Air Commander (Fiebig) were to engage front line objectives, while VIII Air Corps units were to operate in the northern part of the attack sector (because of ranges involved) and would overlap, in part, the target area of General Fiebig's forces. An exception was the bomber units of the II Air Corps, who were also committed to direct support of the ground forces, but in the rear of the attack zone. After the first, sudden, concentrated attack, the VIII Air Corps would again support the Third Panzer Group. Since Guderian's Second Panzer Group succeeded on 11 July in forcing the Dnepr crossing by surprise,

*The RAF, operating in the Western Desert in 1942, and the AAF operating in Tunisia in late 1942 and early 1943, had the same complaint. The RAF by the end of 1942 and the AAF by April 1943 had corrected this unwise and dangerous Army practice.

these assault plans were never carried out. This abandoned short-term operational plan clearly shows, however, how quickly, in even the larger scope of the air fleet, strong forces could be assembled to produce a sudden concentration of heavy, annihilating firepower at a given point.

After crossing the Dnepr on both sides of Mogilev on 11 July, the Second Panzer Group pushed forward with its right wing and its center as far as the Sozh River and on 16 July reached Smolensk from the south. With this crossing over the Dnepr, the enemy air activity, like that at an earlier period at the Berezina, was considerably stronger than usual, just as it was on the other fronts. Guderian later commented that strong enemy artillery fire and numerous bombing attacks launched on 11 July against the bridge site of the 10th Panzer Division had made crossing operations more difficult than for the XXXXVII Panzer Corps.* A bridge near the SS-Division "Das Reich" (2nd SS Panzer Division) had also been damaged by these air attacks.³¹ But Guderian also verified the successes of German fighters in destroying their aerial opponents again and again, or in securing in specific areas temporary air superiority or even air supremacy. Moelders' fighters, operating from advance fields located just behind the front lines, achieved air supremacy over the assembly area for the Dnepr crossings. "Wherever he [Moelders] showed himself," wrote Guderian, "the air was soon clear."³²

In the meantime, the Third Panzer Group had pushed forward by way of Vitebsk to Yartsevo and had wheeled its right wing around toward Smolensk. After weeks of heavy fighting the infantry divisions of the Fourth and Ninth Armies, which had moved slowly up from behind, almost completely closed the circle around the enemy forces west of Smolensk. As usual, the close support forces of the Second Air Fleet supported successfully the envelopment movements of the armored groups and the advance of the unmotorized armies. In this operation the ground-attack wing, the 210th Bomber Wing (equipped with Me-110 twin-engine fighters) attached to the II Air Corps, destroyed 915 Soviet aircraft in 1,574 sorties flown between 22 June and 26 July 1941. Ninety-two of these planes were put out of action in aerial combat. On the ground, 165 tanks, 2,136 motor vehicles, 194 cannon, 52 trains, and 60 locomotives were either put out of action or destroyed.³³

Some interesting comments were made on 11 July by von Richthofen (commanding the VIII Air Corps) concerning leaflet drops

*The roads or routes of approach of the 10th Panzer Division were poor and the bridge position barely adequate.

during this period of close support activity. The Russians in front of the Third Panzer Group began to desert in small parties and, at the request of the German ground forces, leaflets were dropped stating that deserters would not be shot (as had been rumored by Soviet leaders). Deserters who came over on the strength of these leaflets maintained that probably even more of their comrades would desert, but that too few of the leaflets bearing promises of safety were to be found. Since the Russians believed that a leaflet of this kind would be valid for only one person, many were afraid to desert without having such a "special life insurance certificate." After that, improved leaflets were dropped which were valid for more than one person. The expected deserters, however, failed to appear. Thereupon, the VIII Air Corps itself prepared new leaflets which were dropped during its dive-bombing attacks. In contrast to the long-winded earlier leaflets, the air corps leaflet was of classic brevity: "No one is shot! But, if you do not desert immediately, we will come again!" The result was a clear increase in the number of deserters.³⁴

Unfortunately, the Smolensk pocket had not been closed tightly. Through a small gap east of Smolensk only a few miles wide, substantial Soviet forces escaped destruction or capture. Kesselring commented in 1955 that, after personally inspecting the gap, he had requested Hoth of the Third Panzer Group and von Bock to launch an attack from the north and close the opening, and that he had guaranteed air support, but "unfortunately nothing happened. My proposals by way of the Commander in Chief of the Luftwaffe were also fruitless."³⁵

Although during daylight hours the continuous attacks on the escape gap by close-support air units succeeded at least in limiting or delaying the movement of Soviet fighting forces, the enemy used the breach very successfully at dusk and during the night. Kesselring estimated that over 100,000 Soviet troops escaped from the Smolensk pocket.³⁶ As in earlier battles of encirclement, this battle had shown that the Luftwaffe alone was incapable of closing openings in an encirclement ring. During the day the Luftwaffe could strike the enemy with destructive force in waves of air attacks, but at night neither an exact target designation nor a fix on the target was possible in the completely obscure terrain, with its numerous small woods and shrubbery which offered no check-points. Employment of paratroopers or airborne troops which would have been especially suitable for closing gaps could not take place because these special units had suffered very heavy losses in the capture of Crete and were not available for a special mission of this kind.

A situation--at times critical--also existed north of Yartsevo, when an enemy fighting force attacked across the Vop River from the area

north of and around Dorogobuzh. This attack, supported by strong artillery and tanks, was initially successful against the weak German security forces. The Russians even succeeded in occupying the highlands west of the Vop and in advancing somewhat farther along the Tsarevich River. In the meantime, the VIII Air Corps had brought forward a part of its close-support forces to a position just back of the front in the Dukhovshchina area. Since 23 July the air corps command post also lay just to the east of Dukhovshchina. As soon as the Russian assault was recognized, the close-support units were immediately committed and inflicted severe losses upon the enemy in ceaseless attacks. Even the 99th Antiaircraft Artillery Regiment, attached to the VIII Air Corps for airfield defense, was employed to parry the menacing enemy thrust. The destructive effect of the 88 mm. antiaircraft artillery gun in direct fire, with its high firepower, as well as the effects of 20 mm. and 37 mm. antiaircraft artillery weapons, inflicted devastating losses on the Russians.

But, despite the high losses, the enemy again pushed forward over the difficult terrain. The situation became critical not only for the ground forces, but also for the airfields and thus for the operation of the flying units. The command post of the VIII Air Corps organized itself for defense; the units assumed the defense of their operational fields. The ground situation changed so often that Luftwaffe units generally did not know when they took off whether they would be able to land at their old fields after the sortie. Once more, the flying units fought for the protection of their own bases. Over and over again every unit attacked the enemy found directly in front of it, flying the utmost number of sorties. German units had received certain standing orders, since every formal issuance of orders would only have delayed operations. As in previous operations, the high-speed fueling apparatus with its flexible hoses again proved itself particularly valuable, for it made possible the simultaneous fueling of as many as nine planes, which could be parked at distances sufficient to safeguard them against possible bomb hits.

Fluctuating weather conditions also influenced the employment of the flying units. Because of the numerous sorties, a shortage of supplies occurred very soon which was for a time so severe that it appeared questionable whether another strong enemy attack could be warded off. Air transport units were therefore employed to bring up supplies to the front lines, and it was at this time that these units sustained their first losses.

Fortunately, this attack across the Vop River remained an isolated action of the enemy forces which were desperately defending themselves in the Smolensk pocket. Additional German ground forces were brought up, which succeeded in checking the enemy after hard fighting. During these

operations, the order had been received from the Commander in Chief of the Luftwaffe to transfer the VIII Air Corps to Combat Zone North. This air corps, therefore, intended to assemble its forces in the Vitebsk area and to rehabilitate them for the ensuing commitment, leaving only weak close-support forces under Lieutenant Colonel Hagen behind. But, in the critical situation which had arisen, units of the VIII Air Corps were the only forces immediately available for defense against the enemy attack. In this emergency, therefore, its units were again committed to combat action upon the order of the Second Air Fleet. The VIII Air Corps inflicted heavy personnel losses upon the enemy, stopped his advance, and thereby won the necessary time to parry the Soviet attack with newly arrived ground forces. A Soviet attempt to tear open the northern section of the Smolensk pocket was thereby prevented. The enemy, despite considerable casualties, was able to hold a small bridgehead west of the Vop River for the next few days, but this resistance was cleared up during the further contraction of the pocket.

At the end of the fighting, the VIII Air Corps was transferred to the combat zone of the First Air Fleet. On 3 August Field Marshal Kesselring issued an order of the day to the corps, stating that the VIII Air Corps was leaving his command for "temporarily different employment." His order mentioned that a short period of preparation for the Russian war and six weeks of war "lie behind us"; it praised the VIII Air Corps for its role in the rapid successes of the Ninth Army and the Third Panzer Group, and especially praised von Richthofen, the commander of these "superbly trained and aggressive [air] units." Kesselring concluded his order of the day by extending his "heartiest wishes" to the VIII Air Corps in its coming operations and the hope that "without great losses the VIII Air Corps shall again attach equally great laurels to its victorious banner!"³⁷

During the last days of July and the beginning of August, while the close-support forces of the Second Air Fleet made its annihilating sorties, particularly against the enemy forces in the Smolensk pocket, the twin-engine fighter and bomber units attacked the roads and railways leading from the east to the Bryansk-Vyazma-Velikiye Luki line, and on 14 July for the first time hit the railroad and superhighway between Moscow and Smolensk.* These attacks were intended to suppress at the very outset all enemy operations undertaken for the liberation of the Smolensk area. Thus, the railroad station installations at Orel were very successfully attacked during the night of 30-31 July by units of the II Air Corps, which dropped some 30 tons of demolition bombs and 3,600 incendiary bombs.

*See Figure 20.



Figure 20
Interdiction of railroads leading to the
Smolensk area by the Luftwaffe, 1941

Southeast of Smolensk, the Soviets also attempted to tear open the pocket by strong counterattacks. Here the GAF's II Air Corps was employed with success by the Second Air Fleet. The High Command of the Luftwaffe reported on 31 July that bomber and dive-bomber units supported the ground forces by attacking Soviet columns and artillery emplacements in the area between the Smolensk-Roslavl rail line and the highway to Vyazma, and by smashing a Soviet attempt to push forward with tanks around Shatalovo, some 37 miles southeast of Smolensk. These attacks destroyed 67 trucks, 17 tanks, 2 antiaircraft artillery batteries, 6 artillery pieces, 2 trench mortar batteries, 6 teams of horses, 1 fuel depot, and 1 ammunition dump. Knocked out of action were 3 antiaircraft guns and 1 antiaircraft artillery battery, while 6 trucks, 5 tanks, 1 locomotive, and 15 railroad cars were damaged. Railroad stations at Korobets and Stodolishche, parts of a cantonment, and a village near Staraya Sheveleva were set on fire. The Luftwaffe High Command reported that direct hits and very near misses on four to five heavy tanks caused only one tank to smoke. Enemy casualties from these attacks could not be accurately estimated.³⁸ At this time, the enemy flying forces were also being continuously attacked in the air and at their bases. From the beginning of the campaign until 31 July 1941, the 26th Twin-Engine Fighter Wing "Horst Wessel"* alone destroyed 620 Soviet aircraft in aerial combat and in low-level attacks.³⁹

On 5 August the encirclement battle of Smolensk was essentially over, with only small, trapped enemy units still offering desperate resistance. Units of the Second Air Fleet had a decisive share in this successful and great battle in Combat Zone Center. During the last days of the battle around Smolensk, the bulk of the dive-bomber and bomber units of the II Air Corps were employed against railroads and highways, especially in the Roslavl-Sukhinichi-Bryansk-Unecha area, since for days air reconnaissance had reported new Soviet forces moving up against the projecting salient of Yelnya; however, bad weather frequently impaired the employment of the flying units in this area. During the fighting in the Smolensk area enemy air activity had increased, especially against the southern wing and the center of Army Group Center. Especially troublesome were the continuous attacks upon the German front lines by Soviet ground-attack planes. Although these attacks were generally of relatively slight effect, they nevertheless influenced the morale of the ground forces, particularly when the latter were engaged in heavy defensive fighting in sectors such as, for example, the Yelnya salient.

*Named after an early Nazi Storm Troop (SA) leader, Horst Wessel, who was murdered in Berlin.

The struggle against these ground-attack aircraft was very difficult because they approached from afar and at low level, flying singly, in two-plane formations, and in weak squadron strength; dropped their bombs on the front lines; and immediately turned back toward their own territory. Scrambling German fighters usually arrived too late to block the attack, and their pursuit of the Soviet ground-attack aircraft, which were retiring at low altitudes, was too costly for the unarmored German fighters because of the strong Soviet ground fire. An air-defense patrol would have been the most favorable antiaircraft measure, particularly because the Russians, in their familiar stubbornness, repeatedly attacked at the same point, in the same sector, and at the same times. Such a defensive operational procedure was not possible, however, because of the inadequate numerical strength of the available fighter units. Moreover, such a procedure did not correspond in other respects to the German operational principles for fighter pilots.

Favorable results were only possible with the so-called visual take-off (*Sichtstart*), that is, when German fighters could see the enemy aircraft as they were about to take off from advance fields close behind the front and could, as it were, "pin" these aircraft as they took off. However, such airfields were seldom available because of the terrain. The best protection, therefore, was a strong defense by the ground troops themselves with automatic weapons (the same system of defense employed by the Soviets). This was true for the entire Eastern Front and for the entire period of the campaign.

The II Air Corps received a special secondary assignment when it was ordered to support the 1st Cavalry Division* on the southern wing of Army Group Center. This division had advanced along the northern edge of the Pripyat marsh area and had suffered serious losses in the dense vegetation of the difficult, swampy terrain. A large number of river monitors caused the cavalry division particular trouble, and armed Russian motor boats also repeatedly joined in the fighting. These vessels were very difficult to locate and combat, because the banks of the many tributaries were overhung with trees and bushes. For weeks, elements of the II Air Corps were employed against these monitors; and although a large number of them were destroyed, others were able to operate in the marshlands for a long time, much to the disadvantage of the ground forces, which had to fight their way laboriously through this region while suffering grievous losses. Later on, the endlessly overextended

*Commanded by Generalleutnant Kurt Feldt, an officer with cavalry service dating back to the turn of the century.

southern flank of these German units was constantly harassed by attacks from this region.

With the swift advance of the German armored units, the major concern of the Luftwaffe High Command was the timely forward movement of bases for flying units, particularly of the close-support units. At the same time, the signal communications essential for command purposes had to be established up to the front. Only those airfields could usually be occupied and used which lay close to the routes of the armored units and the main line of march. The most pressing supply requirements--especially spare parts--were flown forward by air transport. The Luftwaffe supply columns moved forward only with difficulty over the few available roads which were even halfway passable for heavy vehicles. Bad weather frequently delayed the advance of supply items important for military operations.

The few airfields were generally overcrowded and therefore decidedly vulnerable to air attack. A concentrated enemy air attack could have caused extraordinary damage. Fortunately, the Soviet command missed such opportunities.

Strong defense of these airfields by anti-aircraft artillery was necessary. The ground elements of the air units, together with the anti-aircraft artillery, also assumed the defense against attacks by enemy infantry and armored forces which had been bypassed or dispersed by German armored forces, as well as by partisans, which were becoming increasingly stronger. It now proved worthwhile for every man of the ground organization, including technical personnel, to be trained in ground fighting and armed accordingly. Airfield personnel learned very quickly to organize for all-round defense immediately upon occupying an airfield. From stocks of captured materiel, the ground organization units obtained heavy weapons, ammunition, and even tanks, which they put in running order and used to protect their fields. Such self-initiative was shown, for example, by Col. Gottlob Mueller in the ground defense of his airfield at Bobruysk, using captured Soviet tanks which had been put in effective working condition.

Kesselring later wrote regarding the advance, organization, and defense of the air bases that the advance of the Luftwaffe's ground organization along the roads was much more difficult than that of the Army because there were not enough motorized vehicles and no tracked vehicles. With few permanent bases available, advance airfields which were no longer directly protected by Army troops had to be reconnoitered and prepared. The resultant security measures further burdened the

ground personnel, already too few in number, at these fields. The Luftwaffe administrative commands and their staffs for special duty deserved the highest praise for making possible the continuous employment of the flying units, "particularly the close support corps [VIII Air Corps] and the II Close Support Air Commander [Fiebig]."⁴⁰

The importance of a permanent personal liaison and operational arrangement between the operations staffs of the Luftwaffe and the Army had proven itself in all the battles. Since one could scarcely get through the heavily used, frequently blocked advance routes by motor vehicles or motorcycles, aircraft--generally the Fieseler Fi-156 "Storch"--remained the only means of communications.^{41*}

After repeated costly experiences with the confused, frequently changing ground situation, it had become necessary for liaison planes to fly at low altitudes along the German-held roads, in order to avoid being shot down by dispersed enemy ground forces or to avoid having to make an emergency landing on a cross-country flight, far from the roads. A frightful example of what could happen occurred in the first days of the campaign when Luftwaffe Colonel von Gerlach was shot down while on a cross-country liaison flight from one advance route to another; German troops later discovered his brutally mutilated body.

Support of the Right Wing of Army Group Center by the II Air Corps in the Gomel-Bryansk-Roslavl Area

Before the battle for Smolensk was over, a few armored and infantry corps were concentrated under Guderian to destroy a strong enemy group which was attacking from the Roslavl area toward the northwest. Supported by II Air Corps units, Guderian's troops successfully encircled this enemy group and destroyed it near Roslavl during the first three days of August before it could approach the Smolensk pocket. Guderian's XXIV Panzer Corps, under General der Panzertruppe Freiherr Geyr von Schweppenburg, then pushed forward from Roslavl in the general direction of Klinty, in order to cooperate with the Second Army in the envelopment (from the line west of Mozyr-Rogachev-Krichev) of two Soviet armies which stood north and west of Gomel, forming a deep dangerous wedge between the rearward bending flanks of Army Groups South and Center. German ground troops, assisted continuously by the close support of the II Air Corps, destroyed this mass of enemy

*Col. Rudolf Meister (GSC), Chief of Staff to von Richthofen, once had an accident with his liaison plane. His 50-mile return by ground transportation took 11 hours.

strength in the encirclement battle of Gomel-Klintsy, with only small remnants getting away to the southeast. During this period, between 9 and 24 August, bomber units of the II Air Corps successfully attacked troop movements and concentrations, notably in the Chernigov-Konotop-Gomel area. Moreover, continuous attacks followed on all railroads which approached the southern wing of Army Group Center from the east and southeast, in order to prevent both a retreat of enemy forces to the east and the arrival of new Soviet forces and supplies from the east. Since 22 August, a weaker enemy force on the northern wing of the army group (in the Velikiye Luki area) had been successfully destroyed with VIII Air Corps support. At the same time, Second Air Fleet bombers--primarily under the command of the II Air Corps--repeatedly attacked the occupied Soviet air bases which had been reported by air reconnaissance and radio intercept services. Because of these attacks the Soviet air attacks decreased noticeably, thereby substantially relieving the ground forces. On 9 September the High Command of the Luftwaffe, summarizing this action against enemy forces, reported that the II Air Corps had destroyed 2,660 planes (1,380 shot down and 1,280 eradicated on the ground) between 22 June and 30 August.⁴²

During this fighting on both wings of Army Group Center, the elements of the group which had pushed farthest to the east in the center met very strong opposition and went over to the defensive in the so-called Yelnya salient. The Soviets attacked continuously with strong artillery support.* In this tense situation, however, the weak German forces again and again successfully warded off these heavy counterattacks, and, despite great losses, held their positions. It was understandable that the Army urgently requested Luftwaffe support for the heavily engaged ground troops in their defense of the salient.⁴³

The forces of the Second Air Fleet, however, were too weak to meet all the desires and requirements of the ground forces in Combat Zone Center. The few flying units, which had been in continuous action since 22 June and were therefore seriously reduced in combat readiness, were insufficient to carry out several tasks at the same time. Therefore, the Second Air Fleet decided, with Goering's consent and in accordance with the principle of concentrating forces at key points, to commit all forces of the II Air Corps for the support of the right (southern) wing of Army Group Center in the Mozyr-Konotop-Roslavl-Rogachev area. This decision was possibly made because it seemed to be of decisive importance

*Editor's Note: These attacks were alleged to have been ordered by Stalin.

to assist the Second Army under Generaloberst Maximilian Freiherr von Weichs, which was far to the rear and faced with an ever menacing danger from Russian units to the south, to move forward as quickly as possible by eradicating these hostile forces.

Furthermore, by gaining the area south and southwest of Bryansk as a base of departure--about on a line from Pochep to Unecha--a vast envelopment movement could be created from the north against the armies of Marshal Budëny, which stood east of Kiev.

In his diary entry for 27 August General von Waldau, Chief of the Operations Staff of the Luftwaffe General Staff, commented on the satisfactory beginning of the operations by the Second Army and Guderian's Second Panzer Group, which culminated in the capture of the crossings over the Desna River. Von Waldau believed that if the rail line between Kiev and Konotop could be reached within two to three days, "a thrust could be made deep into the rear of the Russian forces" and developments would progress favorably at the Dnepr front, while the north front of Yelnya remained on the defensive.⁴⁴

The closing up of the Second Army in the vicinity of the Yelnya salient would in itself relieve the German forces there. The Army High Command (OKH) was divided on whether to hold or to yield up the salient. However, it disagreed with the Luftwaffe command by insisting that the air arm, as a first priority, support the salient. These opposing views are evident in Halder's diary entry of 3 August 1941, in which the Chief of the Army General Staff commented that the Yelnya salient provided "dominating positions" whose abandonment would affect the area to the north. "The holding of the 'bridgehead' is costing us much blood." Halder felt personally that the salient should be held and that the Russian artillery should be met by German counterfire and a widening of the bridgehead.⁴⁵ On the following day, Col. Adolf Heusinger (GSC), upon returning from the Fuehrer Conference (held at headquarters, Army Group Center), reported that the successful operation against Roslavl was expected to relieve the Yelnya situation and that the abandonment of Yelnya was "out of the question."⁴⁶

Field Marshal von Bock telephoned the Commander in Chief of the Army, Field Marshal von Brauchitsch, on 14 August, complaining of Goering's order to shift air support from Yelnya to Rogachev despite army group objections, and commenting that Guderian wanted to give up the Yelnya salient but that the army group command did not. On the following day the Russian attacks continued and the question of whether to hold Yelnya was still undecided by Army Group Center. On 21 August

Halder protested the action of Goering to Field Marshal Keitel at the High Command of the Armed Forces (OKW). By 1 September strong Soviet attacks in the Yelnya salient and to the south of it began to take on the appearance of a "regularly planned large-scale operation." On the following day, abandonment of the salient was finally decided upon by Halder, von Bock, and von Brauchitsch during a conference at the headquarters of Army Group Center. Three days later (5 September 1941) the Yelnya salient was evacuated.⁴⁷

In 1955, Kesselring, replying to questions about the Luftwaffe's support of the Yelnya salient, stated:

Nothing is known about the conversation of von Bock; I do not, however, consider this impossible, since at the time the Second Air Fleet, with only a part of its forces, had to support the Second Army (von Weichs) and later the Second Panzer Group (Guderian) on the right wing of von Bock's army group against enemy forces advancing in the direction of Gomel-Roslavl.

The fact is that Guderian wanted to abandon the Yelnya salient. When I heard of that, I flew forward to the command post of the Second Panzer Group (Guderian) to discuss everything further with Guderian regarding support. However, I met only the Operations officer, to whom I explained my view that I would immediately give the armored group all possible Luftwaffe support, if the Yelnya salient could thereby be held.

Finally I flew to my command post and immediately ordered the concentration of all flying forces in front of the Yelnya salient. The order remained in effect a few days. Inordinately soon thereafter, however, the abandonment of the Yelnya salient was ordered.⁴⁸

A number of documents of Luftwaffe High Command (OKL) provenance describe the commitment of air units in the Yelnya area. The situation report of 31 August 1941, concerning the sector east of a line from Roslavl to Yelnya to northeast of Smolensk, bears a commentary on a resumed Soviet offensive which made use of rehabilitated units. Although these troops, supported by armored vehicles, succeeded in breaking the German main line of resistance, the offensive was halted by action of the Luftwaffe.⁴⁹

Beginning early on 30 August the Russians launched renewed attacks against the German front lines south and northeast of the Yelnya River bend which were preceded by hours of artillery barrages. Tanks were used to spearhead the infantry attack. At this time three Luftwaffe bombers attacked tank concentrations and massed troops 16 to 27 miles to the southwest of Shatalovo, registering a number of hits on moving armored vehicles. Troop concentrations at the Desna bridges south of Shatalovo were struck by German bombers, several bombs landing amid massed Russian infantry units.⁵⁰

On 4 September strong Soviet forces, supported by tanks and artillery, pressed forward an attack against the sector from Roslavl to Smolensk. According to the High Command of the Luftwaffe, the statements of Russian prisoners revealed that "several [Luftwaffe] armored battalions" had recently arrived from Asia and were "assigned to the infantry divisions to bolster their fighting power." At the same time, however, German forces made slight gains east of Velikiye Luki. In support of them were 89 dive bombers, 20 light bombers, and 1 bomber, which were used against truck and tank columns, bridges, infantry, and artillery positions in the Desna River region from Sosnitsa northward to the sector south of Yelnya.⁵¹ The German position remained, nevertheless, precarious. On 7 September the Luftwaffe reported the abandonment of the Yelnya salient "for reasons of economy of forces." Wehrmacht units thereupon withdrew behind the Desna, with the enemy following slowly behind.⁵²

The bulk of the flying units of the II Air Corps, however, remained in action in front of the Second Army and the Second Panzer Group, facing enemy forces south and southwest of Bryansk. The successful advance of the Second Army, constantly supported by forces of the air corps, proved in the final result that the Luftwaffe was correct in placing its main effort and commitment in the area west (and later east) of Gomel, to the southwest of Bryansk, and in front of the Second Army and Guderian's armored group, then advancing from Roslavl toward the south and south-east. This air effort was maintained despite the counterclaims of army command posts in the area.

A concentrated commitment of the II Air Corps in the Yelnya salient would at best have been able to achieve only a tactical defensive victory on a relatively small sector of the front. At worst, the salient could be temporarily withdrawn for a few miles without adverse operational consequences. In contrast, the concentrated employment of Luftwaffe forces in front of the Second Army and the Second Panzer Group in and east of the Gomel area enabled the right wing of Army Group Center, which was behind the others, to advance and thereby

eliminated the deep Soviet wedge between Army Groups South and Center. This air action was therefore of decisive importance. After the war, General der Infanterie Kurt von Tippelskirch wrote that the Soviet forces involved consisted of 17 infantry, 1 armored, and 5 cavalry divisions, and yielded, "78,000 prisoners, 144 tanks, and 700 guns," with the remaining forces falling back to the southeast. "This victory," asserted von Tippelskirch, "was already the prelude to the great battle of annihilation around Kiev, which began on the last days of August."⁵³

The II Air Corps' ceaseless direct and indirect support of the Second Army and the Second Panzer Group was a decisive contribution toward winning this northern jump-off point for the encirclement of Kiev, the greatest battle of its kind in the eastern campaign.

Antiaircraft Artillery to the Front!

Assembled in Combat Zone Center under the command of the Second Air Fleet was Generalmajor Walter von Axthelm's I Antiaircraft Artillery Corps, consisting of two motorized regiments (the 101st and 104th), each of which had three heavy battalions and one light battalion. Working in close cooperation with the Second Panzer Group, the corps was to support the breakthrough of the Soviet border fortifications, protect the armored group from air attacks during the advance, and help in breaking up all enemy resistance.

Additional heavy and light antiaircraft artillery battalions of the Luftwaffe were attached directly to the ground forces under the control of commanders of the Luftwaffe (KoLuft) who were assigned to the armies, army groups, and armored groups.

When the army batteries opened fire at 0315 on 22 June, shortly before the beginning of the general attack, the batteries of the I Antiaircraft Artillery Corps also commenced firing. In direct fire the antiaircraft artillery destroyed bunkers and special pinpoint targets in the Soviet field positions and border fortifications, such as known observation posts, towers, and entrenched tanks. The flat trajectory and the high rate of fire of their guns enabled the Luftwaffe antiaircraft artillery to achieve particular success against these kinds of point targets.*

*See Figures 21 and 22.



Figure 21
Heavy (8.8 cm.) antiaircraft gun supporting
ground forces against Soviet armored
attacks, Eastern Front, 1941



Figure 22

Night firing by 8.8 cm. antiaircraft gun in support of German ground forces on the Eastern Front, 1941



Figure 23

An 88 mm. gun being pulled from the mud by a German tank, Russia, 1941

At the opening of the general attack, the heavy and light batteries of the I Antiaircraft Artillery Corps crossed the Bug River with the first armored units. Included within the points of the armored spearheads, the batteries henceforth had as their first and most important mission the defense of the forward-rolling armored units from any air attack which would delay their advance. Although the condition of the advance routes was terrible, the antiaircraft artillery batteries had to keep pace with the armored units.* Wherever the leading tank was to be found, there also stood the first antiaircraft gun.

The successful destruction and crippling of the enemy flying forces by the Luftwaffe's air units in the first days of the campaign also had its effects in Combat Zone Center, with the result that enemy air attacks occurred only sporadically and in low numerical strength. Seen as a whole, the effect of these Soviet air attacks was extremely slight. Thus in the central combat zone the secondary mission of the I Antiaircraft Artillery Corps became more and more its primary task: combating Russian tanks and furnishing artillery support for the Army in action against enemy pockets of resistance. As was the case on other fronts, here, too, whenever strong enemy resistance was to be broken or hostile tanks came forward to counterattack, the call invariably resounded at all points: "Antiaircraft artillery to the front!"

Batteries of the I Antiaircraft Artillery Corps consistently provided the expected effective support. For example, a report of the High Command of the Luftwaffe on 3 July 1941 announced that from 22 to 28 June the heavy antiaircraft artillery units of the corps had brought down 21 Soviet planes, while firing an average of 28 rounds per aircraft. Fourteen planes were shot down by German light batteries, which expended 1,170 shots in the process. Two additional planes were destroyed by German quadruple 20 mm. machine guns, which fired about 200 rounds against each aircraft. The corps also destroyed 45 personnel carriers, 34 tanks, and numerous pockets of resistance manned by personnel with machine guns and antitank weapons.⁵⁴

Other similar successes were mentioned in reports of the High Command of the Luftwaffe, which indicated the nature of the actions and the results achieved. Included in such reports were units of the I

*See Figure 23.

Antiaircraft Artillery Corps, as well as antiaircraft artillery battalions assigned to the Army and under the control of commanders of the Luftwaffe (Koluft). 55*

A particularly important victory was the repulse of persistent Soviet attempts in early July to eliminate the Borisov bridgehead or to destroy the bridge by aerial attack. The antiaircraft artillery units kept this highway bridge across the Berezina River open and intact, rendering a valuable contribution to the continued operations of the Second Panzer Group.[†]

Especially effective was the action of the antiaircraft artillery in the area around Bobruysk. While the battle for the town was still in progress, the Soviets continued to hold an airfield south of the town from which close support and fighter aircraft continued to operate. In a bold surprise attack antiaircraft artillery personnel seized this airfield, capturing 59 aircraft intact and a large number of damaged and destroyed aircraft, large quantities of fuel, and more than 10,000 bombs of all sizes. Desperate Soviet efforts to retake the field in counterattack failed in the face of blazing defensive fire by the antiaircraft guns.

A few days later Guderian's armored units prepared to cross the Berezina at Bobruysk. Heavy units of the antiaircraft artillery and the flying units of the 51st Fighter Wing were then alerted to protect the crossing site and river-crossing movements. From intercepted Soviet radio messages it was known that the Soviet forces had been strictly ordered to halt the German advance across the Berezina at Bobruysk at all costs, and that all bomber units based on airfields between Bobruysk and Moscow were to be concentrated in attack against the German crossing site. In fact, it was at Bobruysk that the Soviets renewed their massive bombing attacks. The bridge was bombed continuously by aircraft flying at an altitude of approximately 6,500 feet. But the assembled batteries of the 10th Antiaircraft Artillery Regiment concentrated upon the crossing site, overwhelmed the approaching bombers with sustained fire, scattered the formations, and shot down a number of planes. Groups of the 51st Fighter Wing under Colonel Moelders dived after the scattered bombers and completely destroyed them. By exemplary cooperation, the German antiaircraft

*See p. 111.

†See the interesting eye-witness accounts of these actions during early July 1941 in the diary of Col. Hans-Wilhelm Doering-Manteuffel, Commander of the 101st Antiaircraft Artillery Regiment, G/VI/3a, Karlsruhe Document Collection.

artillery and fighter units repulsed with heavy losses the Soviet air attacks at the crossing sites. The German armor, motorized infantry and artillery, and their supply columns continued to roll eastward over the Berezina without interruption.

The antiaircraft artillery was also effectively employed in air defense and ground combat in the later battles around Roslavl, near Gomel, and especially on the Desna near Trubchevsk (50 miles southwest of Bryansk). In the severe fighting in the Yelnya salient, the batteries of the I Antiaircraft Artillery Corps were the strong backbone of the defense of all the ground forces there for more than four long weeks.

During its combat employment between 22 June and 30 August 1941 the I Antiaircraft Artillery Corps shot down 259 airplanes, while antiaircraft artillery units under the control of Koluft Army Group Center brought down 500 aircraft and destroyed 360 armored vehicles between 22 August and 9 September.⁵⁶

Chapter 6

KIEV

Prelude

While the entire German Eastern Front continued its fluid advance against a stubborn and tenacious enemy, a serious command crisis arose between Hitler and the Army High Command over the question of the further prosecution of the Russian campaign once the three army groups had achieved their initial objectives. As Supreme Commander of the Armed Forces, Hitler had taken a much larger part in both the strategic and tactical operations of the eastern campaign than he had in all of the preceding campaigns and operations.¹

The greatest disagreement concerned the primary objective. Halder, von Brauchitsch, the commanding generals in Army Group Center, and the Luftwaffe's Field Marshal Kesselring adhered firmly to the goal of destroying the Soviet military power, which they believed could best be accomplished by a continued rapid drive toward, and seizure of, Moscow. Moscow was important not only because, as the seat of government, it was the symbol of the Soviet regime but also because it was an important industrial and armament center and the hub of the entire railroad system in European Russia. Its loss would mean not only a loss of prestige for the Soviet government in world opinion--one may remember the effect which the loss of Paris had in 1940 upon the French armed forces and populace--but it would also mean the loss of an important nerve center of the Soviet Union.

Kesselring, who had been the Luftwaffe commander in Combat Zone Center, declared after the war that leaders in that sector pondered over the matter of a continuation of the drive on Moscow, while the troop units, "unfortunately, stood inactive at their positions for too long a time."² According to Kesselring, allowing for the inevitability of bad weather and its effects in Russia, Moscow could still have been taken had Hitler not wasted costly weeks in lengthy "deliberations and secondary operations." If the drive had been continued early in September, Kesselring believed that the Soviet capital could have been captured before the arrival of both winter and the enemy's Siberian divisions. In all probability it would then have been possible to push forward a screening bridgehead to the east, which would have complicated Russian flanking maneuvers and the supply of other fronts. The capture of Moscow would have cut off European

Russia from its Asiatic resources, and the seizure of the economically vital city of Leningrad, the Donets Basin, and the Maykop oil region "would have been no insoluble task in 1942."^{3*}

Hitler reasoned differently, for he wanted to operate on the flanks and seek a decision there. Furthermore, he placed the economic goals of seizing the war economy of the Leningrad area, the Ukrainian granary, the Donets Basin, and the Caucasian oil fields, and the capture of the Crimean air bases which threatened the Rumanian oil fields ahead of purely military objectives. Within Hitler's own staff, as well as in the Army High Command, this trend of thought met with opposition and serious doubts. Until late in August, the decision upon which the campaign's success might depend was sought in conferences; through new directives (often impossible to carry out); through continual admendments to the directives; and by "reciprocal memorandums."⁴

On 21 August, after much annoying vacillation, Hitler finally settled the dispute by issuing a directive to the Commander in Chief of the Army--Goering received a copy--which advised von Brauchitsch that the most important goal before the arrival of winter was not the capture of Moscow, which was what the Army believed to be the best strategy, but the seizure of the Crimea and the Donets Basin, "the strangulation of the Russian oil supply from the Caucasus region," the encirclement of Leningrad, and a link-up with the Finnish forces. To achieve these goals Hitler ordered adjoining units of Army Groups South and Center to attack the opposing Soviet Fifth Army, not only in order to push it from its positions behind the Dnepr River, but to destroy its forces before they could be withdrawn behind a line in the Desna-Konotop-Sula sector. Only thus could Army Group South be relatively free of danger so that it could seize a foothold east of the Dnepr and resume its advance in the direction of Rostov-on-the-Don and Kharkov. A rapid crossing of the Dnepr in the direction of the Crimea was to be made by German mobile units before Soviet reinforcements could arrive. The capture of the Crimea would provide security for the Rumanian oil fields and allow Wehrmacht forces to advance rapidly into the Caucasus, from which place the Reich could bring pressure to bear upon Iran.

North of the Pripyat marshes the Second Army (right wing) of Army Group Center was to eliminate Russian salients which bulged into its front, while the left wing of Army Group Center (Ninth Army) was to establish contact with the Twenty-Seventh Army (right wing) of Army Group

*See Maps Nos. 1 and 3.

North in the high ground west of Toropets. Meanwhile the Eighteenth Army (northern wing) of Army Group North was to encircle and drive beyond Leningrad, linking up with the Finnish Army.

Only after the Soviet Fifth Army had been destroyed, Leningrad encircled, and contact made with the Finnish forces, could German military units be made available for an attack upon Moscow and against the forces of Marshal Timoshenko as had been planned in Directive No. 34 of 12 August.^{5*}

A study signed by Hitler on 22 August 1941, concerning how the coming operations in the East were to be carried out, shows not only the reasoning by which Hitler rejected the Army's proposals and issued his directive of 21 August, but cites the efforts of the highest leadership of the Luftwaffe to build up concentrations of main effort. This document is not mentioned to emphasize any differences in operational concepts between the Army and the Luftwaffe, but, rather, to show that the Luftwaffe's efforts to adhere to the principle of power concentration were recognized at the highest levels of command. In the study, Hitler pointed out that the campaign was intended to eliminate Russia as a continental ally of Great Britain and as the last hope of Britain for a favorable outcome of the war. Only by annihilating Russia's armed forces and by capturing or devastating the essential economic foundation required to reorganize those forces could this objective be achieved. Hitler considered "the destruction or seizure of vital sources of raw materials" to be "more decisive than the occupation or devastation of industrial areas." Manufacturing facilities--particularly when machinery had been evacuated--could soon be reestablished and also imported from overseas, but the replacement of coal, oil, and iron through imports was hopeless.

Thus, Soviet forces were to be destroyed, and any Soviet program of rearmament prevented "by the capture or elimination of the regions of raw materials" and the means of production. Russian naval and air forces in the Baltic region were also to be destroyed. All Russian airfields in the Black Sea area--particularly around Odessa and on the Crimean Peninsula--were to be quickly seized to prevent any fatal air attack on the vital Rumanian oil producing region and also to encourage Iran to hope for German support in the event of Anglo-Russian threats to that country. Moscow, said Hitler's study, was of far less importance than were these objectives.

*See Maps Nos. 1 and 3.

In order to achieve these goals, individual army groups and army commanders were to be permitted freedom of action in their operations as long as they did not compromise or endanger the overall concept of the campaign. This concept was not to be based upon "the frequently divergent views, intentions, or expectations of the individual army groups or armies," but rather, all-unit commanders at the front were to "scrupulously" follow the instructions.

In this tremendous theater of war, decisive results could be achieved only by a concentration of forces in whatever sector was deemed to be of sufficient importance to the overall plan. In accordance with this idea, air and ground forces had been concentrated in Army Group Center from the beginning of the campaign--not on the assumption that final victory lay only in that area, but with the intention of breaking through the Soviet resistance at that point and, after reaching the initial Dnepr River objective tentatively chosen by Hitler, to stop and shift the two armored groups (one to the north, one to the south) for the support of operations in other parts of the front.

The hope, which was justified by later events, that the drive in the center would lead to the encirclement and annihilation of large hostile forces, led to the continuation on 3 July of the offensive of Army Group Center. But even the initial objectives had been placed so far forward that the infantry lost valuable weeks trying to reach the advanced armored units instead of using that time to destroy the power of the Soviet ground forces, with the result that the Russians were able to extricate elements of their organizations which, after rehabilitation, again stood in opposition to Army Group Center.

At the outset of the campaign it was possible for the Wehrmacht systematically to develop a power concentration to include all arms. However, in view of the great extent of the Eastern Front, it soon became clear that similar massive concentrations of power could only be developed with those arms which by their very nature were "sufficiently mobile" and maneuverable and were alone suited for such purposes. This meant that in future operations, whether on a large scale or on the basis of a single division, the decisive points upon which strong concentrations of forces must be employed had to be clearly recognized. Furthermore, the wide extent of the front would in almost every instance prevent a timely movement of infantry troops to a given area; only the motorized Army units and the Luftwaffe could concentrate and reinforce their troops in a short time over long distances. Because of this, neither the motorized ground

forces nor the Luftwaffe were to be integrated into any army group, army, or air fleet, but were instead to be placed under the exclusive operational control of the supreme command.

Hitler admonished the Army to instill within its ranks an understanding of this irrevocable principle of command, just as Goering had done in the Luftwaffe. He observed that if the Army's viewpoint had prevailed over the Luftwaffe, the air forces would have been dispersed even to the army corps level and would no longer be capable of performing the tasks demanded by a continental conflict. Hitler declared that any departure from the overall concept would inevitably result in an impossible situation, forcing the Army High Command to "adjust its plans to the tactical conceptions and requirements of the individual army groups and armies." Hitler also believed that while a proper disposition of forces required lengthier preparations, it was actually a guarantee of success because time would be thereby saved which might otherwise be lost through dispersals and dispositions of units.

Hitler blamed the stalemated situation in the north on Army Group North's partial disregard of an order (which was never identified by the Fuehrer). But he saw that with the available forces, the army group could not throw its right wing around Leningrad quickly enough to encircle or destroy the city and its defenders. Units originally designated for later assignment to Army Group North (numerically the weakest of the army groups) were now ordered up, and Hitler expressed the hope that the three divisions dispatched would enable Army Group North to secure its south (right) flank. He also hinted that the quicker the reinforced army group, in cooperation with Luftwaffe units assembled by Goering, succeeded in its mission, the sooner its forces--particularly the motorized units--could be used with those of Army Group Center to advance upon Moscow.

"Equally important, indeed more decisive," said Hitler, "was the rare opportunity presented by a Soviet force occupying a triangular-shaped, 185-mile-deep salient between Army Groups Center and South." According to Hitler, this Soviet force, surrounded by two army groups, could be destroyed if the viewpoint of the high command prevailed over that of the army groups involved. Objections by Army leaders that too much time would be lost thereby and that Wehrmacht units committed to this action would then no longer have the technical capacity to advance upon Moscow appeared to Hitler to be inconclusive when compared with the inviting opportunity at hand. The Army suggestion that the destruction of Soviet forces east of the Dnepr between Army Groups Center and South would require the assistance of Army Group South was shrugged off by Hitler

with the comment that, even if the task might be easier with additional help, "it could not be overlooked or left unresolved [by the Wehrmacht] under any conditions.

Hitler did not know whether the center of the attack force, the Sixth Army of Army Group South (then stalled by the Soviet Fifth Army to its east), could force a crossing of the Dnepr River in the vicinity of Kiev or whether this problem could be solved by an attack from the south toward Mirgorod and Poltava by the Seventeenth Army (right wing) of Army Group South, thus checking Russian forces before they had made good their withdrawal to the east. To the left of the Sixth Army the Second Army of Army Group Center continued to move to the southeast toward Gomel, strengthening the southern flank of Army Group Center and tightening the ring around the Soviet forces east and west of Kiev. On the far left wing of the operation the Second Panzer Group began its drive to the south from an area around Klinty. All armored elements of Army Group Center which were not indispensable as reserves were ordered to be sent to Army Group South for use in a drive into the Donets Basin. Such transfers of units took valuable time, however, and permitted the Russians to proceed with their withdrawal.

The tardy buildup of the right wing of the German force for the encirclement of the Kiev area prevented Army Group South's Sixth Army (the center of the attack force) from engaging the main body of the Soviet Fifth Army around Kiev. Hitler believed these delays were necessary in order to complete the destruction of the mass of enemy troops situated east and west of Kiev before they withdrew to the base line of the salient. Hitler also held that criticisms of this operation and the resulting postponement of the assault upon Moscow were invalid because the elimination of Soviet forces on the right flank of Army Group Center would enhance, rather than impair, a further advance to the east. If Soviet forces were not destroyed they would continue to threaten the southern (right) flank of Army Group Center, and serve to reinforce new Russian positions in the rear.*

In Hitler's opinion no one would have questioned the wisdom of an operation for encirclement of Russian troops east of the Dnepr if the salient near Kiev had developed at the start of the campaign, and in any case the circumstances--chiefly the opportunity to destroy a large Soviet force--did not warrant any different action. Once operations around Kiev

*See Maps Nos. 4, 6, 7, and 8.

had been brought to a conclusion, Hitler's promised thrust (which was not to fail in any circumstances) toward Moscow was to begin. For this offensive he considered the formation of powerful motorized armies to be indispensable, especially for operations on the flanks. These forces-- which were to be kept intact rather than dispersed--were to pause when necessary to destroy entrapped Soviet forces. Hoping that Army Group South could cross the Dnepr near Zaporozhye or Dnepropetrovsk and seize the Soviet air bases in the Crimea which threatened the Rumanian oil fields, Hitler delayed approval of the army group's proposed dispositions, which he thought prematurely determined the final direction of advance of the group's motorized units. In the event that a crossing could be achieved in a short time between Kiev and Kremenchug, motorized units of Army Group South were to rush ahead to dislodge the new Russian position or to assist in the destruction of Soviet forces still within the salient. Should this opportunity fail to materialize for Army Group South, the supreme command was to direct the completion of this task by motorized units of Army Group Center.

Hitler made the Army High Command solely responsible for implementing these assignments, just as the Commander in Chief of the Luftwaffe was to be responsible for the logical and strategically concentrated employment of the Luftwaffe.⁶

No further objection was advanced by any of the leading commands of the Wehrmacht or by the High Command of the Armed Forces itself against the new Fuehrer directive, which became binding and subsequently decisive in effect.

Coordinated Operations of Army Groups South and Center

Army Group South, in cooperation with the southern wing of Army Group Center, was to envelop and annihilate the Soviet forces remaining along the middle Dnepr and the lower Dnepr Rivers so that operations against Kharkov and the Donets Basin could continue at an early date. Operations were to proceed as follows:

(1) The First Panzer Group was to drive north from the Kremenchug bridgehead, wheel toward the Sula River section, and block the Soviet forces withdrawing from the west between Romny and Lubny. Later, the III Panzer Corps was to attack eastward from the Dnepropetrovsk bridgehead.

(2) The Seventeenth Army in the area of Kremenchug and northwest of Cherkassy, with a bridgehead east of Kremenchug, was to use

its XI Corps to block the Sula River section downstream from Lubny. Most of the army's forces, however, were to drive on Poltava to secure the line along the Vorskla River and to facilitate the later armored attack from the Dnepropetrovsk bridgehead toward the Donets Basin.

(3) The Sixth Army, deployed from north of the Seventeenth Army to north of Kiev, was to advance from its bridgehead across the Desna River near Oster and Morovsk to the Yagotin-Priluki line. The XXIX Corps was to take Kiev from the west. Army Group South was to advance in a general offensive when the envelopment from the north began to develop.

Army Group Center was to push elements of the Second Army toward Olishhevka to facilitate the advance of the Sixth Army from the Morovsk bridgehead. The Second Army, which was deployed in an arc beginning west of Chernigov and running northeast to Novozybkov, with its strength concentrated on its eastern flank, was to advance through Nezhin to Lokhvitsa to intercept the Soviet forces withdrawing before the Sixth Army. The Second Panzer Group, located southwest and south of Pochep, with its main front facing south and with components constantly covering the eastern flank, was to proceed across the Bakhmach-Konotop line against Romny to close the Romen River section between Bakhmach and Romny and join forces with the First Panzer Group advancing from the south.

On 25 August 1941 the forces of Army Group Center opened their offensive to the south. German armored units drove through the boundary between the army groups of Timoshenko and Budënyy and penetrated deep into the rear of Budënyy's group, which had sought to protect the northern Ukraine by defending the areas north and south of Kiev and east of the Dnepr. Budënyy had already lost his opportunity to achieve a planned and orderly withdrawal of his unit to the east. The Soviets, quickly recognizing the far-reaching significance of the German operations, attempted to frustrate the Wehrmacht's intentions by making a spirited defense of the Desna lowlands. After weeks of bitter fighting, the Second Army of Army Group Center advanced as far as Nezhin. On 14 September the Second Panzer Group reached Romny, 124 miles east of Kiev. Its eastern flank (which had steadily lengthened to some 136 miles) was constantly attacked by Soviet forces, especially around Trubchevsk, Yampol, and the area south of Putivl.

On 10 September Army Group South's First Panzer Group and Seventeenth Army moved out of the Kremenchug bridgehead toward the northeast, north, and northwest. Six days later at Lokhvitsa the First

Panzer Group joined components of the Second Panzer Group advancing from the north. The ring was closed around five Soviet armies. Now began the actual encirclement battle of Kiev, the greatest battle of annihilation in the entire Russian campaign.

The Seventeenth Army advanced its right wing to Poltava to cover the east flank of the First Panzer Group, while other strong elements of the Seventeenth Army wheeled to the northwest. At the same time, the Sixth Army of Army Group South attacked across the Dnepr River on both sides of Kiev, isolating that Soviet strong point, and on 19 September the city and fortress were taken. The autumn mud season seriously hampered the movements of the armies, especially the smooth advance of the armored groups. Nevertheless, the ring around Budëny's armies grew steadily tighter and stronger. German infantry forces finally compressed the enemy into the Kiev-Cherkassy-Lokhvitsa area, while the armored units beat off Soviet counterattacks from the east which sought to relieve the pocket. These armored forces also drove repeatedly into the pocket, dividing it into still smaller pockets.

Although in some areas strong Soviet forces were destroyed to the last man in bitter hand-to-hand fighting, the number of prisoners taken in the encirclement seemed incredibly large. Yet, all reports of prisoners taken and material captured were later confirmed. When this encirclement battle ended around 26 September, the Germans had captured 665,000 prisoners, 3,718 guns, 884 tanks, and immense quantities of other materiel.*

Did the results of this tremendous battle confirm the views of Hitler or those of his generals as to how the war on the Eastern Front should be fought? After the war, General der Infanterie von Tippelskirch declared that "the magnitude of the local success spoke for Hitler. Yet, only the outcome of the entire campaign could show whether the extent of the tactical victory . . . stood in correct proportion to the resultant loss of time for the continuance of the operations. If the objective of the campaign was not achieved, therefore, the Russians had indeed lost a battle, but won the campaign."⁷ Generaloberst Guderian, Commander of the Second Panzer Group during the Kiev battle, later acknowledged that the battle had been "a great tactical success," but he doubted that the tactical victory "would also produce great strategic results." It was vital for German forces to achieve decisive results before the onset

*See Maps Nos. 6, 7, and 8. See also Figure 24.



Figure 24
The endless mass of Soviet prisoners,
encirclement battle of Kiev, 1941



Figure 25
Air interdiction of the Kiev pocket, 1941

of the autumn mud period or of winter, and although the planned operation for a tighter siege of Leningrad already had had to be abandoned, the Army High Command believed that the Soviets could not establish effective defensive positions in the South and that Army Group South could win the Donets Basin and reach the Don before the arrival of winter. The main effort, however, was to be directed at Moscow with the reinforced Army Group Center. Some army commanders, like Guderian, questioned whether there was still time for that.⁸

The Luftwaffe Shatters Budëenny's Armies

In the gigantic encirclement battle at Kiev units of two air fleets were for the first time required to support the coordinated operations of the several armies and panzer units of two army groups, South and Center. Over a million Soviet soldiers with a vast quantity of materiel were enclosed within a pocket of some 15,440 square miles.

The Luftwaffe supported ground operations by air reconnaissance, establishment of air superiority over the battlefield, isolation of the pocket against external Soviet counteraction, and by direct attacks against the entrapped enemy ground forces. Air reconnaissance units supplied the Army and Luftwaffe commands with essential data for the evaluation of strategic and tactical situations, thus permitting a timely commitment of forces in an auspicious strategic or tactical direction. Enemy positions inside and outside the pocket from which relief attacks might be launched were kept under constant surveillance by German airmen.

The fighter units, achieving air superiority over the battlefield, prevented any serious Soviet air interference with German ground forces and protected close support units of the Luftwaffe as they carried out successful, devastating, and virtually undisturbed attacks against Russian troops and materiel in the pocket.

Luftwaffe bomber units isolated the battlefield against Soviet ground intervention by continuous (and effective) attacks against the roads and railways leading into the pocket from the southeast, east, and northeast. By making constant sorties against rail junctions and highway traffic centers, by repeated interdiction of track sections and the destruction of numerous trains, and by the destruction of bridges, these bombers also complicated or prevented both the advance of Soviet reserves attempting to break the encirclement and the escape of sizable forces from the pocket. The German isolation of the Kiev pocket was exemplary, with the bombers of the V Air Corps (Fourth Air Fleet) operating from the

Kirovograd area in the south and those of the II Air Corps (Second Air Fleet) operating from north of Gomel and Orsha in the north.^{9*}

The Right Wing of the Pincer Movement

The First Panzer Group, advancing rapidly from the south under the constant support of the Close Support Air Commander and fighter units of the V Air Corps (Fourth Air Fleet) reached Lokhvitsa to join elements of the 3rd Panzer Division of Guderian's Second Panzer Group of Army Group Center. In an earlier desperate move the Soviets, using the only rail line still in their hands, the line from Romodan to Poltava, attempted to transport as much supplies, equipment, and personnel as possible to the east, saving whatever could still be saved. Trains--heavy rail movements--were observed moving within sight of each other. In extremely heavy attacks on this rail line and against Soviet troops marching on both sides of the roads, the long-range bombers of the V Air Corps inflicted severe losses, in particular upon elements which had already escaped east of the Khorol-Lokhvitsa line.¹⁰ At the same time, units of the Close Support Air Commander of the V Air Corps attacked enemy columns and field positions in the Lubny-Lokhvitsa-Priluki-Yagotin and the Akhtryka-Gadyach-Mirgorod areas.

A series of local Soviet attempts to effect a breakthrough in the Lubny area were smashed with the support of V Air Corps units. A critical situation which developed in the Lubny-Lokhvitsa area, because of the inadequate strength of the advance German ground forces (First Panzer Group of Army Group South) was equalized only by the Luftwaffe. Further, units of the Seventeenth Army (right wing) of Army Group South had to prevent the formation of a new Soviet force in the Mirgorod-Gadyach-Akhtyrka-Poltava area (made up of elements which had escaped the pocket and reinforcements from the east), since such a force, under energetic leadership, could undoubtedly be capable of delivering promising relief attacks from the Mirgorod-Gadyach area toward the Sula River sector. At the same time, the Seventeenth Army, attacking toward Poltava, also would be supported by these air attacks. Long-range bomber forces of the V Air Corps, therefore, repeatedly struck at the numerous withdrawing Soviet columns in this area, preventing them from reorganizing their units and reestablishing their defenses and forcing them to retreat in disorder to the Kharkov-Akhtyrka area, leaving some elements around Poltava. German fighter pilots were

*See Maps Nos. 6 and 7. See also Figures 25 and 26.



Figure 26
Damage to Russian materiel
in the Kiev pocket, 1941

very successful in establishing air superiority over the Soviet air arm in the battle area, and by 14 September had shot down 44 enemy aircraft. In addition, V Air Corps units in this period destroyed 560 trucks and 3 tanks, damaged 267 trucks, destroyed or badly damaged 17 trains, and repeatedly interrupted traffic on 5 railroad lines. Further continuous bombing of the Soviet air bases at Kharkov and Poltava destroyed large numbers of aircraft.

After the completion of the envelopment, the enemy divisions within the pocket were attacked daily by waves of aircraft. The Soviet command was no longer in a position to employ its troops in organized operations and to force a way through the iron ring. With the increasing contraction of the pocket, dive bombers were able to attack dense concentrations of enemy troops and vehicles, inflicting exceedingly heavy casualties.

At this point a fuel shortage, which had threatened for days in the area of the Fourth Air Fleet, exerted such an extremely adverse effect upon operations that on 16 and 17 September only a few bombers could be sent into action. Repeated requests to the air fleet by the V Air Corps, asking for timely and sufficient fuel supplies, were futile, even after the air fleet had begun to exert its influence in the matter, since the tremendous distances and inadequate available transport space did not allow a smoothly functioning supply system. Nor was an adequate reserve of supplies to be expected at the airfields in the near future.

On 18 September the German Sixth Army began its offensive to the east. Its XXIX Army Corps was to capture the Kiev citadel after breaching the fortified defense system. As always, air attacks were to soften up the fortress for the ground attack. General der Artillerie Fritz Brand (OKH) declared that Kiev was to be reduced to "rubble and ashes" and the Luftwaffe was to do "half of the work."¹¹ For this attack, therefore, the V Air Corps transferred the III Group of the 77th Dive Bomber Wing and the III Group of the 52nd Fighter Wing to Belaya Tserkov. Bunkers and artillery positions in the fortress approaches and fortifications on Lysa Hill were successfully attacked, enabling the ground forces to advance quickly and to capture the fortress around noon on 19 September.¹²

The dive bombers, now sent in to break the last bitter resistance and to annihilate the pocketed enemy forces, struck very dense masses of troops, vehicles, and equipment of all kinds around Borispol, Voronkov, and Staroye. On 29 September alone, at least 920 vehicles were definitely destroyed and extraordinarily heavy and unprecedented losses of men and

materiel were inflicted upon the enemy. A later inspection of the battlefield impressively confirmed the chaotic and destructive impact of the air attacks. Prisoners agreed that Soviet combat morale had long been declining because of the Luftwaffe. The commander in chief of the Sixth Army, while visiting the completely demolished Borispol, saw the annihilating effects of the dive bomber attacks on closely massed Russian forces--in some instances, eight columns of vehicles had been moving abreast--and recognized the merits of the Luftwaffe in quickly breaking Soviet resistance in sectors of main effort and, especially, in facilitating the swift continuation of operations.

In summation, the following comments can be made with respect to the fighting along the southern half of the Kiev pocket:

(1) Even before the actual battle of annihilation began at Kiev, ceaseless day and night attacks by V Air Corps units against the rail lines to the east decisively delayed the timely withdrawal of strong Soviet forces from the Kiev area and weakened the enemy through continuous disruption and destruction of his supplies.

(2) The V Air Corps enabled the Seventeenth Army to establish the bridgehead at Kremenchug which was decisive for the envelopment movement and contributed positively to the rapid advance of the First Panzer Group northward until it made contact with the Second Panzer Group.

(3) Before the ring was closed between Lubny and Lokhvitsa, the Luftwaffe prevented the withdrawal of substantial Russian forces toward Kharkov.

(4) A developing Russian threat to the flanks and rear in the Mirgorod-Gadyach area was nipped in the bud.

(5) The contraction of the pocket, as well as the swift capture of the Kiev fortress, was in large measure due to the work of the close support units of the V Air Corps.

(6) The annihilation of the entrapped Soviet masses within the area southeast of Kiev represented the high point which was achieved up to that time in the destructive effectiveness of the bomber and dive bomber.

During the battle around Kiev (12 to 21 September) the V Air Corps flew 1,422 sorties and dropped 1,251,440 pounds of bombs, 96

containers, each holding a number of incendiary bombs (Brandbomben-Schnell-Kasten 36), and 1 1/2 racks of propaganda leaflets, with the following results: (1) 65 aircraft of the Soviet Union were shot down with 42 more being destroyed on the ground; (2) 23 tanks, 2,171 motor vehicles, 6 antiaircraft artillery batteries, 52 railroad trains, 28 locomotives, and 1 bridge were destroyed; (3) 355 motor vehicles and 36 trains were damaged; (4) 41 horse-drawn vehicles were damaged or destroyed; and (5) 18 sections of railroad track were broken up. At the same time, German Air Force personnel losses were limited to 4 officers killed and 3 missing, and 5 noncommissioned officers and airmen killed, with 15 missing and 5 wounded. Aircraft losses were also low, with 17 planes destroyed, 9 receiving over 30 percent damage, and 5 with less than 30 percent damage.^{13*}

The Left Wing of the Pincer Movement

In the northern area of the Kiev pocket the II Air Corps of the Second Air Fleet supported the advance of the Second Army and, more especially, of the Second Panzer Group (later Second Panzer Army) of Army Group Center. After heavy fighting, the ground forces, aided by strong air support, crossed the Desna River--its wide, marshy banks formed a difficult natural obstacle--and broke through the enemy field positions on the far shore. While the II Air Corps employed its bomber units en masse against railroads, units of the II Close Support Air Commander rendered invaluable assistance to the Second Panzer Group in its drives on Konotop and, later, on Romny.¹⁴

Dive bomber and ground attack units, cooperating directly with Guderian's armored corps and divisions, repeatedly broke local Soviet resistance which attempted desperately to hold the German spearheads and the enveloping flanks. These air units also effectively supported the ground defenses against massed Soviet attempts to break out through the weaker positions on the northern and eastern fronts of the pocket. In addition, through waves of attacks, which inflicted exceedingly high losses on the Russian forces within the steadily contracting pocket, these units contributed much to break the will and destroy the fighting power of the entrapped armies. The strong and diversified character of these sorties is shown by the following reports and observations:

*See Maps Nos. 6 and 7.

After the war, General Guderian commented on the effectiveness of the Luftwaffe, remarking that while visiting an artillery forward observation post on the north bank of the Rog [Rozhok] River on 26 August to observe the impact of the dive bombers on Soviet positions defending the river, he noted that although the bombs were well aimed little damage was done. "Nevertheless, the morale effect, which held the Russians down in their foxholes, permitted the river to be crossed almost without losses."¹⁵

On 10 September, General Halder wrote with regard to Army Group Center that the Second Panzer Group had taken Romny and was advancing towards its First Panzer Group counterpart (v. Kleist). Halder thought it curious that the Second Panzer Group had not been attacked on its eastern flank, and thought that perhaps "the numerous destructions of railroads by our Luftwaffe are a part of it."¹⁶

The High Command of the Luftwaffe report for 2 October mentioned the outstanding performances of the 3rd and 53rd Bomber Wings of the II Air Corps and listed the severe destruction which they had wreaked upon Russian targets between 22 June and 9 September. The 3rd Bomber Wing, for example, accounted for 21 planes in the air and 450 more on the ground. It also destroyed 30 tanks, 488 motor and other vehicles, 349 railroad trains, 7 armored trains, and 14 bridges, while it interrupted rail traffic 332 times. In addition, 290 sorties were flown against troop concentrations, columns, barracks, 21 supply depots, and 27 artillery and field positions, while 1,334,000 propaganda leaflets were dropped over enemy lines.¹⁷

The highly effective results achieved by the 210th Ground Attack Wing (II Air Corps) between 22 June and 27 September were also noted by the OKL. During this time the wing shot down 96 Soviet aircraft and destroyed 741 more on the ground; it also destroyed 148 tanks, 166 artillery pieces, 3,280 motor and other vehicles, 49 railroad trains, 1 armored train, 68 locomotives, and 4 bridges. The wing was also able to silence 47 artillery batteries, to cut repeatedly seven railroad lines, and to successfully carry out numerous attacks upon troop units, positions, depots, and cantonments.^{18*}

Also mentioned by the High Command of the Luftwaffe was the performance of the 51st Fighter Wing (II Air Corps), which on 8 September

*Attacks made with Me-110 two-engine fighters, equipped with SD-2 fragmentation bombs (each bomb weighing 4 1/2 pounds). See Figure 26.

1941 achieved its 2,001st air victory. The figure includes victories on both the Western and Eastern fronts. By 10 September, on the Russian front alone, the wing had shot down 1,357 planes and had destroyed 298 more on the ground. In 354 strafing attacks by the unit on Soviet airfields, columns, battery positions, troop concentrations, railroad installations, and other targets, the wing successfully helped to overthrow enemy resistance, "destroying 142 tanks and armored cars, 16 guns, 34 locomotives, 432 trucks, 75 vehicles of various types, and 1 armored train."¹⁹

Luftwaffe antiaircraft artillery--incorporated with the advance assault troops--defended the ground forces, especially the armored spearheads, against attacks by Soviet ground attack aircraft along the entire front of the encirclement. In ground fighting the antiaircraft artillery fought against pockets of resistance and provided valuable defensive firepower against enemy armor attempting to break out or to counterattack. Many local crises were mastered by committing antiaircraft artillery batteries to ground combat.²⁰

An outstanding example of the effective employment of antiaircraft artillery against ground targets is that of the 104th Antiaircraft Artillery Regiment, commanded by Col. Hermann Lichtenberger. On 18 September 1941, Soviet forces, supported by numerous tanks, attempted to break through the thin ring encircling the Kiev pocket just east of Romny. Only two weak battalions of the German 10th Infantry Division (Motorized) were then available to repel the attack, and Generaloberst Guderian (who, on 16 September, had shifted the command post of his Second Panzer Group from Konotop to Romny) requested help from Generalmajor von Axthelm, commanding the I Antiaircraft Artillery Corps. The latter, whose command staff had arrived at Romny on the morning of the 17th, summoned by radio the batteries of the 104th Antiaircraft Artillery Regiment, then situated five miles northwest of Romny. These units, led by Lichtenberger, arrived through the mud and immediately went into action against the decisive Soviet tank assault, made by T-34 tanks, then already within a half mile of the city. As the batteries arrived on the scene, they began by rapid firing to simulate a superiority in firepower. On the front line, unsupported by infantry, the batteries provided their own infantry cover from supply train personnel, while their guns neutralized several Soviet batteries and set numerous tanks on fire. The 104th Antiaircraft Artillery Regiment thereby succeeded in crippling and delaying the strong Russian attacks until elements of the SS-Panzer Division "Das Reich" and the 4th Panzer Division could arrive. On 19 September and during the following days the Russian forces were thrown back with heavy tank losses. The regiment received the thanks of Guderian and the plaudits of the High

Command. Colonel Lichtenberger and Captain Fahlbusch, one of his battery commanders, were awarded the Knight's Cross of the Iron Cross.²¹

The heavy commitment of antiaircraft artillery batteries and flying units of the Second and Fourth Air Fleets in support of army operations helped materially to accelerate the Wehrmacht advance in the East. This support was given despite adverse conditions, and was of crucial importance because every day gained for operations was essential if the objectives of the campaign were to be achieved before the onset of winter.

Chapter 7

FIRST AIR FLEET OPERATIONS IN ARMY GROUP NORTH AREA

Operations of Army Group North

At the beginning of the Russian Campaign, Army Group North, commanded by Field Marshal Wilhelm Ritter von Leeb, was committed to action with the Sixteenth Army on the right (south) and the Eighteenth Army on the left (north). Behind the adjacent wings of the two armies stood the Fourth Panzer Group, ready to make a breakthrough. Army Group North, numerically the weakest of the three great army groups on the Eastern Front, controlled 20 infantry, 3 motorized infantry, and 3 armored divisions. Its mission consisted of three principal tasks: to destroy Soviet forces deployed in the Baltic region; to seize the Baltic ports; and to capture Leningrad and Kronshtadt, thereby depriving the Soviet Navy of its bases.¹

Because of the location of the Russo-German border in the northern area and the consequent lack of large areas for troop concentrations, there would be from the first no opportunity to carry out (as did Army Group Center) a large-scale envelopment of Russian forces. Therefore, after breaking through the border positions Army Group North would rely upon advancing a strong right wing, preceded by hard-hitting mobile units, to reach as quickly as possible the OPOCHKA-Pskov area, where it was to check the withdrawal of Soviet units from the Baltic region and thus open the way for the continued rapid advance on Leningrad. OKW Directive No. 21 of 18 December 1940 provided that Army Group Center was to support these operations by wheeling mobile units from the Smolensk area toward the northeast.^{2*}

The Soviet forces in front of Army Group North were deeply echeloned. Under Marshal Kliment Efremovich Voroshilov, seven infantry divisions were deployed in the relatively weak border fortifications. To the rear 22 infantry and 2 cavalry divisions and 6 motorized-mechanized brigades were concentrated in separate groups in the Wilno-Kaunas area, around Siauliai, and in and south of the Pskov area.³

*See Maps Nos. 3, 4, 8, and 9.

The weak border defenses were quickly breached on 22 June. Advancing on a broad front, units of Generaloberst Erich Hoepfner's Fourth Panzer Group reached the Dvina River at Daugavpils on 26 June and established a bridgehead.* One corps of the unit was temporarily held up near Kedainiai, north of Kaunas, by heavy Soviet tank attacks. Following behind in forced marches were the Sixteenth Army under Generaloberst Ernst Busch and the Eighteenth Army under Generaloberst Georg von Kuechler, the latter unit occupying Riga, Latvia, on 29 June.⁴

The northern wing of the Fourth Panzer Group, leading the field, captured Pskov on 9 July, and on the following day its southern wing reached Opochna. The Eighteenth Army mopped up the southern Baltic region against slight enemy resistance, occupying Liepāja (Libau), Latvia, on 28 June and Ventspils on 1 July. By 10 July one army corps had reached the Tartu-Pärnu line.

Up to this time, Army Group North had not been able to envelop and destroy the strong enemy forces at hand. The Soviet front had given way in all sectors as the German forces sought to come to grips with Russian armies. According to an entry in his diary on 23 June, Halder thought that the Soviets had long prepared to withdraw, probably behind the Dvina River. Russian resistance did not begin to stiffen until the Wehrmacht crossed over the old pre-1939 Soviet border south of Lake Peipus.⁵

Since 11 July 1941 Finnish troops had been attacking on the isthmus toward Leningrad, and on 13 July Army Group North also resumed its drive toward that city. Although the Finns' attack tied down considerable Soviet forces, enabling the northern wing of Army Group North to make good progress, a dangerously deep and open flank developed on the southern wing of the army group, which was advancing in a general north-easterly direction. The army group's right wing was behind the general advance, and a steadily widening gap developed between Army Groups Center and North, constituting a grave source of danger to both army groups. Soviet movements in this area had to be watched continuously. Halder noted on 4 July that a Soviet movement was proceeding from Moscow into the area west of Velikiye Luki and therefore "between the inner wings of Hoth and Hoepfner," while a second Soviet advance was moving northward around Lake Ilmen into the Pskov area.⁶

*See Figures 27 and 28.



Figure 27
The Dvina bridge and Daugavpils,
Latvia, in June 1941



Figure 28
Air view of the fortress of Daugavpils,
Latvia, June 1941

But Army Group Center constantly required all of its forces to clear up the critical situations developing on its extended flanks and so could not support Army Group North by wheeling mobile units north or northeast, as had been stipulated in the basic operational directive.⁷ In the meantime, the High Command of the Armed Forces had ordered that Army Group North would have to perform its assigned tasks with its own forces alone.⁸

The Eighteenth Army cleared Latvia and Estonia, but the bulk of the enemy force was able to fall back across the Narva River before the Fourth Panzer Group (which, on 17 August, had taken the city of Narva from the south) could close the narrow stretch of land between Lake Peipus and the Gulf of Finland.

The Sixteenth Army had to cover the Eighteenth Army's drive on Leningrad against attacks from the east or southeast. On 10 August the Sixteenth Army occupied Kholm and, after very heavy fighting, established a defensive front at Staraya Russa on the Lovat River. A surprise attack by strong Soviet forces across the Lovat led to a very serious crisis, particularly in view of the fact that large Russian units had turned abruptly to the north. In cooperation with Fourth Panzer Group tank units (which were rushed south from Luga) and an armored corps from the left flank of Army Group Center, the units already in the area were able to restore the situation and destroy the Soviet group in bitter combat along the western slopes of the Valdai Hills. During this fighting the Sixteenth Army advanced its southern (right) wing to a line extending from Ostashkov to the eastern shore of Lake Ilmen. Driving ahead to Petrokrepost (Schluesselburg) the Eighteenth Army sealed off all eastern and southeastern approaches to Leningrad. It was hoped that with Finnish support the city could be encircled and captured.

By the end of August, Army Group North had inflicted heavy losses upon the enemy, but it had not achieved a genuine strategic victory. In the early days of September the Eighteenth Army had forged ahead as far as the Neva River east of Leningrad and thus occupied the entire southern coast of the Gulf of Finland, except for a Soviet bridgehead around Lomonosov (Oranienbaum) and pressed forward to encircle heavily fortified Leningrad. The attack on the eastern and southeastern outer perimeter defenses, which began on 5 September, brought favorable results, and on 8 September Petrokrepost was taken by assault.⁹

A joint Army-Navy-Luftwaffe operation launched on 14 September against the Baltic islands of Muhu, Saaremaa, and Hiiumaa was successfully concluded on 21 October. A more detailed treatment of this

operation appears later in this chapter.

In mid-September the Fourth Panzer Group and the armored corps of the Third Panzer Group (brought up from the south a few weeks before to support the Sixteenth Army) were disengaged from Army Group North and transferred to Army Group Center for the planned operation against Moscow, an action which seriously weakened Army Group North. Halder recorded on 5 September that during a Fuehrer conference held that day it had been announced that the Leningrad objective had been achieved, that henceforth the city would be a secondary theater of operations, and that all armored and Luftwaffe units were to be transferred elsewhere. Moreover, it had been decided that, in an impossibly few days, an attack--in which the role of the Sixteenth Army was obscure--was to be launched against Marshal Timoshenko's forces. That evening a discussion between Col. Adolf Heusinger, Generalleutnant Friedrich Paulus, and Halder brought forth the conclusion that the attack could not be undertaken before the end of September.¹⁰

Despite being severely weakened, Army Group North continued its attack early in October and, after breaking through the Volkhov front with elements of the Sixteenth Army, pushed forward in stubborn, bitter combat as far as Tikhvin. However, the southern wing bogged down in front of the Valdai Hills in the face of strong Russian resistance.

Under the pressure of a very heavy Soviet counteroffensive the spearhead of the Sixteenth Army, which had been pushed forward as far as Tikhvin, had to be withdrawn in December of 1941 to a defensive position on the west bank of the Volkhov. The Eighteenth Army established contact on the Volkhov, and Petrokrepost remained in German hands. On Christmas Day 1941 an apparent halt to the fighting came over the entire front of Army Group North.¹¹

Operations of the First Air Fleet

Mission

Under the command of Generaloberst Alfred Keller,* the First Air Fleet (with its headquarters at Norkitten, some 12 miles west of Insterburg)† in coordination with Army Group North, was to: (1) destroy

*See Figure 29.

†East Prussia, annexed by the Soviet Union and renamed Chernyakhovsk.



Figure 29
Generaloberst Keller, ready to fly to one of his
First Air Fleet units, Russia, 1941

the enemy flying forces in its combat zone and thereby gain air superiority; (2) create conditions which would permit the units of Army Group North, particularly the Fourth Panzer Group, to advance quickly upon Leningrad; and (3) attack the Soviet Navy in its Baltic bases, in Kronshtadt and Leningrad. Under the air fleet's control were the I Air Corps under General der Flieger Helmuth Foerster and Luftwaffe Commander Baltic, Col. Wolfgang von Wild. With these forces the First Air Fleet intended to: (1) attack all occupied Soviet airfields within the range of its own bombers, operating against Russian aircraft in the air and on the ground, to prevent any counter-air activity against German Army operations; (2) provide fighter protection for the advancing ground forces, especially armored units, against possible enemy air attack; (3) interdict Soviet highway and railroad traffic; (4) attack the Soviet Baltic Fleet at sea and in its bases with bombs and mines, tie up merchant shipping in the Baltic, and stop traffic through the White Sea-Baltic Canal (Stalin Canal), the last task to be accomplished mainly by destroying the lock installations at Povenets, the highest locks (about 328 feet above sea level) of the canal, thus preventing the transfer of some 45 submarines, about 15 destroyers, and various mine-laying vessels from the Gulf of Finland to the Arctic Ocean; (5) directly and indirectly support the ground forces with bombers; and (6) attack the Soviet air armament industry, concentrating on Leningrad.

Special antiaircraft artillery forces in the form of an antiaircraft artillery corps or a division were not available to the First Air Fleet in 1941 as they were to the air fleets in Combat Zones Center and South. Instead, the Luftwaffe antiaircraft artillery battalions and regiments were assigned to the Luftwaffe commanders (Köluft) attached to the headquarters of Army Group North, the Sixteenth and Eighteenth Armies, and particularly the Fourth Panzer Group. Their primary task was to provide antiaircraft protection for the armored spearheads and the main advance routes, especially at river crossing sites. Only in cases of emergency were these units to be employed in ground combat.

First Air Fleet Operations in the Baltic Area, 22 June to early August 1941

All bomber units of the First Air Fleet took off in clear weather about 0230 on 22 June from their East Prussian bases and crossed the border between 0300 and 0330 to attack the identified Soviet operational airfields. Air and ground reconnaissance had presented a clear picture of the condition of the Soviet flying forces, their strength, their composition, and the garrisoning of their air bases. This data was continually checked and amplified with great success by the long-range reconnaissance

squadrons.¹²

In Combat Zone North the opening attacks of the First Air Fleet units took the Russians completely by surprise. A great part of the Soviet flying units were destroyed by these attacks and by those which took place during the following few days. Assessments made after the capture of the area yielded the same picture of tremendous destruction as had been found in Combat Zones South and Center. Many hundreds of wrecked aircraft were found, mostly I-16 Rata fighters but also numerous so-called Martin bombers (SB-3's), burned out and torn to shreds on the airfields which had been plowed up thoroughly by German bombs of all sizes. The field installations, mostly of wood construction, were burned out or otherwise destroyed. As a result, the Luftwaffe construction troops and the German Labor Service (Reichsarbeitsdienst) battalions later had to work long and hard to restore these airfields and to remove the gigantic quantities of debris.

Through these annihilating blows, the First Air Fleet achieved air superiority within the first few days in its zone of operations and induced the Russians to transfer their remaining air units behind the Dvina River. Then, the emphasis in air fleet operations shifted to the support of Army Group North's advance toward the Dvina, with the main effort over the sectors of the armored spearhead of the Fourth Panzer Group. By 1 July the Wehrmacht reached the Dvina on a broad front, and the cities of Riga, Jēkabpils, and Daugavpils were captured, with bridgeheads being successfully established at these places.* The I Air Corps performed a particularly valuable service to the ground forces by shattering a Soviet counterattack, heavily supported by tanks, in the area south and southwest of Siauliai. In close cooperation with the Army, the air arm destroyed more than 250 tanks.¹³

From the beginning of the Russian campaign, single planes and formations of planes of the enemy flew over East Prussian territory. These were so effectively met by German antiaircraft artillery and fighters that after some three to four days no substantial penetration by Soviet aircraft occurred. Reports of the High Command of the Luftwaffe describing these air penetrations show, for example, that on 22 June some 70 to 80 Russian aircraft, deployed in a number of raids, flew over German territory and occupied Poland, damaging some property and killing and injuring a few civilians. On the following day, 10 Soviet

*See Figures 27 and 28.

bombers slightly damaged the gas works and the wharf area at Koenigsberg. On 25 June some 28 Russian planes made bombing attacks over Germany, occupied Poland, and Norway; eight planes hit Memel (Klaipėda), killing 23 persons, leaving 250 homeless, damaging houses and a chemical factory, partially interrupting electric power and the water supply, and mining the harbor. However, seven Soviet planes which attacked Tilsit were shot down before they reached their targets.¹⁴

The superiority of German fighters over Soviet bombers was especially impressive when an entire formation of 20 enemy bombers, returning from a largely ineffective attack on Gumbinnen, was intercepted and shot down between Gumbinnen and Goldap by a fighter group based at Trakehnen.* A few hours later the first Soviet prisoners were interrogated by the air fleet intelligence officer and their statements were immediately evaluated for the next German sorties. A Soviet bomber formation of 43 planes was completely destroyed in the same way a short time later by fighters of the I Air Corps, and during the daylight hours of 4 July fighter and twin-engine fighter units shot down another 20 out of 25 bombers which were attacking the advance units of an armored group.¹⁵

Units of the Luftwaffe Commander Baltic carried out continuous attacks against enemy shipping and mined the waters of the Baltic Sea around Kronshtadt. On 29 June a 2,200-pound Luftwaffe high-explosive bomb struck a lock gate of the White Sea-Baltic Canal, which interrupted all traffic over that route.

On 2 July Army Group North attacked from its bridgeheads east of the Dvina and breached the old Russian border fortifications. A week later, the advance reached a line extending generally from Oepochka through Ostrov, Pskov, and Tartu to Pärnu, and the flying units of the I Air Corps were moved forward to bases in the Daugavpils-Riga area. On the first day of this offensive the First Air Fleet supported the attack against the Soviet fortifications in this sector, but on the second day shifted its operations mainly to the interdiction of Soviet retrograde movements by rail and road. This action against the Russian defenses east of Pskov greatly aided the German advance.

*The northern half of East Prussia, seized by the Russians in World War II, has been incorporated into the Soviet Union. Thus Tilsit is now Sovetsk, Gumbinnen is Gusev, and Trakehnen is probably Anderskemen. Goldap was given by the Allies to Poland. De jure recognition has never been given to these acquisitions, which are tied in with the problem of the final settlement of Germany's boundaries and the "Cold War."

At the bridgehead across the Velikaya River at Ostrov another very heavy attack by Soviet bomber units was repulsed on 6 July with 65 of the 73 bombers being shot down. After this costly defeat the Soviets desisted from further attacks in large formations.

On 14 July the High Command of the Luftwaffe reported that between 22 June and 13 July the I Air Corps had shot down 487 Soviet planes and destroyed 1,211 aircraft on the ground, a victory which prevented an effective intervention by Soviet flying forces. The 1st Bomber Wing,* moreover, had carried out "particularly effective attacks" while directly and indirectly supporting Army operations. Similar support was rendered to the German Navy by the 806th Coastal Group under Lieutenant Colonel Emig.^{16f}

By 30 July the right wing (the Sixteenth Army) of Army Group North reached Lake Ilmen. In the center, the Fourth Panzer Group, driving on Luga, had encountered south of that city a strongly organized fortification system in which the enemy tenaciously resisted. For weeks the Sixteenth Army had a major problem, for until mid-August all supplies had to be brought forward by transport planes, since the only road extending from Pskov to Gdov was repeatedly closed by scattered, but still fighting, Soviet forces in the almost impenetrable forests. The High Command of the Luftwaffe reported on 29 June that since 23 June bombers had daily supplied the advancing armored units, Army reconnaissance aircraft, and airfields with ammunition, fuel, and aircraft weapons.¹⁷ The OKL report of 6 July noted that on the previous day the Army and the Luftwaffe had been supplied by air "with fuel, aircraft ammunition, replacement parts for fighters, rations, communication equipment, [and] medical supplies, as well as . . . news."¹⁸

Meanwhile, Army Group North's left wing (Eighteenth Army) had pushed forward from Riga to the Gulf of Finland and to Pärnu on the east side of the Gulf of Riga. The First Air Fleet supported this advance, concentrating its units with the Fourth Panzer Group. With the exception of targets immediately ahead of the forward armored units, strong Luftwaffe bomber forces attacked the highway and railroad traffic north-east and east of Pskov, while other bomber units were employed against rail traffic in Estonian territory and on the Leningrad-Moscow railroad.¹⁹

*Attached to the I Air Corps.

fThe 806th Coastal Group was attached to the Luftwaffe Commander Baltic. The group's commander, Colonel Emig, was killed in action during this operation.

The important railroad junction at Bologoye, always heavily occupied by 20 to 30 locomotives and 1,600 to 1,800 freight cars, was successfully attacked in several operations, especially those of 25 and 27 July. Counter-air operations were also carried out against Soviet airfields around Leningrad and in the Lake Ilmen region.

Small Russian forces scattered behind the front in very thinly settled and generally marshy areas had to be constantly eradicated by difficult guerrilla warfare. The monotony of the landscape and the extremely poor and inaccurate maps placed extraordinarily high demands upon the orientation abilities of the I Air Corps crews committed to operations in these areas.

In the meantime, units of the Luftwaffe Commander Baltic continued their operations against the Soviet Navy and merchant shipping and laid mines in the Gulf of Finland. For example, on 11 August it was reported that bombers operating against Soviet warships and merchantmen had severely damaged two destroyers, sunk a 2,000-ton merchant vessel, and damaged a 3,000-ton merchantman so badly that it was a total loss.^{20*}

A Reinforced First Air Fleet Supports Army Group North Operations Against Leningrad[†]

In OKW Directive No. 34 of 30 July 1941 Adolf Hitler ordered a continuance of the attack on Leningrad. The order concentrated on the attacking forces between Narva and Lake Ilmen in order to "surround Leningrad and establish contact with the Finnish Army." The Luftwaffe was to shift its main attack operations to the northeastern front by the transfer of the VIII Air Corps to the First Air Fleet. This change was to be made in time for the beginning of Army Group North's main attack, early on 6 August.²¹

Pursuant to these instructions, the VIII Air Corps was withdrawn from Combat Zone Center during late July and early August and transferred to the Dno area to reinforce the First Air Fleet. Here, in concentrated action, the corps was to support the breaching of the

*The 4th Bomber Wing, which had just been transferred (mid-August 1941) from the western theater of operations to the First Air Fleet, did not assist the campaign against Allied shipping, but took part in the opening air attacks upon Moscow.

†See Maps Nos. 11 and 12.

fortifications at Luga and the advance of the Eighteenth Army on Novgorod. Halder's diary indicates that this use of the VIII Air Corps must have been discussed and decided at the highest command level (between Hitler and Goering) without asking for the opinion of the Commander in Chief of the Army, Field Marshal von Brauchitsch.^{22*} Hitler's interference in the transfer of the VIII Air Corps and his interference in the control of operations (the dislocation of the Luftwaffe's main point of effort from Combat Zone Center to Combat Zone North) and in tactical control (the precise disposition of the air corps in Combat Zone North) are clearly evident. On 30 July General Jodl informed Halder that Hitler had now decided that Army Group North must take Leningrad and that the attacks against the Moscow-Leningrad railroad were to be abandoned. Furthermore, the Luftwaffe was to build up its strength in Combat Zone North in order to assist the ground forces in mopping up Estonia, and no air units were to be withdrawn until the success of the army group's efforts was assured.²³ The Fuehrer had given precise instructions for the employment of the First Air Fleet and the VIII Air Corps, first in attacking Novgorod, and later in supporting an attack by forces under General der Panzertruppen Hans Reinhardt.²⁴

The Fourth Panzer Group, with the effective support of the VIII Air Corps, broke through the Soviet system of fortifications on 11 August. Ten days later, Army Group North had reached the northern tip of Lake Ilmen and the Gulf of Finland, and its position extended roughly along a line passing through the captured cities of Novgorod, Kingisepp, and Narva.

Typical of the diversified and effective employment of the First Air Fleet during this period were the operations of 10 August. On that day strong dive bomber and bomber units attacked a variety of targets in the Lake Ilmen-Mshaga River-Luga-Kingisepp area, destroying 10 tanks, more than 200 vehicles, 15 artillery batteries, and individual emplacements, silencing several anti-aircraft artillery batteries, setting five transport trains on fire, and destroying several ammunition and fuel dumps. Besides this damage, the command posts of several important Soviet commands were bombed. These attacks, including those on Saaremaa Island, resulted in 54 Soviet planes being shot down.²⁵

*Halder commented, "The commitment of the VIII Air Corps [was ordered] for the support of the Lake Ilmen group without in any respect informing the Army High Command."

By 26 August units of Army Group North in Estonia had advanced to Tallinn (Reval), which they captured two days later with support from the concentrated forces of the I Air Corps and the Luftwaffe Commander Baltic. Particularly successful here were air attacks on 28 and 29 August against Soviet merchant vessels which were embarking from Tallinn loaded with troops and evacuated materiel.*

On 30 August the High Command of the Luftwaffe reported that most of its bomber units were being used against Russian vessels fleeing from Tallinn, enemy warships and merchantmen in the Gulf of Finland as far as the Bay of Kronshtadt, and individual ships on the Neva River and in the Ladoga Canal.^{26†} Stronger bomber forces continued to attack the retrograde ship movements during the next few days.

A strong Soviet counterattack against the advancing left wing of Army Group North (running along a line from Staraya Russa to Kholm to Lake Ilmen to the east) required a further concentrated effort by the Luftwaffe. Units of the First Air Fleet made a decisive contribution to the successful conclusion of the defensive battle south of Staraya Russa, which continued until 24 August.

Besides this direct support of the ground forces, the I Air Corps in the month of August carried out numerous attacks against the railroads leading from Leningrad to the west, south, and southwest, as well as the rail lines south and east of Lake Ilmen.

The Soviet air forces limited their operational activity almost wholly to the immediate vicinity of the front lines. The few flights which they made into the German rear service area and over Germany itself were carried out by very few aircraft and had no appreciable effect, except as nuisance raids. An example of this could be seen in the High Command of the Luftwaffe report of 9 August that "on the night of 8-9 August two to three Soviet Russian aircraft" utilized the "almost closed cloud cover" to approach Berlin via Stolpmuende. One plane dropped its bombs without effect and turned away when it encountered gunfire in the anti-aircraft artillery zone in the northern part of the capital, while the other aircraft dropped their bombs in open country. The intruders were

*See Figures 30 and 31.

†Ladoga Canal consists of two parallel canals, running east from Petrokrepost (Schluesselburg) along the southern coast of Lake Ladoga. The canal closest to the lake is the Novo-Ladozhskiy (New Ladoga) Canal, while that to the immediate south is called the Staro-Ladozhskiy (Old Ladoga) Canal.



Figure 30
Harbor of Tallinn (Reval) after its occupation
by German forces, end of August 1941



Figure 31
Soviet transport attacked by the Luftwaffe,
Gulf of Finland, Summer 1941

also fired upon by antiaircraft artillery at Stettin and Kuestrin,* but bad weather prevented German night fighters from intercepting them.²⁷

To suppress, or at least to limit, the slowly reviving Soviet air activity, bomber and fighter units of the First Air Fleet continuously attacked the Soviet flying units at their bases. From the beginning of the campaign until 23 August the I Air Corps alone destroyed 2,514 enemy planes. Of these, 920 were shot down in the air and 1,594 were destroyed on the ground.²⁸ An additional 433 planes were probably destroyed.²⁸ On 23 August the High Command of the Luftwaffe (OKL) made special mention of the 26th Twin-Engine Fighter Wing of the I Air Corps. The wing had carried out two attacks on 19 August on a Soviet air base at Nizino, 17 miles southwest of Leningrad; the first attack silenced the antiaircraft artillery and the second set 30 fighters on fire, destroyed 15 more, and shot down 3 in aerial combat. The wing thereby increased its total of enemy planes destroyed to 854, of which 191 had been shot down.²⁹

North of Lake Ilmen the Sixteenth Army had advanced through Chudovo and on 8 September captured Petrokrepost, while the Fourth Panzer Group had advanced through Gatchina into the area just south of Leningrad. On 23 September the Eighteenth Army reached the coast of the Gulf of Finland at Petrodvorets, placing the entire southern coast of the Gulf in German hands. Leningrad was completely surrounded except for a pocket around Lomonosov,[†]

On 26 September the planned siege of Leningrad began. To support this operation the bulk of the forces of the First Air Fleet had been committed mainly to the area south and southwest of Leningrad, where they were to carry forward the attack of the Fourth Panzer Group and the Eighteenth Army. Targets of military importance in Leningrad, as well as Soviet naval vessels in Kronshtadt, were also repeatedly attacked with good results. Toward the end of September, continuous operations by concentrated forces halted strong Soviet attacks south of Lake Ladoga and thereby prevented an opening of the ring around Leningrad. In addition to supporting the ground forces in repulsing Soviet breakout attempts at Leningrad, and in defending against attacks on the screening front south of Lake Ladoga, the First Air Fleet had to take continuous action against the supply and evacuation traffic to and from Leningrad by way of Lake Ladoga.³⁰

*Both cities are situated on the Oder River.

†See pp. 140 and 142.

Bomber and Dive Bomber Operations Against the Soviet Baltic Fleet

In the second half of September, the warships at Kronshtadt were attacked repeatedly with good results. The attacks were directed in particular against the two battleships Oktiabrskaya Revolutia (October Revolution) and Marat, which had been under constant surveillance by German air reconnaissance. According to situation reports of the High Command of the Air Force, bombers and dive bombers on 22, 23, and 24 September attacked the two battleships, a cruiser of the Kirov class, a second cruiser, several destroyers, a few miscellaneous naval vessels, and some merchant ships--sighted mainly at or near Kronshtadt (they hit the cruiser Kirov again on 29 September)--causing heavy cumulative damage, including fire, to the battleships (although apparently there was no fire on the Marat) and the cruisers, with many of the destroyers and merchant vessels sunk, damaged, or set afire. Aerial photographs taken on 23 September show that the heavily damaged bows of both battleships were at times under water.^{31*}

These attacks on the Soviet warships, exemplifying a successful use of aircraft against naval targets, were carried out in the face of very heavy ship and land-based antiaircraft artillery fire. Flying into such defenses, Lt. Hans-Ulrich Rudel of the 2nd Dive Bomber Wing, who became the most highly decorated officer in the Luftwaffe, made a direct hit with a 2,200-pound bomb on the Marat on the morning of 22 September.^{32†}

*On 23 and 24 September 1941 the 2nd Dive Bomber Wing attacked units of the Soviet Baltic Fleet. After heavy bomb hits, although some guns were still serviceable, the battleship Marat was beached. The Oktiabrskaya Revolutia was hit outside the harbor; the cruiser Maksim Gorki was heavily damaged at Leningrad when a group commander of the 2nd Dive Bomber Wing, his plane fatally damaged, dived next to the cruiser. See Gerhard Huemmelchen and Juergen Rohwer, "Vor Zwanzig Jahren," Marine-Rundschau ("Twenty Years Ago," Navy Review), LVIII, Okt. 61, p. 299.

†See Figure 32. See also "Rudel" in the biographical section in the back of this study.



Figure 32

Soviet battleship Marat sunk by direct hit from the Ju-87 of Hans-Ulrich Rudel, 22 September 1941



Figure 33

A Siebel Ferry, a German attempt to stop Russian supply movements across Lake Ladoga, Russia, 1941

Upon completion of the encirclement of Leningrad,* the VIII Air Corps--despite all protests of Army Group North--was transferred back to the Second Air Fleet in Combat Zone Center to support the advance of the ground forces on Moscow. Halder's notes of 12 August indicate that he had been told by the army group's liaison officer that retention of the air corps was necessary until the Moscow-Leningrad railroad was reached on about 25 August. A month later Field Marshal von Leeb (Army Group North), "stormily" insisted that he retain control of the air corps, but the forthcoming operation in Combat Zone Center had priority.³³

On 14 August the combined operation of the Luftwaffe, Army, and Navy began against the Baltic islands of Muhu, Saaremaa, and Hiimaa. For this operation, the First Air Fleet had reinforced the units of the Luftwaffe Commander Baltic with a bomber group, a twin-engine fighter group, and a replacement fighter group and had concentrated them into a combat organization under the command of Generalmajor Heinz Helmuth von Wuehlisch. Then, during the course of the capture of Saaremaa, the combat unit was disbanded.[†]

First Air Fleet Operations at the Volkhov River and Tikhvin

During the second half of October, the main point of effort of the First Air Corps was concentrated upon the support of the motorized XXXIX Army Corps penetration of the Soviet defenses on the Volkhov River and the subsequent German advance on Tikhvin. For the support of the Tikhvin advance, the First Air Fleet established a "Luftwaffe Commander Tikhvin," which was to cooperate closely with the army corps. The Commander of the 77th Bomber Wing, Col. Hans Raithel, who was also named Luftwaffe Commander Tikhvin, established his command post at the headquarters of the XXXIX Army Corps, then at Trubnikov Bor. His units were comprised of the 4th Squadron of the 122nd Long Range Reconnaissance Group, one group of the 54th Fighter Wing, the 77th Bomber Wing, one heavy antiaircraft artillery battalion, and air signal units. Preparation for the advance were largely improvised by the Army and the Luftwaffe.

*Editor's Note: The reference to the "surrounding" of Leningrad is somewhat misleading. Leningrad was effectively encircled only on the land routes, leaving Lake Ladoga open as a possible source of supply. The Ladoga route enabled the city to resist capture throughout the war.

†A detailed description of the Luftwaffe's role in this operation is presented in the next section of this chapter.

Maj. Rudolf Loytved-Hardegg, Intelligence Officer of the First Air Fleet (temporarily assigned as General Staff officer to the Luftwaffe Commander Tikhvin), later described the operation against Tikhvin:

The building of the bridgehead at Gruzino succeeded without substantial local support by the Luftwaffe. The enemy held out in the vicinity of the bridge site in a monastery, whose walls withstood even the heaviest bombs. Only on the second or third day was this troublesome defensive post smoked out by engineers with flame throwers. Sorties of the bombers took place mainly in the depth of the attack sector against enemy concentrations [and] highway and railroad objectives (Novgorod-Borovichi-Tikhvin-Chudovo area.)

The enemy air force replied with small, but often very troublesome attacks upon the advancing divisions, the bridge sites, headquarters, and rear supply services. They were usually carried out in low-level flight by three to five twin-engine aircraft.

The adverse weather and rough terrain favored surprise attacks and complicated our own defenses on the ground and in the air. A timely arrival of our own fighters was difficult to accomplish, and generally they were able to down only one of the Soviet planes. The enemy exploited well the moments when our fighters were away.

The experiment of transferring one of our fighter groups to Chudovo or to another field close to the front was unsuccessful, and there remained only the advance landing field at Siverskiy which was too far back for even Me-109 speeds. As a rule . . . scramble take-offs from there were therefore too late.

On the second or third day after the attack a thaw set in The armor came to a standstill; the crews had to dismount. The armored spearhead advancing on the Gruzino-Tikhvin road had not reached the important road bottleneck (a swampy area crossed by a corduroy road which was easy to block) lying near Serebryanka. Here arose the first opportunity for the Luftwaffe Commander [Tikhvin] for direct intervention in the ground fighting. The combat team of Captain Poetter (77th Bomber Wing),

experienced in close combat at Saaremaa, received the mission to keep the bottleneck open, destroy the enemy found there, and to combat the reinforcement of the position by new forces until the dismounted tank crews and infantry were near.

This was an extremely difficult task (especially for Ju-88's), since enemy movements were difficult to detect in the wooded, bushy country, and area attacks upon woods suspected of harboring enemy concentrations were out of the question with the [inadequate] air strength available.

The mission was successfully completed, despite the fact that Captain Poetter himself was shot down in one of the first low-level attacks. He and two of his crew, wounded, were able to rejoin our troops the next day. The assumption that the much liked officer was still alive had urged on the tank crews to speed [their] advance and his own combat team to make unflagging sorties.

* * * * *

The correct judgment of the Luftwaffe's action was extraordinarily difficult here. It was clearly evident that the available number of flying units was insufficient . . . for the detachment of a strong close support unit. Moreover, dive bombers and ground attack aircraft, which were essential to such a unit, were also lacking.

As so often happens, the disproportion between the number [of aircraft] in units and those found in operations staffs also worked to disadvantage. Even in the given situation, the staff of the Luftwaffe Commander Tikhvin increased this disproportion. The necessity for a tactical air command near the front in the Tikhvin sector could have been realized equally well by an advance command post of the I Air Corps or by an air liaison party well equipped with signal communication equipment.³⁴

This last view must be acknowledged to be absolutely correct. With the shortage of personnel and materiel, as well as of time for preparations, the smoothly functioning command machinery of the I

Air Corps at an advance command post would have been sufficient, especially since the operation involved was limited in time and space.

Besides the direct support of the troops advancing against the tenaciously resisting Soviets, the Luftwaffe units attacked all railroad lines leading toward the flanks of the XXXIX Army Corps to prevent the approach of fresh enemy forces. Another interesting operation of the First Air Fleet which deserves mention was the attempt to ignite the large oil storage lakes at Shcherbakov by high-explosive and incendiary bombs, an effort which was completely unsuccessful.³⁵

Important military targets in Leningrad were also continuously attacked with good results, although the city was very heavily defended by numerous anti-aircraft artillery batteries of all calibers and many balloon obstacles.³⁶

Tikhvin was captured on 9 November and held for an entire month by heavy defensive fighting against strong counterattacks from numerically superior Soviet forces. Besides supporting this defensive action, I Air Corps units carried out interdiction attacks against rail traffic east of the Volkhov River and Lake Ilmen.³⁷

Beginning late in the autumn and early winter of 1941, the results of air reconnaissance operations became steadily more fragmentary. This was due less to the increasing Soviet fighter and anti-aircraft artillery defenses than to unfavorable flying weather;³⁸ even during sunshine there were blinding effects and haze. Also, in comparison to the gigantic area to be reconnoitered, the reconnaissance squadrons were much too weak, a disproportion which became still more obvious in trying to detect the columns of vehicular traffic after the marshes, rivers, and lakes froze over. The Russian dependence in summer upon a few highways ceased in winter for all tracked and even conventional vehicles. Because of this greater freedom of action, the reconnaissance of Soviet routes now became the reconnaissance of areas, which required considerably more time and resources. With the strong commitment of units to other sectors of the front, there was also a decrease in reconnaissance in the forward areas by bomber crews and by fighters, which had hitherto formed a valuable supplement to the normal air reconnaissance effort.

With regard to Soviet rail movements, which were carried out principally at night in the front areas, the German command was essentially dependent upon inferences drawn during the day from traffic observed at the various railroad stations. The station at Bologoye, the most important junction in the northern combat zone, showed the greatest variation

in activity and was, therefore, attacked on numerous occasions, while the stations at Tikhvin and Parakhino-Poddubye were attacked less often.

Immediately after Lake Ladoga had frozen over, a heavy, steadily increasing Russian supply traffic developed, which moved across the ice, to and from Leningrad. Since it was impossible for the ground forces to cut this supply artery, the First Air Fleet was ordered to interrupt the traffic over the so-called ice road on the lake. Between 25 November and 3 December, elements of the First Air Corps attacked the ice road, especially at its southern extremity. Although considerable casualties and great materiel losses were inflicted upon the enemy, the attacks did not permanently interrupt this important line of supply.³⁹ It was found that traffic over large frozen lakes could not be stopped by shattering the ice surface with bombs. Holes which were blasted here and there by large caliber bombs very soon froze over again. Moreover, the tremendous ice area enabled the Soviets to detour quickly around any obstacles in their supply route.

It may be noted here that before Lake Ladoga froze over, an attempt had already been made to prevent supplies from crossing the lake. For this purpose, so-called Siebel Ferries (named for their designer Reserve Colonel Fritz Siebel) armed with anti-aircraft guns were employed from the Finnish occupied shore.* These ferries involved a great expenditure, but their employment on Lake Ladoga was always fundamentally unsuccessful. Motor torpedo boats or heavy motor boats would certainly have been better and have achieved better results.

The continuing bad weather and the extreme cold throughout December greatly impaired the combat activity and operational preparedness of the flying units of the First Air Fleet. The elemental force of winter, with its directly paralyzing effect upon man and machine, was the most powerful ally of the Russians. Its effects could not then, and cannot in the future, be completely assessed but they were enormous.

On 27 October the forces of the Luftwaffe Commander Baltic had been disbanded. Only the 806th Coastal Group (bombers) remained in Combat Zone North assigned to the I Air Corps, while the remaining units were transferred to other fighting fronts.

*See Figure 33.