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THE INFLUENCE AND REASONS FOR ACCEPTANCE OR REJECTION OF OPERATIONAL
LEVEL INTELLIGENCE DURING THE 1914 MARNE AND 1943 KURSK CAMPAIGNS

by

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**Abstract:** This monograph examines the 1914 Marne and 1943 Kursk campaigns to determine, from the operational perspective, the reasons for decision failures and how intelligence influences them. Part I defines operational level intelligence, establishes the parameters of the study and selects decisions for discussion. It then presents the three reasons: lack of key data, incorrect analysis and ignoring intelligence and how they effect intelligence assessments.

Part II describes the two campaigns and discusses the operational decisions made by both belligerents. Part III analyzes the decisions to determine what intelligence was acceptance or rejection and the reasons for this.

(continued on other side of form)
This monograph concludes that key data is usually available at the operational level of war. It further concludes that incorrect analysis of known data is important, however ignoring sound intelligence leads to the greatest number of decision failures.

It recommends that to prevent decision failures we must understand the options available to the enemy and not overestimate his capabilities or underestimate our own. Secondly, we must continue to develop our intelligence collection systems to acquire needed data while we do more than a superficial analysis to determine its effects on our campaign. Third, we must encourage skepticism, imagination and diverse interpretations of known data while we ensure that the influence of senior personnel do not skew the process. Finally, we must realize when to stop seeking more information and make the decision.
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ABSTRACT

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by Major Joseph A. Bolick, United States Army, 46 pages.

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PART I. INTRODUCTION

"By intelligence we mean every sort of information about the enemy and his country—the basis, in short, of our own plans and operations. If we consider the actual basis of this information, how unreliable and transient it is, we soon realize that war is a flimsy structure that can easily collapse and bury us in ruins. The textbooks agree, of course, that we should only believe reliable intelligence, and should never cease to be suspicious, but what is the use of such feeble maxims? They belong to that wisdom which for want of anything better scribbers of systems and compendia resort to when they run out of ideas."(1)

Clausewitz, On War

The importance of intelligence to the prosecution of war is a debate as old as the waging of war. Statesmen and military leaders ignorant of the intentions of rivals have been compared to blind men. Napoleon reportedly said that a well-placed spy was as important as several divisions, yet in his campaigns he paid little attention to intelligence. The ancient Romans did not think highly of espionage though they had their speculators and frumentarii. Frederick the Great once wrote "If one knew the enemy's intentions beforehand one could always defeat him even with an inferior army." Like Napoleon, his own record does not bear this out. The possession of superior intelligence may in fact, induce leaders to make decisions that in retrospect appear counterproductive.(2)

Clausewitz's quote above indicates that he felt that reliable intelligence often determined the outcome of war. FM 100-5, Operations, is the army's keystone warfighting manual. It too states that intelligence is a vital function which must be initiated prior to beginning operations.
Intelligence is considered in FM 100-5 as one of the major functional areas along with maneuver, conventional, nuclear and chemical fires and thirteen others. (3) Intelligence, within the context of this paper, is considered a tool to be used in the decision making process. The decision is the critical action which results in the winning or loosing of the campaign.

CURRENT US INTELLIGENCE DOCTRINE

The Department of Defense and the U.S. Army continue to debate the responsibilities and functions of the different organizational levels in relationship to the different levels of war. FM 100-5, Operations, states that war is a national undertaking which must be coordinated from the highest levels of policy making to the basic levels of execution. Military strategy, operational art, and tactics are the broad divisions of activities in preparation for and conduction of war that it identifies. Operational art, which is the focus of this paper, is defined as "the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations." (4)

As the existence of this debate indicates, the responsibilities and functions of military organizations change. Responsibilities and functions are a reflection of a country's strategy, doctrine and military capabilities at a particular time. To compare events from the campaigns considered to present U.S. doctrine, the following definition from FM 34-1, Intelligence
Electronic Warfare Operations, was the basis for selection of the
decisions to be analyzed and the intelligence which supported them:

Intelligence is categorized as strategic, operational level of war, and tactical. The focus and definition of each are tailored to the echelon and type of decision maker to be supported. Strategic intelligence is defined as that intelligence required by national and allied decision makers for the formation of national foreign and defense policy. The strategic intelligence community will collect, analyze, and disseminate intelligence which satisfies the constantly changing requirements of national level decision makers. As the imperatives of American foreign and defense policy change, so too does the focus of the strategic intelligence community.

Operational level of war intelligence is defined as that intelligence which is required for the planning and conduct of campaigns within a theater of war. At the operational level of war, intelligence concentrates on the collection, identification, location, and analysis of strategic and operational centers of gravity. If successfully attacked, they will achieve friendly political and military-strategic objectives within a theater of war.

Operational level of war intelligence focuses on the intelligence requirements of theater, army group, field army, or corps commanders. The echelon focus at the operational level is situational dependent. It reflects the nature of the theater of war itself. It shows the political and military objectives of the combatants. The echelon focus also reflects the types of military forces which can or may be employed. The planning considerations of the tactical commander will be principally "military" in nature. However, the campaign-planning considerations of the operational-level commander will incorporate political, economic, psychological, geographical, and military factors on a grand scale.

The key elements from this passage used to select the type decision and related historical case studies are:

a. at the operational level of war, intelligence concentrates on the collection, identification, location, and analysis of strategic and operational centers of gravity, and
b. the campaign-planning considerations will incorporate political, economic, psychological, geographical, and military factors on a grand scale.
INTELLIGENCE FAILURES

Despite intense efforts the intelligence assessments provided commanders today, as in the period of the campaigns to be considered, may be incorrect or not accepted. There are three reasons for this. The first is that even with the massive efforts to collect data, a lack of key data may still exist. Secondly, the abundant data collected may be analyzed incorrectly. Finally, sound intelligence is sometimes simply ignored.

The first reason results from poor or incomplete collection. However, intelligence agencies, both military and governmental, have always been unsurpassed in their ability to collect data by whatever means were available at the time. Data collection, while a problem at the operational level, usually does not significantly contribute to decision making failures. Michael Handel asserts in Avoiding Political and Technological Surprise in the 1980's that "historical experience confirms that intelligence failures were more often caused by a breakdown on the level of acceptance than on the acquisition or analysis levels."(6)

The second and third reasons are a result of human hindrances to accurate prediction. This is a very complex problem with many factors. To provide a basis for understanding this problem and its effects on the following campaigns, the main reasons for human intelligence failures follow.

Bias is the cause of intelligence failures most frequently adduced. It may take various forms, such as an unwillingness by analysts or consumers to accept evidence contradictory to their preconceived notions or which is
for some other reason inconvenient. Such bias has, on occasion, had fatal consequences. Yet bias has probably been of less overall importance than ignorance, lack of training and experience, and lack of imagination. Also of importance are the assumption that other people behave more or less as we do (mirror imaging), and that their governments generally share our psychology, values, and political aims. The impacts of ideology, nationalism, militant religions, and so forth have always been difficult for deeply pragmatic and nonideological people to understand.

Other reasons for failure have included the politicization of intelligence agencies, bureaucratic reluctance to accept risks by presenting ambiguous intelligence assessments, and resistance on the part of consumers to intelligence warnings. Yet these and other shortcomings are of minor importance at the operational level in comparison with the basic weakness of inferior political knowledge and judgment. The inclination to exaggerate the role of bias and deception is as strong and constant as is the tendency to underrate incompetence and self-deception.(8)

This monograph will examine two campaigns to determine which of the above reasons contributed to failure at the operational level of war. The methodology selected is first to describe the campaign, and the operational decisions made by both forces, and to analyze the decision to determine how intelligence influenced operational choices. While focusing on the operational level of war, it is accepted that a close relationship exists among the three levels of war. Within this is the understanding that plans or actions which occur at one level may result in changes at the others. Concurrently, it is accepted that poor strategic plans can result in
operational or tactical failure just as poor operational plans or tactics may doom a superior strategic vision. Strategic and tactical decisions or events will be reviewed only where necessary to further explain operational decisions.

To have a representative sample for analysis the World War I Marne and the World War II Kursk campaigns were selected. This selection is based on a search for one campaign which was a first battle and another which was in the middle of a war. Also consideration was given to campaigns which were conducted in separate theaters of war by different belligerents and during different time periods.
PART II. THE CAMPAIGNS

THE 1914 MARNE CAMPAIGN

It is not too much to say that the first thirty days of battle determines the future course of the war, the terms of the peace and the shape of the world and all its nations since that time. (9)

It is said that war was inevitable in 1914. Never before in the history of the world had so many nations been so fully prepared for it. (10) The diplomatic weapon of mobilization, either full or partial was no longer usable. The earlier Prussian victories over Austria and France had shown that time could be saved if mobilization led directly to a definite plan of attack. (11) Both Germany with the Schlieffen Plan and France with Plan XVII, as the primary belligerents in Europe, were ready if the other showed the least offensive intent. It was in this setting that the assassination of Archduke Ferdinand and his wife by a Bosnian revolutionary on 28 June 1914 set into motion events that neither country could have stopped, even if they had wanted. (12)

This assassination gave Austria a long awaited excuse to suppress her troublesome neighbor, and on 28 July she declared war on Serbia. Prior to this she had received assurance that Germany would come to her aid against Russia. Quickly thereafter, on 30 July, Russia mobilized to prevent Austria from overwhelming Serbia and obtaining Austro-German supremacy in the Balkans. On 1 August Germany and France declared general mobilization with Germany further declaring war on Russia and crossing the Luxemburg frontier.
that night. At the same time the German ambassador to Belgium demanded free passage for German troops to attack France. Albert, King of the Belgians refused. On 3 August Germany declared war on France and on 4 August crossed the Belgian border resulting in Great Britain honoring her treaty agreements and entering the war. For sixteen days the unprepared Belgian army fought the advancing German forces. By the 20th of August the Germans had pushed the Belgian forces to Antwerp. Thus ended the Belgians' main contribution to the eventual stalemate at the Marne. They siphoned off two corps of the German right wing and possibly slowed the German advance by two weeks.

On August 20th, German forces occupied Brussels and began attacking the fortress of Namur. Meanwhile, far to the south, at the other end of the front, a French advance in Alsace had been initially successful; a French army had occupied Mulhouse, but then had been driven out. A renewed, larger French offensive took Mulhouse again and penetrated Lorraine to the outskirts of Sarrebourg. The stage was now set for what has become known as the Battle of the Frontiers. These raged all along the line for a period of four days, from August 20 to August 24; each side fighting with great determination and sustaining extremely heavy casualties. At the end the French armies were in retreat. For a period of two weeks the Allies withdrew, grimly giving up ground when forced to, while the French Commander General Joffre vainly sought an opportunity to renew the offensive.

The ambitious commanders of the German armies in the south, encouraged by their success against the first French attacks, persuaded their
commander General von Moltke to send them additional troops instead of following the original Schlieffen Plan. At about the same time another two Corps were taken from the right wing to counter unexpected Russian success on the Eastern front. As von Moltke was destroying the Schlieffen Plan, Joffre was strengthening his left. Two new armies were created: the French Sixth near Paris and the French Ninth in the line between Paris and Verdun. As the German First Army began sweeping by just north of Paris the French commander saw his chance to attack the German flank with the French Sixth Army. (16) The French attacked with the Fifth and Sixth Army forcing the Germans to fall back across the Marne River. The climax of the battle came on the 8th of September when the French Fifth Army launched a surprise attack into the Petit-Morin gap against the right flank of the German Second Army. This resulted in von Moltke ordering a general withdrawal to the line of the Aisne. (17)

Thus ended the German bid for a short, glorious war won by a rapid, decisive campaign. Nearly two and a half million men were engaged: 1,125,000 Allies and 1,275,000 Germans. (18) A look at the operational level decisions and the rationale for their choice will provide an insights into what intelligence was available and the extent and correctness of its use.
GERMAN OPERATIONAL DECISIONS

There were three operational level decisions and one assumption made by the German staff on which the revised Schlieffen Plan was based. The first decision was to attack France through neutral Belgium. The German General Staff believed it necessary to attack the flank of France. They concluded, after considerable study, that they could not successfully attack the fortified Alsace-Lorraine front. The Kaiser and Chancellor accepted this decision with more or less equanimity. Whether it was advisable, or even expedient in view of probable world opinion or British intervention was not considered relevant. It was seen as necessary to the triumph of the German Army and that was the only criteria.

The decision to violate Belgian territory was also based on the belief by the German staff that Belgium would not fight and add her six divisions to the French forces. This belief was held because of the well known avarice of Leopold II, King of Belgium. The Kaiser offered Leopold two million pounds to allow passage through Belgium; he refused, but the Germans clung to the idea that he would not fight.

The second decision was to plan for and fight a decisive, quick battle. This assumption was the product of Austrian and French victories of 1866 and 1870. These past battles held the inflexible German military staff in their grip. The concept of a long war could not be as scientifically planned for as could the orthodox, predictable, and simple solution of decisive battle and short war. Germans, no less than the French, thus prepared for the last war.
The third decision was to take drastic measures to prevent the sabotage of German lines of communications through Belgium. The German army knew it could not permit breaking of its railways and telegraph lines, nor the indiscriminate shooting of its soldiers by local inhabitants. The German authorities saw severe punishment as a necessity and carried their punitive measures to extremes. The invading forces executed numerous innocent civilians, which, instead of subduing the people, caused keener resentment and more daring efforts at sabotage. The net result was that a larger proportion of German troops had to be assigned to guard the lines of communications than had been contemplated, thus further reducing the strength of the right wing. (24)

The Germans also assumed that Russia could not mobilize and launch a major offensive to influence the attack on France in less than six weeks. (25) This assumption was based on a careful count of Russian railroad mileage and the reliance on the well fortified German eastern frontier. To defend this front the Germans planned to use the Eighth Army which had orders to fall back to the Vistula River if necessary. (26)

There were three operational level decisions made during the campaign which adversely effected the German attack on the Allies. The first was the decision to transfer troops from the right to the left wing. This transfer by von Moltke was the result of the early successes by the ambitious commanders of the German armies in the south. Von Moltke and the commanders had begun to dream of a second, greater Cannae. Visions of a huge double envelopment of over a million French troops obsessed the minds of all the leaders. (27)
The second decision was to send two corps from the German right wing to aid the Eighth Army on the Eastern front. Russia had begun to mobilize and deploy more quickly than expected and was pushing the Eighth Army back. This decision by von Moltke resulted in a further weakening of the German right wing. The redeployment turned out to be unnecessary for before these troops could arrive on the scene, the decisive Battle of Tannenberg was won and the Russians routed. (28)

The final decision was made by the 1st and 2nd Army Commanders, Generals Kluck and Bulow. On 7 September two corps were ordered north by Kluck to counter attacks by the Allies north of the Marne River. This decision was made without a clear picture of the overall enemy situation and more importantly without permission of the head of German forces General Moltke. This transfer created a gap guarded only by a tired German calvary division inadequately supported by a Jaeger battalion. It presented the British Army, Conneau's Calvary Corps and d'Esperey's Fifth Army an open flank to attack. (29)
As with the Germans, the French made several decisions and assumptions prior to and during the campaign which influenced its final outcome. The first was the rejection by the French Army that the German would use reserves as active troops to strengthen their right wing. In 1913 the French intelligence service had collected enough information on the German use of reserves as active troops to make it impossible for the French General Staff to ignore this crucial fact. But ignore it they did. They did not want to be convinced and constantly rejected any evidence that argued in favor of a defensive battle. They persuaded themselves that the Germans intended to use the reserves only to guard communications lines and "passive fronts" and as siege and occupation troops.(30)

The second related decision was the choice not to use French reserve troops for anything other than fortress or support troops. They believed to merge the reserves with the active divisions would be to dilute the Army's fighting thrust.(31) The French heart and hopes, as well as their training and strategy, were fixed on the offensive and nothing would be allowed to compromise it.(32)

The French placed great reliance on the ability of Belgium to help them guard their left flank. This assumption was based on the treaty between France and Britain to come to the aid of Belgium if she was attacked by Germany. The French were hampered in making this a viable defense by Belgium's strict interpretation of her neutrality which had prevented the French and Belgians from making plans for military cooperation. King
Albert's plan, which could have stopped the Germans in their tracks, called for his Army to assemble along the banks of the Meuse, anchoring their defense on Liege and Namur until reinforced by Britain and France. This plan failed as the Belgium army could not hold until reinforced as the belated influx of untrained reservists destroyed their cohesion and discipline. (33)

Probably the most controversial decision was made on 8 August when Joffre issued his "General Instructions No. 1" ordering the French 1st and 2nd Armies to advance northeast into Alsace-Lorraine on 14 August. This order was issued even though they were continuing reports of masses of German troops moving into Belgium. The French were well aware of the German plan to attack using a strong right wing as they were given the plan by a German staff officer in 1904. (34) Indeed the Germans had made little secret of their intentions. Enormous detraining stations, great camps like that of Elsenborn, had been established on the Belgian frontier. (35) The French did not want to believe the Germans could have sufficient men on the Western Front for such extensive operations. They refused to accept that the Germans might leave only a small force to guard their Eastern front or use reserves to attack in the West. (36) These operational decisions contributed to the 15 September stalemate. Part one of the great war drama -- the campaign of the Marne -- was over. Part two would be a methodical battle that would last for four years.
THE 1943 KURSK CAMPAIGN

One of the most important factors conductive to success in the Kursk campaign was the timely and complete discovery of the enemy plans and troop concentrations. This allowed the Soviet Supreme Command to adopt in advance strategically expedient decisions suiting the situation and skillfully to carry them out. (37)

On the afternoon of 4 July 1943, violent fighting broke out to the northwest of Belgorod when German advance units attacked Soviet positions to establish favorable positions for a major offensive. Early the next morning a pre-emptive surprise attack by Soviet artillery and tactical air caused severe losses to German units and forced them to temporarily postpone their attacks. At day break German artillery opened fire and started one of the greatest battles of history. (38)

The bulge in front of Kursk had come into being in February and March of 1943 at the end of the Soviet winter offensive. Hitler decided in March to make use of the bulge for a major attack. Armored forces on both flanks were to break through to Kursk, join up east of the city and trap Soviet forces occupying the bulge. Hitler realized it was now impossible to destroy the Soviet Army with a single blow. Nevertheless, it was hoped that this operation, despite its limited objectives, would be a turning point in the course of the war, allowing the Germans to regain the strategic initiative. (39) Soviet headquarters, through intelligence sources, were aware of the German plan to attack. They decided to remain primarily on the defensive until the German offensive had expended itself and then to mount a counter-offensive.
To support this concept the Soviet built an impressive defensive system consisting of tank-traps, anti-tank gun emplacements, and trenches linked together and protected by the extensive use of mines and barbed wire. This large scale construction and concentration of troops did not escape the notice of German reconnaissance units. (40) Hitler was thus confronted with the choice of attacking an enemy of considerable strength at great risk or of irrevocably permitting the Soviets to take the initiative. His decision to attack was based on his belief in the quality of the German officer corps and soldiers and the penetration capability of the armored divisions.

The previous winter campaign had reduced the strength of German forces to such an extent that attack was not conceivable until the combat power of the forces could be rebuilt. The necessary tanks and artillery pieces were not delivered on time. This resulted in several delays in the date for the Kursk attack from the beginning of May to the 5th of July. On the eve of the battle German forces consisted of 900,000 men, 570,000 were combat troops; 10,000 guns, mortars and howitzers; 2,700 tanks or self-propelled guns; and 2,000 aircraft. (41)

The Soviet forces consisted of a total force of 1,337,000 men, about 977,000 were front line troops; 19,300 guns, mortars and howitzers; 3,300 tanks and self-propelled guns; and 2,650 tactical aircraft. In addition to these forces the Soviets had assembled as a strategic reserve the Steppe Front composed of five armies and six independent corps. (42)

On the 5th of July the 9th German Army, consisting of thirteen divisions, attacked to the north of Kursk on a relatively narrow front. This attack with infantry leading did not achieve the necessary breach for the other
armored divisions to exploit. On the 6th of July, Col. General Model was forced to move an additional three armored divisions to the front. By the 8th of July the 9th Army's attack had lost momentum in the labyrinth of the defensive positions with penetration to a depth of a bare 12 kilometers at only a single point. Model intended to continue the attack after re-grouping his already badly shaken forces. The Soviets, realizing the initiative was shifting, attacked on the 11th of July to the north of the salient toward the city of Orel. This counterattack forced Model to break off the offensive and withdraw his forces to protect his rear. (43)

To the south of Kursk, Army Group South with fifteen divisions, attacked the weaker Soviet defenses and by the 9th were able to achieve some depth but with severe losses in men and equipment. By the 11th of July, after re-grouping and the introduction of the fresh Kempf Army armored and infantry forces, the German achieved a penetration of 30 to 35 kilometers. To counter this penetration the Soviet Voronezh Front counter-attacked with the 5th Armored Guards Army and other units from the Steppe front. On the 12th of July the main armored forces of both armies clashed at Prokhorovka. By the 15th of July, the German strike capability was broken. In view of the Soviet superior reserves and the deterioration of their own combat forces the German command called off the offensive. (44)

The German Command at Kursk had a reserve of only six to eight divisions. Instead of using these forces to support the attacks of the 9th and 4th Armies the Germans were forced to employ them to the north and south of the salient as Soviet counter-offensives began to gather momentum. By the 15th of July the exhausted German assault forces were forced to
evacuate the areas they had won. They were pursued by Soviet formations which had obtained replacements with the recapture of the cities of Orel to the north, and Belgorod to the south on the 5th of August. (45)

The Kursk campaign instead of neutralizing the capability of the Soviet Army for large-scale offensives, forced Hitler to go on the strategic defensive. As with the Marne campaign, a look at the operational level decisions and assumptions at Kursk and the rationale for their choice will provide an insight into what intelligence was available and the extent of its use.
GERMAN OPERATIONAL DECISIONS

To understand the influence of intelligence on German decision making in this campaign requires a review of several related factors. The first is to place the campaign in its proper historical perspective. The Kursk outcome was not predestined by the Soviet superiority in numbers in the salient. This judgement belies the actual situation. Objectively, the German Operation Citadel was to be the fifth annual demonstration of the power of blitzkrieg. A demonstration that, since September 1939, had occurred annually in the late spring or summer. Every previous operation of such strategic scale had reaped immediate victory, although in 1941 Germany had not achieved the ultimate goal of the operation and, in 1942, had stretched the operation to its disastrous climax at Stalingrad. If not all of the annual exercises had resulted in strategic success, they had all achieved remarkable operational success in their early and intermediate stages. (46)

Concurrently, it must be understood that by this stage of the war Hitler had taken over complete control of the strategic, operational, and often the tactical operations of the German forces. Historically this was not a new German phenomenon as seen by the combination of German military and government in the First World War. However, this time it was the result of the German General Staff's failure to provide Hitler with the support which he required. Throughout the war the staff had continually been proven wrong in their assessments of the capabilities of both their forces and those of their enemies. This problem was compounded as the staff often, to prove its case, used supporting information which later proved to be false.
As so often happens when one view becomes supreme, Hitler's planning was based in important particulars on conditions which did not yet exist and which might not come into being exactly as he anticipated. To prepare for Operation Citadel by mid-April, as originally proposed, would prove impossible. A look at the situation when planning started in early 1943 indicates that Army Group Center was in the midst of Operation Blaufeld. Second Army and Second Panzer Army were struggling to stop Russians in the bulge west and northwest of Kursk. The striking force of Army Group South, Fourth Panzer Army, was adding the finishing touches to its victory at Kharkov, but it had been on the move without pause for nearly a month, and its troops were nearly exhausted. Both Army groups needed time to rest and refit before embarking on an offensive.(47)

An indication of Hitler's state of mind as planning for this operation was conducted is revealed from the transcripts of a meeting in early May. In this meeting he drew a detailed comparison between the year 1932, when the party—after victories at the polls—appeared to be going down to defeat at the hands of Papen and Hindenburg. "In 1932", he said "we attained victory only by stubbornness that sometimes looked like madness, so too shall we achieve it today." This was a theme which, over the years, he had come to regard as the first principle of his military and political leadership. It expressed his deep-seated belief, shared by many Germans, that his primary claim to greatness was his ability to achieve victory against impossible odds, sometimes almost by will power alone. As had happened several times in the past, the apparent doubts and uncertainty
were a phase in the period of incubation from which he invariably emerged determined to follow the most radical course. (48)

Compounding this was the tension between Rosenberg and the other ideologists of Nazism and the German generals. Nazi racial dogma still decreed that the Slav must be despised as an inferior only fit to labor on German farms. The German generals, few of whom were Nazis by conviction, had acquired a healthy respect for the doggedness of Stalin's peasant soldier and the skill of the ex-privates and non-commissioned officers of the Imperial Russian Army who now led the Russian levies into battle. The generals and soldiers who had to face the Slavs in battle knew from experience that the Red Army rank and file was formidable when properly led and adequately equipped. (49) It is within this context that decision were made prior to the start and during the campaign which accounted for its outcome.

The first decision was not to advise Hitler of the extent and dangers of treason in the Wehrmacht High Command. Colonel-General Franz Halder, Chief of the General Staff of Land Forces testified as a witness at a court trial in 1955 that: "Nearly all German offensive operations became known to the enemy as soon as they had been planned at the Wehrmacht High Command, even before they reached my own desk; this was due to treason by a member of the OKW. Throughout the war we were unable to stop the leak." At the time this treason was being committed, General Erich Fellgiebel, Chief of Wehrmacht Signals Communications at the Fuehrer's headquarters returned a comprehensive report from German radio security about the Warsaw spy-ring. This report, which detailed the dangers of agents and their use of radios, a
new type of spy which emerged in the Second World War, was determined to be "too alarming": the Fuehrer, it was said, would only be upset if he saw it.(50)

The second decision was Hitler's decree that battles of attrition were to be fought. This forced the German Army to hold every piece of ground as if it were located in downtown Berlin. Defensive patterns were static and even encirclements were accepted in hopes that the Soviets would wear themselves out in such actions. As detailed earlier, the land forces thus were not initially capable of the offensive operation as envisioned at Kursk. This decision also tied the Luftwaffe more and more to the success or failure of the ground forces by piecemealing it to bolster the wall against which the Soviet forces would expend their might. Additionally, air superiority became more fleeting as Soviet air forces began to recover from the disasters suffered in 1941.(51)

Also, by 1943 it was decided that the more experienced pilots were to be shifted from the eastern front to counter the air threat of the strategic attacks against Germany by forces of the RAF Bomber Command and the U.S. Eighth Air Force. Consequently, not only were the ground forces in poor condition but the air forces were not available to allow fighter bombers to attack with strength behind the front lines. These decisions meant that the Luftwaffe could not focus on its most important mission of isolating the battlefield to stop the flow of troops and material into the salient.(52)

Along with these decisions was the assumption that the Soviet forces did not have the capability to stop a determined German offensive. These
expectations were founded on the quality of the German officer corps which was regarded as being obviously superior, although the series of catastrophes of the previous winter seemed to refute this. More importantly though was the incapability of the Nazi leaders to appreciate the changes which had occurred in the military and political situation by the summer of 1943. The German politicians and generals overestimated their military and economic potential, particularly the results of "total mobilization", and underestimated the fighting efficiency of Soviet troops and the capability of the Allied and Soviet armaments industry.(54)

The third decision was to go on the strategic offensive. Hitler was faced with a crumbling strategy; he had failed to make good the boast that he would deal with his enemies one by one and Germany was thus confronted with a 2-front war, that old specter that had haunted the General Staff since the latter years of the nineteenth century. The Fifth Panzer Army and Italian First Army had surrendered on 12 and 13 May in Tunisia. That the Allies would follow up their victory in North Africa with an invasion of southern Europe seemed certain. Landings in Norway were possible and growing hostility in Sweden added to the danger.(55)

Hitler realized the risk of Kursk. He would be attacking into a salient which would commit him to a possible larger envelopment by Soviet forces.(56) At the same time he saw the chance to destroy no less than eight to ten Soviet armies in a single stroke.(57) Hitler suppressed his doubts. The reason why is found in Operation Order 6. "The victory at Kursk," he stated,"must have the effect of a beacon seen around the world."
He needed a victory in the old style to reestablish his political control over the Axis powers. (58)

The decision to delay the attack on the Kursk salient from May to July greatly influenced the outcome of the campaign. A detailed analysis of the correlation of forces and the potential of the two sides at the beginning of 1943 shows that the Germans may have lacked adequate manpower and material resources for an attack. Of the 159 ground divisions at the beginning of March, 45 were units of limited fighting efficiency—airfield ground troops, security, and "foreign". All divisions had suffered heavy losses in the winter campaign and there were not enough manpower and material resources to replace them. The reserves sent from the West had been expended in the February-March counter-offensive in Donbas and at Kharkov. (59)

Along with this realization were the constant alarming reports from the two Army Groups of the extent to which Soviet strength was building. Hitler thus decided to wait for the new tanks, especially the Ferdinands. He was promised ninety of these in June and even after the production was reached decided to postpone for another three weeks so more tanks could be fielded. (60)

The above decisions and assumptions set the stage for the struggle. During the battle two additional operational decisions were made which warrant consideration. The first was the decision on the 7th and 8th of July by Hitler to shift Manstein's air to the northern sector. In response to Model's urgent request for more forces, Hitler shifted the air resulting in Nöth's loss of air superiority at the critical juncture of the southern
Unhampered by overwhelming German air power, the Soviet air force forced Hoth to slow his advance toward Prokhorovka. (81)

The final decision was Hitler's to stop Operation Citadel when he did. On 13 July Hitler called Manstein and Kluge to Fuehrer headquarters. The Orel salient was in danger, and Soviet buildups opposite First Panzer Army and Sixth Army had aroused his concern for defense of the Donets basin. Compounding this was his concern about Sicily where American and British forces had landed and Italian troops were not fighting very well.

As previously planned troops would have to be moved from the Eastern Front. Manstein indicated that his operations were just reaching their turning point. In the Army Group South zone, he insisted, the Russians could be considered defeated, and if Ninth Army resumed its offensive within the next few weeks, victory might yet be secured. But he was alone in his feelings; Kluge declared that Ninth Army could not advance again and in a few days would have to withdraw to its line of departure. (62)
SOVIET OPERATIONAL DECISIONS

Unlike the Germans, there is only one issue which influenced Soviet decision making. It is the timely and complete discovery of the German plans and troop concentrations. There are two widely varying positions on how much the Soviets knew and used information about German plans to develop their scheme to counter Operation Citadel. Soviet literature asserts that they were provided very little assistance from Soviet or other nations agents. They state that even though the espionage rings delivered some interesting information, it only caused confusion at Moscow. (63)

Western literature on the other hand indicates that the Soviets were provided as early as March 1943, through "Ultra," indications of German intentions. (64) Other authors state that the Soviets were told about the composition of the German offensive formations on both points of thrust of the Citadel front. They were also told the precise number of German Panzer Divisions, their equipment, the points of main effort and the first operational objectives. (65) Finally it is stated that on 2 July, scarcely twenty-four hours after Adolf Hitler passed to his generals the exact time of the attack, Soviet front commanders were advised the Germans would attack between 3 and 5 July. (66)

There is no way to prove indisputably which version of history is correct. The Soviets could have, assisted by partisans in the area and other intelligence gathering means (67), correctly developed their massive defensive system to counter the German plan. However, one still must question how Marshal G. K. Zhukov's report to the Supreme Commander-in-
Chief, Stalin, on 8 April 1943 can be so accurate as to German intentions for their offensive. (68)

With this in mind there were three Soviet decisions made prior to and one during the campaign which deserve review. The first is the decision to go on the strategic defensive to counter the anticipated German thrust. This decision was made on 12 April 1943 by Stalin in an interview with Zhukov. The decision would be subsequently reviewed, and finalized only at the end of May, when, in Zhukov's words "the enemy intention to strike a powerful blow at Voronezh and Central Fronts... became known, in fact, in all its detail". It appears that Soviet planning was one jump ahead of the Germans through the preparatory period, for whatever reasons. (69)

The second decision was to place the greatest defensive effort in the northern sector. The Soviet High Command, STAVKA, continually collected information on German deployments by every possible means. The reports from the various sources were carefully analyzed, and it was concluded that though the Germans were attempting to hide their intentions by establishing dummy concentrations and using other ruses the strongest German force was in the Orel salient. This conclusion was wrong as the group facing Voronezh Front was in fact stronger. It consisted of nine Panzer or Panzer Grenadier divisions and approximately 1,500 tanks and self-propelled guns, as opposed to seven armored divisions with about 1,200 tanks or self-propelled guns operating against Central Front in the north. (70)

The third consideration, while not a decision, requires discussion because of its influence on the campaign's outcome. This was the STAVKA's planned annihilating blow against the German airpower on the southern front of
Citadel. At first light on the 5th of July, as the bomber formations of the Soviet Seventeenth Air Army left their bases everything pointed to success of the Soviet plan. But their surprise attack was not effective. Even with the extensive information gathering and assessments done by the Soviets an unknown element changed the situation. This unknown element was the Luftwaffe’s radar. This radar succeeded in locating the approaching enemy formations at a range of over sixty miles, complete with direction and altitude.

The resulting few minutes of warning decided this preliminary air battle. Out of the dawn haze the German fighters attacked the Soviet bombers at 10,000 feet. This altitude was particularly unfavorable to the Soviets. In the first moments of the German attack the Russians lost 120 machines. By the end of the day the score was 432, and 24 hours later it had grown by another 205. Unopposed the German bombers and ground-support aircraft blazed a trail for the German southern attack on the ground.(71)

During the ground battle one Soviet decision was key. It was to dig in the First Tank Army on the 7th of July rather than to use it to counter-attack. In the south Roth’s division was on the verge of breaking through to Oboyan. The only opposition was two badly beaten Soviet armored corps. To halt the German armored thrust, the First Tank Army reinforced with anti-tank guns was directed to dig in. Marshal Zhukov, representing Stalin, violently objected to this “unnatural use of tanks” and demanded they counter-attack. After considerable debate and several changes of mind, Stalin allowed the First Tank Army to dig in resulting in victory.(72)
PART III. ANALYSIS

LACK OF KEY DATA

The lack of key data influenced two decisions in each of the campaigns. The first, in the Marne campaign, was German General von Moltke's transfer of troops from his right wing to the Russian front. This decision was the result of an inadequate appreciation of the enemy situation. Moltke's headquarters was far to the rear and communications with the front was extremely limited. To compound the problem, neither he nor his senior staff made any efforts to visit the front. General von Moltke was ignorant of the true situation and his intelligence and operations sections failed to give him the information he needed. He thus was misled by fragmentary and overly optimistic reports of victory over France, while news from the Russian front was bad. His decision to break contact was made at the most inopportune time for it allowed the retreating Allied armies the time to regroup. (73)

The second decision in the Marne campaign was Generals Kluck's and Bulow's transfer of two corps in reaction to enemy pressure north of the Marne River. Moltke was aware of the formation of the French Sixth and Ninth Armies in the vicinity of Paris. He realized these forces could effect a decisive defeat on German forces as they advanced to the south. However, in issuing orders to his field commanders to orient to the south, he failed to mention the existence of these two new armies. (74) This
decision was the result of the higher headquarters failing to pass known intelligence to the lower headquarters.

In the Kursk campaign the lack of key data influenced one German and one Russian decision. In the case of Germany, it was Hitler's decision to transfer Manstein's air on the 6th and 7th of July north to assist Model. Hitler shifted the air because he was ignorant of or did not appreciate the significance of the situation on both fronts. By the 7th of July it was obvious that Model would not achieve a quick penetration toward Kursk; his battle could only be one of attrition. Hoth on the other hand, had not only succeeded in penetrating the first defensive belt, but was also proceeding on a course of action which promised to gain a favorable early decision with Russian tank forces. Hitler's decision to shift the air permitted the unopposed Soviet air force to slow Hoth's movement to Prokhorovka. Had Hitler been more experienced in operational matters or had he a better understanding of the situation, he may not have been so rooted to his plan of a double envelopment and instead reinforced success rather than failure.

The lack of key intelligence influenced one decision for the Soviets. This was to concentrate all of their air forces for an annihilating blow against German air on the 5th of July. Because of inferiority in equipment and training, the success of this attack depended on catching the German air forces on the ground. The Soviet High Command had skillfully chosen the precise time for its blow, however, the existence of the recently developed German Freya radar instruments gave the Germans the warning they needed resulting in a Soviet defeat.
INCORRECT ANALYSIS OF KNOWN DATA

Incorrect analysis of known data influenced seven decisions in the two campaigns. The first in the Marne campaign was the German assumption that Russia could not mobilize quickly enough to influence a German victory over France. The necessary intelligence was available and time lines for Russian mobilization were carefully computed by the German staff. However, the preconceived notion that Russian forces would react at the same pace and in the same manner as German forces (mirror imaging) was incorrect. This plus the unanticipated early mobilization of Russian forces stripped needed forces from the German western front.(77)

The second example of incorrect analysis was the German decision to use harsh measures to prevent civilian interference with their forces as they moved through Belgium. The German decision to use these measures was the product of the German theory of terror coupled with an incorrect analysis of the operational effects of this policy. They believed that the civil population must not be exempted from war's effects but must be made to feel its pressure and be forced by the severest measures to compel their leaders to make peace. This seemingly logical proposition fit within the scientific theory of war which the German General Staff had developed throughout the nineteenth century.(78) The Peninsular War of 1807-1814, however reflected more probable actions a population would take if oppressed. The German lack of political sophistication, poor judgment and the impacts of their ideology severely distorted their perspective.
The third German decision in this category during the Marne campaign was the early transfer troops to the left wing. Von Moltke and his army commanders were convinced that the French and British forces were beaten. However, there were none of the usual spoils of battle such as the large capture of enemy troops or material. The Germans wanted to believe that the French were beaten, they were reluctant to pay attention to contrary, unsupportive intelligence warnings.

The final decision based on incorrect analysis during the Marne campaign was the French false assumption that the Belgians would slow the Germans advance against their left flank until they could be reinforced. The French were well aware of the German plans to attack through Belgium and the problems with the Belgian border defenses. However, poor French political and military judgment, as well as the unwillingness to accept evidence contradictory to their preconceived notions resulted in a dangerously exposed flank.

During the Kursk campaign, incorrect analysis influenced two German decisions and one Soviet decision. The first German decision was Hitler's insistence that all taken ground must be retained resulting in battles of attrition. This decision at Kursk was also based on Hitler's incorrect analysis of the economic significance of the Donetz Basin. He was convinced that German occupation of this region severely hampered Russia's industrial production, even though intelligence indicated that Russian production facilities were deeper in the interior. He was unwilling to accept evidence contradictory to his preconceived notions and this attitude resulted in rigid operational concepts.
The second decision was to delay the start date for the operation. Hitler was provided detailed intelligence concerning the situation on the eastern front. He was convinced that he required more armored forces to achieve victory. To gain these forces he postponed the start date of his offensive from May to July. These delays resulted in the launching of Citadel at the wrong time and, ultimately, at the wrong place, thus missing an opportunity to stabilize the eastern front. The Germans might have won the battle either by attacking about 1 May and defeating the unprepared Soviet forces by taking advantage of surprise and fighting a mobile battle, or by attacking in July, to the north and south of the fortified zone. (81)

The one Soviet decision influenced by incorrect analysis of known data was to place the greatest effort in defense of the northern sector of the salient. The Soviets were aware of the German intentions and plans for their attack into the salient. By the use of partisans and local intelligence gathering efforts they were aware of the exact location and size of all German forces. However, they were unwilling to accept evidence contradictory to the preconceived notion that the German strategic objective had to be Moscow. To ensure success in the northern sector and prevent possible advances on Moscow they placed their greatest effort there.
IGNORING SOUND INTELLIGENCE

We have seen nine examples where sound intelligence was ignored in these two campaigns. The first in the Marne campaign was the German decision to attack through Belgium. The Germans had tried unsuccessfully to "buy off" the Belgian King. They were well aware of the pledge of Great Britain, as well as other European nations, to protect Belgian neutrality. Even with all the indicators that passage through Belgium would be opposed they still believed the Belgians would not fight. Their refusal to accept this inconvenient information displayed an incredible lack of political acumen and judgment.

The second example in the Marne campaign, was to plan for and fight a quick decisive battle. Both countries were unwilling to accept evidence contradictory to their preconceived notions about future war. Young Moltke in 1890 foretold that the next war might last seven or thirty years because the resources of a modern state were so great. Military strategists in other countries glimpsed the possibility of prolonged war, but all preferred to believe, along with the bankers and industrialists, that because of the dislocation of economic life a general European war could not last longer than three or four months.

The third and fourth decisions in the Marne campaign were a result of the French belief that the Germans would not use reserves to strengthen their formations. As stated previously, the French Intelligence service had collected indisputable evidence that the Germans were planning to use these forces. The French military refused to believe this because it would so
strengthen the German forces they would have to go on the defensive. The acceptance of the use of the defensive was impossible for the French military. It had staked its entire campaign on the training and doctrinal concept that the French soldier was superior and the use of the offensive was the road to victory.

The final example in the Marne campaign of the refusal to accept valid intelligence was the decision by the French to attack into Alsace-Lorraine. The French received information on the large formations facing the Belgiums. However, this information was inconvenient and would require a change to their plan XVII. The French refused to pay heed to these intelligence warnings.

In the Kursk campaign there were four significant decisions or assumptions made by the Germans as a result of ignoring sound intelligence. The extensive intelligence available to the Soviet STAVKA, either from their own intelligence gathering or from spies, was not ignored. This was not the case for the Germans. The German decision not to advise Hitler of the extensive leaking of information from his headquarters was the result of a reluctance on the part of his staff to risk confronting him with this, or perhaps some underlying internal desire for failure of the Nazi cause. The results were that the Soviets were informed about all vital secrets and all military plan of every campaign. (84)

The assumption that Soviet forces could not stop a determined German offensive and the resulting decision to go on the offensive rather than assume a defensive posture are further results of ignoring sound intelligence. As stated previously, the Germans were aware of the extensive
build up of forces in the salient and the extensive Soviet and Allied
industrial reinforcement as well as the extensive training being done by
the Soviet forces. The German General Staff was unwilling to accept this
contradictory or inconvenient evidence which challenged preconceived
notions. The rigidity inherent in Nazi dogma caused a lack of political
testing and judgment. Belief in predetermined German superiority
greatly inhibited the ability to conceive of anything less than aggressive
action. Their fanaticism tended to purge any notion of a flexible approach
to operations and almost guaranteed their eventual failure.

Hitler's decision to stop the offensive when he did is the final example
of ignoring sound intelligence. He refused to pay attention to the
intelligence warning presented to him. He was advised of the danger
presented by Soviet forces poised to the north and south of the Kursk
salient, as well as the extensive forces within it. He was aware of the
Allied intentions and peripheral strategy and its political danger to the
Axis. His willingness to start the offensive indicated his intention to
continue it to its successful conclusion. The decision to stop the
offensive to move forces to Italy when it was attacked, removed any
reserves his operational commanders could use to influence the battle and
guaranteed the failure the above intelligence foresaw.
IV. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The analysis of these two campaigns indicates that the lack of key data at the operational level of war was not a significant factor. Of the twenty decisions only four are related to a lack of data. In three of the four cases the information was available, however it was not passed to the appropriate decision maker. The reasons for this are that key leaders were not in position to make the necessary decisions (as with von Moltke's transfer of troops to the Western Front and Hitler's transfer of air forces from the south to the north) and information was not transferred to the necessary level of command (as seen by von Moltke's failure to pass current information on new French forces to Generals Kluck and Bulow). The one case where key information was not available was the German use of radar to warn of the approaching Soviet air attack at the beginning of the Kursk campaign.

Incorrect analysis of known intelligence accounts for seven of the twenty decisions. The reasons for this are first mirror imaging, as in the German assumption that Russia could not mobilize quickly enough to affect their attack on France. Secondly, by a lack of political sophistication and poor military judgment as in the German decision to use harsh measures to pass through Belgium; the French assumption that Belgium would protect their left flank; and the German decision to delay the attack on Kursk. The third reason was the failure to assess the situation correctly as when von Moltke
transferred troops to the Western front weakening his main attack on France. The final reason is an unwillingness to accept evidence contradictory to or inconvenient to preconceived notions. This is exemplified by Hitler's obsession with the economic importance of the Donetz Basin and the Soviet decision to place the stronger force in the north during the Kursk campaign.

Ignoring sound intelligence in nine of the twenty decisions indicates that this factor played the greatest role in the two campaigns. The reasons are as varied as the decisions made. The assumption by the French that the Germans would not use reserves to attack and by the Germans that Soviet troops were inferior were influenced by an unwillingness to accept evidence contradictory to preconceived notions. The refusal to heed intelligence warning resulted in the French attack through Alsace-Lorraine (when they should have been on the defense) and Hitler's decision to stop the German offensive when Italy was attacked by the Allies.

The lack of imagination on the part of both the French and Germans, in the Marne campaign, was responsible for ignoring the intelligence which indicated the next war would be a long one. Relatedly, was the German staffs' unwillingness to accept the risks associated with telling Hitler the truth about espionage in his headquarters. The final reason for ignoring sound intelligence was a lack of political and military knowledge and judgment exemplified by the Germany decision to attack through Belgium.
RECOMMENDATIONS

Even though not stressed in this paper, it is quite understandable that human weakness, such as fear, exhaustion, and prolonged stress, will reduce effectiveness of decision makers. Further, the many considerations and decisions made by commanders and intelligence personnel are strongly influenced by their own personalities and motivations and this, too, can lead to mistakes. With this in mind the following recommendations can be made.

First, intelligence and operations personnel must fully understand the options available to the enemy force. We must avoid "mirror imaging" where our capabilities define what we think he will do. We must avoid the trap of feeling overconfident in our abilities, while we underestimate the enemy's. This requires assumptions and decisions to be based on logical, dialectical, sober comprehension of the situation rather than intuition or experience. In this process senior personnel must realize the influence of their experience and position on subordinates and reduce the risk associated with stating opinions which do not agree with theirs.

The second requirement is to have an intelligence and operations system which will provide accurate, significant, and timely information to the decisions maker who needs it. This requirement will be the most difficult one at the operational level of war, as the information and resulting decisions will have long range impacts which are hard to project. Intelligence personnel must understand the ambiguities in the intelligence they are collecting and do more than a superficial analysis of it. At the
operational level the focus needs to be on ideological beliefs, personalities, technical intelligence, terrain intelligence, true indicators of victory or defeat and indicators of strategic surprise. This requires a continued development of the intelligence collection system ensuring that limited assets are focused on data which will have a significant value.

Finally, we must further ensure that intelligence and operations sections allow and encourage skepticism, imagination and diverse interpretations of known information. All personnel must remain open to evidence and ideas that are in variance with their preconceptions and consequently must be willing to change their estimates of the situation as new facts are discovered. Concurrently, we should realize that information gathering must end at some point, otherwise, the decision will be made to late to affect the outcome of the campaign.
ENDNOTES


4. Ibid. p. 9 & 10.


8. Ibid. p. 340


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18. Ibid. p. 296.


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