Maskirovka--What's in it for Us?

by

Major Daniel D. Krueger
Corps of Engineers

School of Advanced Military Studies
U.S. Army Command and General Staff College
Fort Leavenworth, Kansas

MENS EST CLAVIS VICTORIAE

4 December 1987

Approved for public release; distribution is unlimited.

066

DISCLAIMER NOTICE
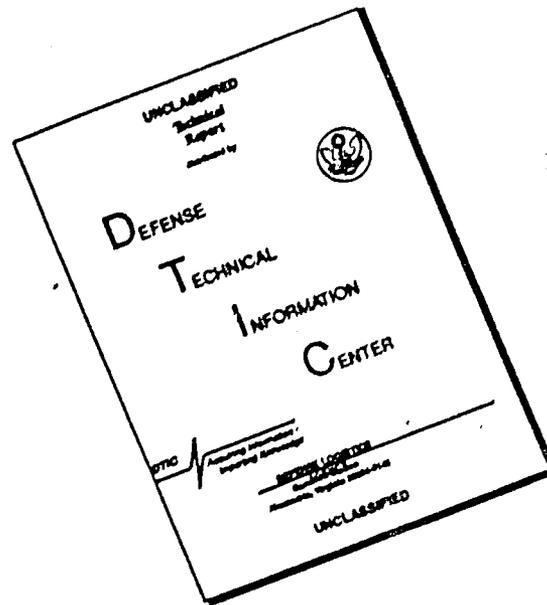
REPORT DOCUMENTATION PAGE *A190836*

1a. REPORT SECURITY CLASSIFICATION	1b. RESTRICTIVE MARKINGS
UNCLASSIFIED	

2a. SECURITY CLASSIFICATION AUTHORITY	3. DISTRIBUTION / AVAILABILITY OF REPORT
	Approved for public release; distribution unlimited.
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE	

4. PERFORMING ORGANIZATION REPORT NUMBER(S)	5. MONITORING ORGANIZATION REPORT NUMBER(S)

6a. NAME OF PERFORMING ORGANIZATION	6b. OFFICE SYMBOL (If applicable)	7a. NAME OF MONITORING ORGANIZATION
School of Advanced Military Studies, USAC&GSC	ATZL-SWV	

6c. ADDRESS (City, State, and ZIP Code)	7b. ADDRESS (City, State, and ZIP Code)
Fort Leavenworth, Kansas 66027-6900	

8a. NAME OF FUNDING / SPONSORING ORGANIZATION	8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER

8c. ADDRESS (City, State, and ZIP Code)	10. SOURCE OF FUNDING NUMBERS			
	PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.

11. TITLE (Include Security Classification)
Maskirovka--What's in it for Us? (U)

12. PERSONAL AUTHOR(S)
MAJ Daniel W. Krueger, USA

13a. TYPE OF REPORT	13b. TIME COVERED	14. DATE OF REPORT (Year, Month, Day)	15. PAGE COUNT
Monograph	FROM _____ TO _____	87/12/4	51

16. SUPPLEMENTARY NOTATION

17.	COSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)
FIELD	GROUP	SUB-GROUP	deception Soviet maskirovka
			TAC-D

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

This monograph studies evolving U.S. Army doctrine for deception and Soviet maskirovka doctrine in order to develop a comparative analysis of the two concepts. While appropriate manuals and regulations are drawn on to establish the essence of our doctrine, Soviet concepts are examined primarily through the numerous open source writings on this topic. Historical examples from the Second World War are included for the illustration of U.S. and Soviet doctrinal concepts in execution. While the applicability of deception at all levels of war is recognized, this monograph focuses on deception at the tactical level.

This study finds that there are great similarities between U.S. Army deception doctrine and Soviet maskirovka. It also finds numerous subtle but significant differences between the two bodies of thought including differences in scale, emphasis, (continued on other side of form)

20. DISTRIBUTION / AVAILABILITY OF ABSTRACT	21. ABSTRACT SECURITY CLASSIFICATION
☒ UNCLASSIFIED/UNLIMITED ☐ SAME AS RPT. ☐ DTIC USERS	UNCLASSIFIED

22a. NAME OF RESPONSIBLE INDIVIDUAL	22b. TELEPHONE (Include Area Code)	22c. OFFICE SYMBOL
MAJ Daniel W. Krueger	(913) 684-2138	ATZL-SWV

DD Form 1473, JUN 86   *Previous editions are obsolete.*   SECURITY CLASSIFICATION OF THIS PAGE

(Block 19. continued) purpose, scope, planning techniques,
attention to advanced technologies, and integration with broader doctrine.
Differing U.S. and Soviet perspectives on the principle of surprise, and
the place that sruprise holds within the respective doctrines, are key to
much of the contrast between our deceptive practices and Soviet
maskirovka.

This monograph concludes by offering four doctrinal improvements that are
suggested by this comparative analysis. First, the principle of surprise
needs to be given more emphasis in the context of our AirLand Battle
doctrine. Second, we need to simplify and integrate efforts taken under
the separate banners of deception, OPSEC, camouflage, and other programs
related to the principles of security and surprise in our doctrine.
Third, our doctrine needs to emphasize more easily attainable deception
objectives that include inducing the enemy not to act, reinforcing
preconceptions, and increasing ambiguities. Lastly, below the guiding
principles of doctrine there is a need for specifics that will support
the executability of deception by our Army.

Maskirovka--What's in it for Us?

by

Major Daniel W. Krueger
Corps of Engineers

School of Advanced Military Studies
U.S. Army Command and General Staff College
Fort Leavenworth, Kansas
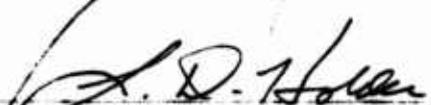
4 December 1987

88-2155

School of Advanced Military Studies
Monograph Approval

Name of Student: Major Daniel W. Krueger
Title of Monograph: Maskirovka--What's in it for Us?

Approved By:

_____   Monograph Director
Lieutenant Colonel Julian M. Campbell, M.S.

_____   Director, School of
Colonel L. D. Holder, M.A.   Advanced Military Studies

_____   Director, Graduate Degree
Philip J. Brookes, Ph.D.   Programs

Accepted this _14th_ day of _December_ 198_7_.

ABSTRACT

MASKIROVKA--WHAT'S IN IT FOR US? by Major Daniel W. Krueger, USA,
47 pages.

Deception is a subject that has drawn increased emphasis in military
studies in recent years. Within our Army we are undertaking concerted
efforts to improve our capabilities in this area. In a broader arena, it is
our most powerful potential enemy who has drawn attention and acclaim in the
area of deception. Numerous authors have noted the increased emphasis of
maskirovka in Soviet military thought and warned of the vulnerability
of the western powers to such a practice.

This monograph studies evolving U.S. Army doctrine for deception and
Soviet maskirovka doctrine in order to develop a comparative analysis of the
two concepts. While appropriate manuals and regulations are drawn on to
establish the essence of our doctrine, Soviet concepts are examined primarily
through the numerous open source writings on this topic. Historical examples
from the second World War are included for the illustration of U.S. and
Soviet doctrinal concepts in execution. While the applicability of deception
at all levels of war is recognized, this monograph focuses on deception at
the tactical level.

This study finds that there are great similarities between U.S. Army
deception doctrine and Soviet maskirovka. It also finds numerous subtle but
significant differences between the two bodies of thought including
differences in scale, emphasis, purpose, scope, planning techniques,
attention to advanced technologies, and integration with broader doctrine.
Differing U.S. and Soviet perspectives on the principle of surprise, and the
place that surprise holds within the respective doctrines, are key to much of
the contrast between our deceptive practices and Soviet maskirovka.

This monograph concludes by offering four doctrinal improvements that
are suggested by this comparative analysis. First, the principle of surprise
needs to be given more emphasis in the context of our AirLand Battle
doctrine. Second, we need to simplify and integrate efforts taken under the
separate banners of deception, OPSEC, camouflage, and other programs related
to the principles of security and surprise in our doctrine. Third, our
doctrine needs to emphasize more easily attainable deception objectives that
include inducing the enemy not to act rather than act, reinforcing
preconceptions, and increasing ambiguities. Lastly, below the guiding
principles of doctrine there is a need for specifics that will support the
executability of deception by our Army.

Table of Contents

I. INTRODUCTION

"All warfare is based on deception." Sun Tzu

During the 4th century B.C., the Chinese general Sun Tzu established in
the Art of War a doctrine for strategy and tactics that is founded on deception
and rapid strikes at enemy vulnerabilities. Sun Tzu s concepts for deception
included not only concealment of his own dispositions and intentions but also
misleading of the enemy to false perceptions of these same elements. He
wrote that "the ultimate in disposing one s troops is to be without
ascertainable shape," and that "the enemy must not know where I intend to
give battle."[1] Beyond the passive object of simply denying knowledge of his
dispositions, he encouraged manipulating the enemy in accordance with the
enemy s own desires and perceptions in order to set him up for a surprise
strike, by such actions as to "pretend inferiority and encourage his
arrogance," and to "entice him with something he is certain to take."[2]
Measures to accomplish these aims included deliberately giving fabricated
information to "expendable" secret agents. Finally, Sun Tzu recognized that
rapidity of his own action and movement is what transformed confusion or
misperception into exploitable surprise. "Speed is the essence of war. Take
advantage of the enemy's unpreparedness....This summarizes the essential
nature of war....and the ultimate in generalship."[3]

More than 2,000 years later Clausewitz considered deception and surprise
in writing his treatise, On War. Clausewitz took his typically dialectic
approach to this subject as he recognized the importance of surprise in
theory, but was pessimistic toward its application in reality. According to
Clausewitz, the desire to surprise is universal and "basic to all operations
for without it superiority at the decisive point is hardly conceivable."[4] He
cited secrecy and speed as the factors that produce surprise. Secrecy is

1

accomplished by being "cunning," and Clausewitz asserted that cunning is a key quality for commanders, but less important than fierce ambition, will power, and *coup d'oeil*. While dealing with the topics of surprise and cunning within the strategic context, he recognized that surprise impacts war at both the strategic and tactical levels, though differently. Surprise is one of the cited factors that yield an advantage to the defender at both the tactical and strategic levels. However, Clausewitz wrote that actually achieving surprise requires "favorable conditions which are not often present, and can rarely be created by the general."[5] He saw the time and space factors of the higher level of war as limiting the feasibility of achieving surprise and for this reason declared surprise as basically "a tactical device." Similarly, cunning actions taken only for appearances and to confuse the enemy "should not be considered as a significant independent field of action at the disposal of the commander."[6]

Many analysts argue that Clausewitz's views on surprise may have been valid for warfare of his day but, unlike much of his other thought, have not stood the test of time to remain valid for warfare today. In his essay, "Clausewitz in the Age of Technology," Michael Handel examines Clausewitzian thoughts in today's context of war. Among his conclusions are that technology has transformed surprise "from a course of action highly attractive in theory to an ever-present possibility."[7] While technology has vastly increased our intelligence collection capabilities, reliance on these capabilities creates potential for surprise through cunning and deception. Technology has also increased the tempo of war to a point where reaction time can be as little as a few seconds to a few minutes over the range from tactical to strategic warfare. L.J. Dick recommends that if faced by the Soviets in war, Western armies today should accept that they will be surprised. "NATO senior commanders would do well to plan on the basis that

they will (not may) be the victims of strategic surprise...As things stand at present, the Soviets will be able to impose their style of warfare on NATO."[8]

The amalgamated concept of camouflage, concealment, and deception is expressed by the Soviets with the term "maskirovka." While direct translations of the single word "maskirovka" may vary, the Defense Intelligence Agency considers "deception" as the closest single word English language translation.[9] Interestingly, the second edition of the Great Soviet Encyclopedia parenthetically defines the term "maskirovka" as "military knitrost," a term for which Clausewitz's "cunning" would be an acceptable translation.[10]

While much of Clausewitz's treatment of surprise can be dismissed as possibly applicable in his time but not today, he addressed two issues that do seem relevant to our situation of today, facing a possible confrontation with the Soviets. The first is the concept of mutual surprises by the offense and the defense, "in which case the side will be justified and succeed that has hit the nail most squarely on the head."[11] The second is his assertion that use of cunning is more appealing to the weaker side.

The U.S. Army has historical experience in conducting deception operations and also has current doctrine that will guide our deception efforts in the next war. However, it seems to be the Soviet capability for deception that is touted as the factor to be reckoned with should war break out between the two nations. Whether this perception is justified or not, we should investigate the Soviet concept of maskirovka in order to evaluate our own deception doctrine and determine how we might improve it. This paper is focused on that purpose.

In pursuing this aim, I will firstly review U.S. Army deception doctrine, drawing from our current manuals and regulations for deception and related areas. In examining our doctrine for deception this study will focus

5

on the basic questions of how it is defined, what purpose it fulfills, how it fits into the context of broader doctrine, how it is accomplished, how it is planned, and how it is controlled. A historical example will be reviewed to illustrate our deception concepts in execution. The Soviet concept of maskirovka will then be examined in a similar manner, drawing primarily on recent Soviet open source writings on this subject. Selected Soviet historical examples will be reviewed also to illustrate the concept of maskirovka in execution. I will then continue with a comparative analysis of the two doctrines and finally offer conclusions as to what the study of maskirovka reveals about our own deception doctrine and how it suggests we might improve it.

Deception is a concept that is applicable across the levels of war. This monograph will focus on deception at the tactical level. According to our doctrine, tactical deception includes deception operations conducted at echelons corps and below (ECB). To maintain a similar perspective in examining Soviet concepts, the focus of this study concerning maskirovka will be at the equivalent command levels, army and below.

II. BATTLEFIELD DECEPTION--A U.S. Army Warfighting Capability

The United States Army doctrinally recognizes deception as a form of support to the execution of combat operations. The Army's current field manual for deception is FM 90-2, Tactical Deception, published in August 1978. In September 1985, the U.S. Army Combined Arms Combat Developments Activity published a Field Circular 90-2, Deception Operations Planning Guide, to augment the field manual with emphasis on "how to." Both the manual and the circular will be superceded by a new FM 90-2, Battlefield Deception which has been completed in final draft form and is currently in the publication process. While the new manual contains significant changes in

4

terms of scope and approach, much of the content of the previous publications is incorporated in the new manual. In addition to the planning and execution guidance set forth in the deception manual, the Army prescribes policy for tactical deception in Army Regulation 525-21, _Tactical Deception (TAC-D) Policy (Including Camouflage, Countersurveillance, and Concealment)_. From a broader perspective, the Army addresses deception within the context of AirLand Battle in its keystone warfighting manual, FM 100-5, _Operations_. Additionally, deception is addressed within AR 525-20, _Command, Control, Communications Countermeasures (C3CM)_, which establishes policy for C3CM, of which deception is one of four components. These publications represent Army doctrine as it exists and is currently evolving with respect to deception at the tactical level.

The _Department of Defense Dictionary of Military and Associated Terms_ (1986) defines "military deception" as:

> action executed to mislead foreign decision makers, causing them to derive and accept desired appreciations of military capabilities, intentions, operations, or other activities that evoke foreign actions that contribute to the originator's objectives.

AR 525-21 narrows the scope of tactical deception to that portion of military deception that is (1) planned and executed by combat, combat support, and combat service support elements at corps echelon and below and (2) aimed at hostile elements collecting intelligence or information against these echelons. The regulation further identifies two roles of tactical deception. The first is activities which seek to "hide the real," the camouflage, counter-surveillance, and concealment component of TAC-D. The second seeks to "portray the false," the deception component.

The new FM 90-2 (Final Draft) defines battlefield deception as "those operations conducted at echelons theater (Army component) and below which purposely mislead enemy decision makers by distorting, concealing or falsifying indicators of friendly intentions, capabilities, or dispostions."[12]

5

Battlefield deception includes operations to deceive at both the operational and tactical levels of war. The manual delineates that operational deception is generally the purview of theater army components, army groups or field armies (echelons above Corps (EAC)) while tactical deception is planned and executed at echelons corps and below. Our doctrine calls for deception to be applied in peace as well as war.

The purpose for battlefield deception, as outlined in our new manual, is delineated by a specific objective and then a range of general goals which are situationally applicable. The objective is "to induce enemy decision makers to take operational or tactical actions which are favorable to, and exploitable by, friendly combat operations."[13] This purpose is in close accordance with that reflected in the previously cited DoD definition for military deception. The goals of battlefield deception may be such functions as masking redeployment, blocking identification, distracting attention, overloading collection capability, creating illusions, or conditioning expectations. The end served by achievement of these goals is succinctly stated in AR 525-21. By minimizing the effectiveness of the hostile commanders' intelligence capabiltiy, our tactical commanders "can control and manage hostile commanders' perceptions of friendly capabilities and intentions."[14]

Deception is by nature closely related to the principles of surprise and security. The new FM 90-2 points out that, "deception, when properly employed, can help create surprise."[15] The guidance for tactical commanders contained in AR 525-21 is that in addition to accomplishing the assigned mission, surprising the enemy and keeping casualties to a minimum must be included in a commander's "basic strategy." In its discussion of the principles of war, FM 100-5 specifically cites deception as a means to promote both security and surprise, principles which are identified as largely

6

reciprocal concepts.

The role of deception within our broader doctrine for warfighting is described in our keystone manual, FM 100-5. Use of deception, along with terrain, weather, and OPSEC, is one of the ten imperatives of AirLand Battle. Also, deception is addressed as a major functional area of coordinated combined arms action. It is considered as a "vital part of tactical operations as well (as campaigns or major operations)."[16] In conjunction with command, control and communications countermeasures, deception is cited as a typical activity conducted as part of deep operations.

The role of deception as a component of C3CM is emphasized within our currently evolving battlefield deception doctrine. "Deception should be understood to be a tool, which when synchronized with jamming, physical destruction, and operations security (OPSEC) activities, can be optimized to effectively counter enemy C3 capabilities."[17] The new FM 90-2 calls battlefield deception "an important foundation to the C3CM strategy for AirLand Battle." The relationship of deception with OPSEC, another component of C3CM, deserves special attention.

OPSEC is cited by the new FM 90-2 as one cornerstone of battlefield deception. It goes on to say that "OPSEC and deception are truly mutually supporting activities." OPSEC establishes the "base of secrecy" and is the "concealment aspect" necessary for all deceptions. The concept of mutual support between these activities is also expressed within AR 530-1, Operations Security, which conveys that deception can be used to support OPSEC as well as be supported by OPSEC. Specifically, OPSEC is necessary to guard against the enemy's discovery of the fallacious nature of deception operations while deception can be practiced to mislead the enemy concerning indicators which he may collect.

To guide the execution of deception, our doctrine establishes principles

and recognizes specific methods and techniques for conducting battlefield

deception. These principles, or maxims as they are called, could be

summarized as the following:

    (1) exploit existing preconceptions.
    (2) exploit the tendency to infer from limited data .
    (3) exploit the susceptibility to conditioning.
    (4) combine the effects of various deception techniques and methods.
    (5) increase ambiguity or increase false conviction.
    (6) utilize assets at the right moment.
    (7) deter indicators of true intent as long as possible.
    (8) insure feedback.
    (9) recognize the possibility of undesired effects.
    (10) co-opt skepticism through subtle portrayal.

The principles, explained in detail within the manual, are drawn from

historical experience, social science, decision analysis, and game theory.

With the essence of deception being to hide the real and portray the

false, it follows logically that the means available to a deceiver include

all the methods by which the enemy seeks to collect information on the

battlefield. Thus, our doctrine includes visual, olfactory, sonic, and

electronic methods for conducting deception. Visual deception efforts include

the use of camouflage, smoke, and dummies and decoys. Our doctrine

emphasizes that visual deception "must present a realistic and complete

picture" that includes all normal indicators associated with an activity such

as movement and evidence of troop occupancy.[18] Olfactory and sonic methods can

also be used to reinforce a deception effort.

The final method, electronic deception, is so extensive as to warrant a

separate manual which is currently being prepared. Our doctrine draws

functional distinctions of manipulative, imitative, and simulative electronic

deception and further recognizes that within each functional area, both

communications and non-communications emissions offer opportunity for

deceptive efforts. Manipulative electronic deception (MED) seeks to falsify

information that the enemy may obtain from our own emissions by modifying the

technical characteristics and profiles of those emissions. Imitative electronic deception (IED) seeks to intrude into enemy systems to introduce transmissions that will deceive or confuse. Simulative electronic deception (SED) is the generation of emissions to represent false units or activities.

In addition to the four deception methods, our doctrine establishes four techniques for executing deception--the feint, demonstration, ruse, and display. Both feints and demonstrations are special purpose offensive operations conducted in order to divert the enemy. Feints are limited objective supporting attacks, normally executed by brigade or smaller units, and are designed to divert the enemy from the main attack. A demonstration differs in that it is a show of force intended to threaten attack but not to engage the enemy. Ruses are "tricks designed to deceive the enemy" and are "characterized by deliberately exposing false information to enemy collection means."[19] Displays intentionally present false information to the enemy's surveillance assets by simulating, disguising, or portraying. Simulation is the projection onto the battlefield of such things as field fortifications, weapons positions, supply dumps, airfields, or bridges. Disguises alter objects which are difficult to conceal completely. Portrayals present non-existent units to the enemy or present existing units as different types than in actuality. Of course, before any of these techniques can be utilized, a sound deception plan must be developed.

Our doctrine emphasizes that deception must be fully integrated with the true operation. In order to insure integration, deception must be considered and planning initiated early in the military decision making process for an upcoming mission. Deception should be included in the commander s planning guidance. The operations officer prepares a deception estimate that analyzes the situation and provides recommendations concerning the use of deception. Our doctrine calls for deception to be used "selectively."[20] The factors to

be considered when determining whether deception should be attempted are generally the information that would be collected into the situation analysis of the deception estimate, such as whether the enemy is susceptible to deception, the time available, and the resources available. Based on a consideration of these factors and the mission, our doctrine calls for deception to be utilized when there is an opportunity for success and when that opportunity justifies the expenditure of the required resources.

Given the decision to attempt a deception, our doctrinal planning process includes a framework of components that are common to all battlefield deception operations. These components are the deception objective, target, story, plan, and events. The objective is the ultimate purpose of a deception operation and specifies "what action or lack of action the enemy must be made to take at a specific place or time on the battlefield as a result of the friendly deception operation."[21] The objective is formulated during the estimate process and included in the deception estimate. The deception target is the enemy decision maker who has the authority to effect the objective. The target is identified in conjunction with development of the desired perception, the view that the enemy must hold if he is to act in accordance with the objective. The information which must be conveyed to the target to cause him to form the desired perception becomes the deception story. The deception plan then prescribes how the story will be presented in terms of specific operations and techniques. Events are detailed actions that convey the story in accordance with the plan. These last four components are developed during the preparation of the deception annex and are included in that document. Events will normally be listed in an implementing schedule which serves to identify specific responsibilities and coordinate the execution of the plan.

Planning may actually be conducted utilizing one of four techniques that

are included in our doctrine. The preferred technique is to use normal staff operations with the G3 having primary staff responsibility. Battlefield deception elements, currently being fielded at corps and division levels, will provide specialized deception expertise to the G3 to plan deception operations. When more security is needed planning may be conducted by one of three other techniques--commander only, close hold, or ad-hoc staff. The commander only technique provides the most secrecy but fails to capitalize on the expertise and manpower of the staff. Under the close-hold technique, planners from the various staff sections and perhaps subordinate units are detailed to the operations element to assist in the planning effort. An ad-hoc staff may be appropriate for smaller scale operations.[22]

Intelligence support is essential to deception planning and is cited as a cornerstone of successful deception operations.[23] Following Sun Tzu's maxim to "know your enemy," our doctrine emphasizes that deception planners must have detailed knowledge of the enemy situation and in particular, knowledge of his collection capabilities and command and control profile. During execution as well, intelligence support is required to provide feedback. Feedback is necessary to "gauge the enemy reaction to the deception" and "increases the chance for success in deception operations."[24]

Deception plans must be coordinated at the strategic, operational and tactical levels. Our new doctrine clearly delineates planning and control resposibilities for these levels by command echelon. Operational deception operations are an EAC, or in some cases corps, responsibility. They "most normally will be land component-specific, derivative slices of strategic deception plans," although these commands are not precluded from developing plans independently.[25] Likewise, tactical deception operations, conducted by corps and lower echelons, will "most normally be derivative slices of operational deception plans." Tactical deception plans must be deconflicted

11

at the operational level. Corps deception plans will usually target enemy

army or front level commanders and may receive the deception story from

higher command. Divisions will not normally conduct independent operations

but will usually receive their deception story from the corps. Division

deception operations will target regiment and division level enemy commanders

but may aim as high as army level.[26]

While we may rewrite and improve our manuals, much of the substance of

our doctrine can still be seen in our past experiences. A well documented

historical example that reflects many facets of our current doctrine is the

deception undertaken in conjunction with XX Corps's operations along the

Moselle River in mid-September 1944 as part of the Third Army's Lorraine

Campaign. XX Corps had advanced east and by 13 September had reached the

Moselle north of Metz and had achieved a bridgehead at Arnaville, south of

Metz. On 14 September the Corps ordered a concentration of its forces in

order to renew the attack through the Arnaville bridgehead. As the Corps

regrouped for its effort in the southern part of its zone, it ordered the

43d Reconnaissance Squadron of the 3d Cavalry Group to screen the Corps north

flank in a 23 mile gap that existed between the Corps's 90th Division and V

Corps, the southernmost element of First Army to the north. To assist in

this sector the Corps planned to conduct a deception, code named Operation

BETTEMBOURG, that would portray an armored division occupying the area

vicinity Bettembourg, Luxembourg.

By request, the Corps was supported by the 23d Headquarters Special

Troops for the conduct of this deception. The 23d, a theater asset, was

specifically organized to plan and conduct deceptions and consisted of a

headquarters company, an engineer camouflage battalion, a combat engineer

company, a signal company, and a signal service company. Half of the 1100

man group participated in Operation BETTEMBOURG.

12

The objective was "to relieve pressure of the XX Corps bridgehead south of Metz by preventing the enemy from reinforcing in the Metz area and to draw enemy troops away from the Metz sector."[2/] The story, developed and assigned by XX Corps, was to portray the 6th Armored Division, less Combat Command B which actually was deployed in the XII Corps zone to the south, occupying the Bettembourg area starting 15 September. The plan, developed by the 23d, broke out the elements of the 23d to portray Combat Commands A and K while the headquarters portrayed the division headquarters.

With only a platoon of light tanks from the 43d to augment their organic resources, the 23d undertook its task by employing radio (SED), decoys, sonic deception, and special effects. Using its organic signal assets, the 23d became an active station on the Corps command and intelligence nets and the 3d Cavalry Group command net. It also established a false 6th Armored Division command net with its subordinate commands and a liaison net with 90th Division. The two "combat commands" emplaced a total of 23 inflatable M4 tank decoys but these were removed after one day for fear of discovery by local enemy agents. With loudspeaker systems, tank noises were broadcast for four nights.

A variety of actions were taken under the category of "special effects." Vehicles were painted with 6th Armored bumper markings. Soldiers wore 6th Armored shoulder patches and were given a short division history to study. Groups of soldiers were purposely sent into the surrounding villages for showers and church services and to coincidentally spread civilian awareness of the "division's" presence. Vehicular movements were staged, specifically utilizing the light tank platoon from the 43d and some organic half-tracks from the 3132d Signal Service Company. Engineers were outfitted as divisional military police and established traffic control along movement routes. The deception efforts continued up to 22 September.

The results of the deception were inconclusive by account of the 23d's own historical records. They did report that additional forces, the German 36th Division, appeared to their front. Earlier in the month the 36th Volksgrenadier Division had in fact been ordered for deployment to that area to reinforce the 553d and 559th Divisions.[28] The 23d detected increased German patrolling activity and aerial reconnaissance over the 6th Armored Division area. Apparently the German theater command, UB West, was deceived by this effort, as their maps depicted the "14th Armored Division" in the Bettembourg area at this time although there was no such unit in theater.[29] However, XX Corps's offensive out of the Arnaville bridgehead was stopped at the Seille River, six miles east of the Moselle. It is speculated that reinforcements for the Seille River defenses probably came from a regiment of the 559th Division, withdrawn from north of Metz on 20 September.[30]

While the results of this effort may have been inconclusive, the example does present aspects of our current doctrine in action. There was a clear deception objective, story, and plan, though a target was not specified. Planning was accomplished by normal staff procedures augmented by the expertise of a special deception organization. An array of methods was used to convey the deception story to include visual, sonic, and electronic methods. The techniques of display, specifically portrayal and ruse, were creatively applied in this effort. The use of a special organization to plan and conduct deceptions is a concept that was resurrected for consideration in the mid-70's and is now being fielded in the 80's, though at a much smaller scale than the 23d, in the form of our new battlefield deception elements.[31]

III. MASKIROVKA--IN CONCEPT AND IN EXECUTION

"To surprise is to conquer." A. V. Suvorov

Before maskirovka is examined, it is important to establish the basis of

14

what constitutes *maskirovka* "doctrine." Rather than manuals and regulations
as is the case for our doctrine, the Soviets have expressed their concept of
maskirovka in a number of articles and books that speak to the role of
maskirovka in military art, specifically as a means to achieve the principle
of surprise. These articles, mostly written within the last decade,
establish a common concept for the subject of *maskirovka*.

There are three threads of continuity that wind through almost all these
Soviet writings. These are an emphasis on historical experience, recognition
of changes in warfare since that experience, and importance of *maskirovka* in
current military art. Soviet *maskirovka* experience during World War II
provides a baseline for their current doctrine. Their experiences were both
numerous and extensive and over the years they have studied them rigorously.
However, the Soviets recognize that warfare has changed, thus this experience
must be placed in context. The three major developments that impact on their
maskirovka doctrine of today versus their war experience are more advanced
means of reconnaissance, the growing number of weapons, and the higher tempos
of attack.[52] Lastly, without exception, Soviet authors emphasize that these
changes have made *maskirovka* more, not less, important.

The Soviet Armed Forces' Dictionary of Basic Military Terms (1965)
defines *maskirovka* as:

> a form of support for combat operations, its purpose being to
> conceal the activities and disposition of friendly troops, and to
> deceive the enemy with regard to the grouping and intentions of
> such troops.

A somewhat more current definition is included in the Soviet Military
Encyclopedia (1978) which renders the following:

> a form of security for the combat actions and daily activity of the
> forces; a complex of measures, directed at deceiving the enemy
> relative to the presence and location of forces (the fleet),
> various combat objectives, their status, battle readiness and
> action, and also the plans of the command.

Levels of maskirovka are distinguished by the echelon of command at which it is directed and by variations in scale and focus commensurate with each level. Strategic maskirovka includes actions ordered by the supreme command and focuses on maintaining the "secrecy of preparations for strategic operations and campaigns and also disorientation of the enemy relative to true measures and actions of the armed forces." Operational maskirovka is conducted by fronts and armies and "is directed at securing the secrecy of preparations for operations." Tactical maskirovka is conducted by divisions and lesser units and is oriented to "concealing preparation for combat or the presence of objectives."[33]

The immediate purpose of maskirovka, as stated by the first definition, is to conceal and deceive. Although "mislead" or "disorient" or "delude" are all commonly used in lieu of "deceive" the combined concepts of concealment and deception is reflected invariably as the crux of maskirovka by the wide number of Soviet authors who have recently written on this subject. While concealment and deception are the essence of maskirovka, they are not ends in themselves. The ultimate purpose of maskirovka is to achieve vnezapnost'—surprise.

Surprise, for the Soviets, is a principle of military art. The above cited Dictionary states that "surprise makes it posssible to inflict heavy losses upon the enemy in short periods of time, to paralyze his will, and to deprive him of the possiblity of offering organized resistance."[34] Soviet writers have given this topic, as well as maskirovka, considerable attention. Recent writings have examined the basic psychological and cognitive factors that are involved in surprise, its implications for military units in combat, and how surprise may be achieved. As with maskirovka, Soviets recognize that surprise is applicable to all levels of war and distinguish tactical, operational, and strategic surprise. Soviets also recognize the effect of

time with regard to surprise and emphasize that it is a temporary condition
that quickly dissipates through reaction and adjustment. Soviet doctrine
stipulates that once achieved, surprise must be exploited to the maximum
extent. As elements of surprise are achieved and exploited during battle,
commanders must continually seek to achieve new elements of surprise.[35]

While not the sole means, maskirovka constitutes the most important
means of achieving surprise.[36] Measures to achieve surprise include
maintenance of secrecy of the aim of upcoming combat, misleading of the enemy
as to true intentions, preparing secretly, and camouflaging to deny enemy
reconnaissance efforts. All of these are integral to the concept of
maskirovka. Additionally, striking with speed, striking where unanticipated,
striking with new weapons or varied tactics, along with resourcefulness and
boldness on the part of the commander are other measures prescribed for the
achievement of surprise.[37] However, it is maskirovka that is cited as the
"primary" means for achieving surprise.[38]

Soviet doctrine includes four principles that must govern for successful
maskirovka. Though the exact terminology may vary slightly from one article
to another, these principles are activity, conviction, continuity, and
variety. Activity refers to persistent and diligent execution by units of
the entire complex of measures aimed at deceiving the enemy.[39] Conviction
refers to the convincing quality or believability of deception measures.
This principle is also expressed as plausibility or naturalness. Continuity
calls for constant and timely execution of measures in preparation for and
during the course of combat operations.[40] Variety recognizes that maskirovka
must be undertaken by different measures, developed with resourcefulness and
cunning for the particular situation and planned combat operation. Patterns
are to be avoided.

There are four basic methods for the conduct of maskirovka--

concealment, simulation, demonstration, and disinformation. Concealment "includes the elimination or cutting down on revealing signs of the forces (military objectives) and their activity."[41] The immediate purpose of concealment measures is to cause enemy intelligence efforts to obtain false data with regard to the disposition of forces. Concealment measures are "to be carried out by units (subunits) of all arms or services in any situation without special instructions of the higher command."[42]

Soviet maskirovka doctrine recognizes and considers the capabilities of enemy reconnaissance and the activity indicators of their own troop units. The various detection means such as sight, sound, radar, heat, and radio intercept are considered, along with the limitations of each and possible countermeasures. While they give heavy emphasis to use of terrain and poor weather conditions, technical means are additionally used to hinder enemy surveillance efforts. Visual reconnaissance is countered by use of terrain, vegetation, night, and weather. Additionally camouflage nets, screens, and smoke are employed to hinder visual surveillance. Use of terrain, vegetation, and local structures as well as extensive use of corner reflectors and interference or shielding screens are emphasized for hindering radar surveillance. Taking advantage of weather, heat shields, and use of false heat sources are advocated measures for countering thermal detection. Radio silence is prescribed to preclude detection by radio intercept. In his manual on concealment, Beketov recognizes the advanced technological capabilities of U.S. reconnaissance assets but confidently addresses how each of these capabilities can be mitigated.[43]

To insure effectiveness when employing concealment techniques, Soviets emphasize strict camouflage discipline and supervision. Units are expected to strictly enforce movement restrictions, weapons fire discipline, light discipline, sound discipline, and radio communications restrictions. Use of

stoves or other heat sources may be prohibited to avoid generating a thermal signature. In reviewing World War II experiences, instances are described of officers being posted for every 3-5 kilometers of road and NCO's every 1-2 km for the purpose of insuring traffic regulation and camouflage discipline during covert movements.[44] Aircraft checked column movements and unit positions and dropped pennants to the units on the ground if camouflage measures were violated. Soviet doctrine calls for concealment measures to be thoroughly and constantly checked through all media utilized by enemy reconnaissance.

Simulation is the "reproduction of disclosing signs present at actual objectives."[45] Also referred to as imitation, simulation includes the establishment of false positions, be they weapons positions at the tactical level or assembly areas for mobile reserves at the operational level. Soviet writings emphasize the use of equipment mock-ups to establish decoy positions. Engineer units may be employed to construct these mock-ups based on simple standardized designs. Mock-ups are incorporated with false engineer works to portray defensive positions, located to portray false attack groupings, or combined with other elements to depict such activities as river crossings, logistical activities or even airfields. Soviets place emphasis on "animating" or "livening-up" decoys by use of some actual equipment, and use of other means to generate the indicators appropriate for the objective being simulated. Explosives, smoke, sound, radar reflectors, and radio transmissions are means commonly used for animating decoys and false positions.

Demonstration is the "preconceived display by real units (subunits) of the movement of troops (forces), the concentration of groups, the carrying out of combat and other actions for the purpose of creating i the enemy a false representation of the intentions of the command in combat

(operations)."[46] Typical demonstrations or diversionary actions in Soviet experience include actions such as strengthening defensive positions when planning an attack, withdrawing though intending to attack, conducting feints away from the axis of the main attack, and conducting reconnaissance along broad fronts to avoid showing interest in one zone. Demonstrations are usually conducted by limited forces, assigned the appropriate combat mission for the desired effect but unaware as to the true role of that mission.[47]

Disinformation is the intentional dissemination of false information and is conducted by making false reports via the press, radio and television broadcasts, and other means. Soviet experience and writings show that while the enemy is the ultimate target audience for disinformation, the local populace and even their own troops may be the immediate targets to effect deception. Command information channels and unit newspapers were commonly used during the War for disinformation. Another typical technique was the staging of various activities specifically for consumption by the populace.

In addition to these four basic methods, some authors have delineated other categories in which the measures for the conduct of maskirovka can be placed. Matsulenko states that maskirovka is conducted by application of operational and engineering measures.[48] The former include demonstration actions while the latter consist of concealment and simulation activities. Beketov offers that measures can be broken down into groups of organizational or technical means.[49] Organizational measures include use of terrain and weather for concealment, camouflage discipline, and measures to protect military secrets. Technical means are those applied by engineer and technical troops and include concealment and simulation activities such as painting, screening, mock-up construction, and smoke generation.

A delineation of maskirovka means into active and passive measures is also recognized by several Soviet authors although from differing

perspectives. Dashevskiy describes active measures as those that require or evoke immediate response by the enemy while passive measures do not.[50] Demonstration and simulation activities would be grouped under the former while concealment and disinformation activities would be included under the latter. Shchedrov states that active measures are focused at deceiving the enemy as to true disposition and intention while passive measures are focused on concealing true dispositions.[51] Within his active/passive context, demonstration, simulation, and disinformation activities would generally be considered active while concealment is passive.

While the purpose, principles, and methods of maskirovka as discussed here are applicable for all levels, the distinction between operational and tactical maskirovka as stated by the definitions given earlier is clarified by contrasting the immediate aims and the means utilized. By virtue of scale and the command level involved, operational maskirovka is clearly focused on deception to insure secrecy of intention for major operations. Concealment of true dispostions is a larger component of maskirovka at the tactical level. However, maskirovka at the tactical and operational level is interdependent and cannot be regarded separately. Although the emphasis may be different at the tactical and operational levels, effective operational maskirovka is dependent on effective tactical measures and conversely, though to a lesser extent, operational measures will also impact on tactical effects.[52] Having examined the purpose, principles, and methods of maskirovka, let us turn to see how maskirovka actions are planned and controlled.

Soviet doctrine continually emphasizes the importance of centralized control of deception efforts. As noted previously, all units are expected to take passive-type concealment efforts without specific orders from higher commands. However, active deception measures taken without orders or

21

coordination are viewed as a serious potential cause for disruption of the higher level operation. In his 1980 article on *maskirovka*, Dashevskiy renders a 1942 historical example of an Army commander who executed *maskirovka* on his own, the author's point being to show "how independent initiative on the part of the commanding general, displayed without coordinating deception measures with front headquarters, frustrated the front offensive operation plan."[53] Dashevskiy advocates that deception efforts must be integrated even among fronts in order to be successful. In reviewing experiences in the Great Patriotic War, Matsulenko concludes that by the end of the war, front commanders were making the decisions and plans to execute *maskirovka* according to the intent of the Supreme High Command. Even at army level, the role was one of execution.[54]

In developing plans for *maskirovka* efforts, Soviet writings call for consideration of the mission of the true operation, the intent of the deception, the enemy, the terrain, and the resources available in terms of both troop units and technical means. With respect to the enemy, knowledge of his capabilities and plans are considered as important as specific consideration of his reconnaissance capabilities. In addition to consideration of these factors, Soviets emphasize that commanders must display creativity, resourcefulness, and initiative in devising plans for *maskirovka* in accordance with the principles listed earlier.

Several Soviet articles describe the development of a staff system for the planning and supervision of concealment, camouflage and deception. At the outset of World War II, responsibilities for planning and supervision laid with the chief of engineers within a command in accordance with Field Service Regulations and a specific command directive of that time.[55] During the second period of the war, special staffs at army and front level were organized to develop concealment and deception plans. These staffs were

22

comprised of personnel from the various staff sections of the headquarters as well as representatives from technical service units. By the third period of the war, the front staff had emerged as the primary organizer of maskirovka efforts, with this planning being done in a "close hold" manner of strict secrecy.[56] For current application, Dashevskiy advocates that organization and conduct of maskirovka efforts are a command responsibility and should not be relegated to the engineer or any one particular staff agency.[57]

Soviet writings commonly include examples of strident measures taken during the War to insure secrecy while planning operations. There are no hints that such measures would not be applicable today. Planning documents would be drawn up by hand in only one copy. Commanders would be told only their specific missions without knowledge of other aspects of the operation. Division commanders were given orders verbally only two days prior to an operation. Support elements were sometimes excluded from planning and logistical actions would be handled by the operations section conducting the planning.[58] Restrictions were placed on communications with use of telephones being forbidden. If necessary, plans were communicated by courier. In the case of the 2d Ukrainian Front and the Iasi-Kishinev operation of 1944, only five personnel had any knowledge of the operation up to four days prior to its initiation--the commander, the military council member, the chief of staff, and the chiefs of operations and artillery.[59]

The maskirovka efforts conducted by the 1st Ukranian Front during the Lvov-Sandomierz operation of July and August 1944 provide a typical example of deception doctrine as it had developed by the third period of the Great Patriotic War. It is also representative of the type experience from that war that has drawn renewed Soviet interest and examination within this decade. In July the Front was deployed from the south edge of the Pripet Marshes across the Dniester River and was assigned seven combined arms armies

and three tank armies. The Front, with Field Marshall of the Soviet Union Ivan S. Konev commanding, had the mission of attacking in the direction of Rava-Russkai and Lvov to destroy the German Northern Ukraine Army Group and liberate the Western Ukraine. To support the operation, the front planned, organized and conducted a deception to portray the main axis of advance toward Stanislav, on its left flank, while concealing the true directions on which its operational formations were to be committed. The Front ordered its southernmost units, the 1st Guards and 18th Armies, to simulate the concentration of a tank army in each of their zones. As these simulations were conducted, the front's mobile groups, the 1st Guards Tank, the 3d Guards Tank, and the 4th Tank Armies actually regrouped for attack on the front right flank and center. The experience of the 18th Army provides an excellent example of a Soviet simulation.[60]

The 18th Army planned and directed the maskirovka efforts by forming a special staff operational group which reported to the Chief of Staff, General F.P. Uzerov. The group consisted of eight officers from the various staff sections and included engineer, artillery, signal, political, transportation, and chemical representatives. It was headed by the deputy chief of army staff operations department, Colonel Soloveykin. The Front provided a full time representative and advisor, an engineer major by the name of Momotov.

Front allocated 18th Army 100 men of the Defensive Construction Administration, a platoon of the 22d Camouflage Company, two platoons of a reserve engineer battalion and 126 tank mock-ups as a start. The Army utilized three engineer battalions, two rifle battalions, a tank destroyer squadron, two self-propelled artillery batteries, an anti-aircraft artillery regiment, and three signal companies of various function. Additionally, twenty trucks, three tractors, two trains, and several loudspeaker sound units were utilized.

The simulation was conducted dring the period of 4-20 July and included rail movement of the forces, unloading at two stations, movement from the unloading points to the assemby area, occupation of the assembly area, and finally, movement into attack postions. The rail movement and unloading was conducted with tank mock-ups on flat cars which were moved at night to the unloading stations but deliberately displayed to German aerial reconnaissance in the morning. Movement to the assembly areas was primarily portrayed by the tank destroyers and self-propelled guns. Day movements would be conducted so as to display the activity to aerial reconnaissance. Night movements were also simulated using dismounted troops with flashlights to look like headlights of vehicles. The lights were deliberately lit long enough to attract aerial reconnaissance and then "blacked out" when the aircraft approached for a closer look. Loudspeakers were used to broadcast sounds of moving equipment.

Within the area for concentration of the tank army, positions were designated and mock-ups set up for separate brigades and regiments. A total of 453 tank mock-ups, 612 gun mock-ups, and 200 vehicle mock-ups were deployed. Mock-ups of 95 field kitchens were also constructed. A false airfield was built and six aircraft mock-ups were displayed. A garrison of troops was assigned to each assembly area to animate and guard the displays. Radio nets were also established to support the notional concentration. From 8-12 July, only communications checks were made. From 13 July on, transmissions were imitated. On 18 July, signal stations were moved forward in preparation for the "attack." Radio procedures were conducted by standard methods with call signs from the Army's existing code.

On the night of 19 July, "tank" regiments were simulated moving into forward attack positions, just prior to beginning the actual attack. On 21 July, 1st Guards and 18th Armies actually did attack in the southern part of

the front zone toward Stanislav. However, the frontal offensive was already well developed by this time. First echelon armies to the north had commenced the offensive as early as 13 July. The three tank armies forming the true operational reserve had been committed on 16 and 17 July.

While simulation was certainly the essential means of deception in this operation, the other three methods were employed as well. Disinformation of the local populace was conducted in order to convince them of the authenticity of the simulated regrouping using the Army newspaper and staged activities for public consumption such as tank crews asking for directions to the assembly areas. Concealment was essential to effect the simulated regrouping with the limited resources. Vehicles made reverse movements at night, bypasssing populated areas so that they could simulate forward movements again the next day. Concealment was also extensively employed to hide the true areas of concentration for the three tank armies. Matsulenko claims that the regrouping of the 1st Guards Tank Army and the 10th Tank Corps of the 4th Tank Army was undetected. Actual regrouping that was detected caused confusion among German intelligence.[61] Demonstration actions also supported the deception. Several reconnaissance in force missions were conducted by 18th Army forces to indicate preparation for a mechanized offensive within that zone.

Dashevskiy claims that the combined *maskirovka* efforts of the 18th and 1st Guards Armies were successful in fixing four German reserve divisions in their area of the front zone.[62] In any case the success of a deception can only be reflected in the accomplishment of the true mission. In this case, the 1st Ukranian Front encircled and destroyed the German XIII Corps vicinity Brody, subsequently advanced to and crossed the Vistula River, and secured a key bridgehead vicinity Sandomierz which was later to serve as a jump off point for the Vistula-Oder Operation.

The Lvov-Sandomierz Operation demonstrates many facets of Soviet maskirovka doctrine. First, it was a typical deception operation of the Great Patriotic War in that it emphasized a simulation effort to mislead the enemy as to where mobile reserves were being concentrated, thereby concealing their true intentions. Soviet deception efforts for this operation demonstrated the four methods of maskirovka as well as the four principles, but especially plausibility, activity, and continuity. The deception effort was planned in strict secrecy by a small operations group. Measures directed for the effort were very detailed and very extensive in terms of scale. This operation was not atypical in terms of the type and amount of resources dedicated to the deception effort.

The same principles applied at the front and army level can be seen at the tactical level in maskirovka applied by divisions. Sverdlov recounts an example of the 26th Guards Rifle Division which conducted a crossing of the Neman River in 1944. The division established a decoy assembly area for an assault crossing with two rifle battalions, a tank company, three artillery and mortar batteries, a combat engineer company, and two radio stations. After the decoy units had moved to their area, the remainder of the division moved under concealment to an actual assembly area 15 kilometers away. The next morning the division conducted a successful crossing while the decoy elements fought heavy German resistance.[60]

The Soviet emphasis on their World War II experiences in maskirovka is not at all an indication of a failure to realize the new challenges that today's technology poses for deception operations. Articles recounting these experiences of more than forty years ago invariably recognize the vastly increased capabilities of today's reconnaissance means. However, it is the recognition of today's and tomorrow's capabilities that has inspired their focused study of their historical experience due to the perception that

technology has increased the importance of maskirovka in war. It is obvious
by some articles that not all leaders in the Red Army are completely sold on
the effectiveness or executability of maskirovka. However it is the views of
those that are sold that continue to make it to the press in Moscow.

IV. ANALYSIS

> Properly planned and executed deception operations will make it
> possible for operational and tactical commanders to "hide the real"
> and display the false." FC 90-2

> ...during the years of the war two main trends in deception, as it were,
> evolved: to conceal that which is, and to show that which is not.
> F. Sverdlov

The preceding surveys of U.S. Army battlefield deception doctrine and
Soviet maskirovka reveal much similarity. Both battlefield deception and
maskirovka are forms of support for combat operations that contribute to the
security and survivability of forces as well as the achievement of surprise.
Both focus on a central theme of hiding the real and portraying the false.
While techniques and methods may be categorized differently, both concepts
recognize the same tools for conducting deception operations. Both concepts
also recognize that deception efforts must be coordinated at higher levels of
command if they are to be effective and that the big payoff for deception is
actually at the operational rather than the tactical level. Both the United
States Army and the Soviet military consider deception applicable in times of
peace and preparation for war as well as during war. Lastly, both armies
face training deficiencies and leader skepticism concerning the subject of
deception despite their advocacy of its virtues.[64]

If we are to see potential improvements for our own doctrine, however,
it is the differences and not the similarities that are important. As with
the similarities, comparison of the two concepts reveals some obvious
differences. Others are more subtle but nevertheless significant. The
purpose here is to review these differences, examine them in detail, attempt

to explain them, and establish their significance.

Perhaps the most striking difference between the Soviets and us with regard to deception is that of scale. Current writings emphasize the very extensive efforts that were given to camouflage, cover, and deception during the Great Patriotic War. Employment of hundreds and even thousands of tank, vehicle, and gun mock-ups for an operation was not exceptional. Matsulenko reports of 240 kilometers of vertical mask being constructed to conceal troop concentrations in the Sandomierz bridgehead prior to the Vistula-Oder operation.[65] Mel'nikov describes complete smoke screens across an army front as typical by 1945.[66] While these particular examples are at the level of major operations, rather than battles, they illustrate the prominence of maskirovka in Soviet military art and indicate Soviet willingness to commit great effort to its accomplishment.

U.S. experience does include deception operations of some magnitude. Operation FORTITUDE, for the cross-channel invasion in June 1944, and Operation VIERSEN, for the Rhine crossing in March 1945, are both examples of deception operations of considerable scale. These were exceptional, however. The experiences of the 23d Headquarters Special Troops, which was involved in most of the major deception operatrions in the European theater during World War II, show that Operation BETTEMBOURG was more typical in terms of scale than were these other operations.

This higher degree of importance rendered to deception in Soviet military thought is also reflected in the difference as to when deception will be conducted. Our doctrine offers considerations for whether or not deception efforts should be undertaken. To the Soviets, however, success of an operation is inconceivable without maskirovka.[67] Maskirovka measures "must be accomplished in all forms, in any situation."[68] As resource justification is one of our concerns in determining whether deception should be employed,

greater availability of resources for the Soviets may be considered as one factor contributing to this difference. However, contrasts in scope, content, and purpose also contribute to the disparity as to when *maskirovka* or deception should be applied.

It is clear from the surveys that our deception doctrine and Soviet *maskirovka* have significant differences in terms of content and scope. *Maskirovka* consists of a complex of coordinated measures which include those that we would categorize under the programs of deception, camouflage, and OPSEC. Despite the considered opinion of the DIA that "deception" is the closest single word translation for "*maskirovka*" the fact remains that "camouflage" is the single word translation that is most commonly used. This is certainly not inaccurate as *maskirovka* entails all of the measures that we call camouflage, but much more as well. While we think of camouflage in terms of masking individual weapons systems or positions, Soviets think of camouflaging operations. AR 530-1 defines OPSEC as "the process of denying adversaries information about friendly capabilities and intentions by identifying, controlling, and protecting indicators associated with the planning and conducting of military operations and other activities." *Maskirovka* integrates all these measures within a unified effort directed toward a single purpose.

Another perhaps more subtle way in which the content and scope of Soviet *maskirovka* varies from our deception doctrine is with regard to focus. While our doctrine is actually a rather generic treatment of the subject, it is clear from the Soviet authors that they are focused on mid- to high intensity conflict against the United States in particular and the western powers in general. Their World War II experiences in Europe and Manchuria serve as a baseline for their current *maskirovka* doctrine below the strategic level. When changes from this baseline are discussed, the discussion commonly

includes specific reference to U.S. or western capabilities and doctrine. Though they have fought a series of lesser conflicts since 1945, their recent discussions of operational and tactical *maskirovka* do not spend attention on these experiences nor have their operations such as in Afghanistan typified their doctrinal *maskirovka* measures at the operational and tactical levels.

A detailed look at how Soviets conduct *maskirovka* also reveals some significant differences when contrasted with our deception doctrine. These differences are seen specifically in the areas of attention given to modern technology and its impacts, development of norms and quantitative standards for deception efforts, organization of staff effort for planning, and supervision and monitoring of the execution of deception operations.

The use of such technologies as radar and infrared detection have been key to much of our recent efforts for developing and fielding intelligence collection capabilities. We recognize that Soviet collection capabilities are technologically comparable to ours but our doctrine for deception and camouflage pay little attention to modern technology. Neither the 1978 version or the new FM 90-2 address these areas specifically. Our current field manual on camouflage, published in 1968, includes a one paragraph discussion of both radar and infrared detection. While the Soviets are certainly not giving away all their detailed secrets, their open source writings on the topic of camouflage and deception give much more attention to modern technologies and how they will utilize them or frustrate the enemy's use of them. FM 90-2 categorizes our deception measures as visual, sonic, olfactory, and electronic. The Soviet Military Encyclopedia differentiates *maskirovka* measures as optical, thermal, radar, radio and electronic, sound, and hydroacoustic. Shchedrov's 1966 article on "Camouflaging Troops During Regrouping and Maneuver" shows that these technologies have had considerable attention for some time now. The conclusion here is not that there is any

gap in development of these technologies for intelligence collection or for deception, but that there is a gap in treatment of these technologies in our doctrinal literature.

Soviet guidance for the conduct of maskirovka also varies from our doctrine in that they have typically applied a quantitative approach in analyzing their past experience and developing norms or standards on which future planning could be based. Shchedrov develops a "coefficient of camouflage volume" which he advocates as a useful measure for comparison of natural camouflage along various movement routes and a basis for estimating additional camouflage effort needed. Beketov includes a table that quantifies the capacity of forests to conceal troop units. Matsulenko quantifies World War II experience for capacities of forests and villages to provide natural cover for densities of troops. These same sources also include experience based data for the effort required to install and remove mock-ups and to prepare false positions. A quantitative orientation of this type is absent from our current doctrine for deception, OPSEC, or camouflage.

There are also significant contrasts with regard to how planning of deception is accomplished. Our doctrine lays out a very complete and logically sequential process for proceeding from receipt of a mission to completion of a deception annex and implementing schedule. Soviet writings are not as explicit in how plans are developed but do indicate that maskirovka plans, like our deception annex, are support plans based on "the commander's decision for the operation (battle) and his instructions on the type of support in which he assigns the missions and designates (resources)."[64] Examples of Soviet plans from World War II show that they are similar in terms of type information presented to our implementing schedules.

Command and staff roles in preparing deception plans are different. While our doctrine emphasizes normal staff procedures for developing plans,

32

they clearly emphasize close hold procedures for developing operations and camouflage plans. Soviet writings indicate that in order to preserve secrecy, planning will be conducted by a select group, similar to the operational groups of the Great Patriotic War, that will be supervised by the chief of staff.[10] The degree of secrecy routinely practiced by the Soviets during the War contrasts sharply with our emphasis on *auftragstaktik* and decentralized leadership based on commander's intent. It is also interesting to note that while our deception doctrine stresses intelligence support (and is largely developed by our intelligence branch), the Soviet staff groups during the War often did not include an intelligence staff member. Recent writings however, have indicted this shortcoming and now emphasize the necessity of intelligence.[11]

As plans are completed and execution begins, both the Soviets and we address the importance of monitoring progress of the deception. There is divergence, however, in where these monitoring efforts are focused. Our doctrine emphasizes close monitoring of enemy reactions to our deception efforts through intelligence collection and feedback. What is emphasized, however, in Soviet writing is constant, strict and systematic supervision of their own efforts. Supervision and inspection includes checking efforts with the same type of collection assets that will be employed by the enemy. While both doctrines consider both aspects and neither doctrine considers either unimportant, the emphasis in our doctrine is clearly on watching the enemy while the emphasis in Soviet writings is on watching themselves. This difference is an indicator of a broader difference in emphasis.

The Soviets and we both recognize that the crux of the issue is hiding the real and displaying the false. Comparatively, however, the Soviet concept of *maskirovka* emphasizes the former while our deception doctrine emphasizes the latter. On our part, the emphasis on portraying the false can

33

largely be explained by the distinction we have drawn between OPSEC and
deception. From the Soviet view, portraying the false is undertaken because
modern technologies make it impossible to totally hide the true, as reflected
in the following:

> Indeed it is hardly possible to conceal the locations of troops
> completely when the enemy has modern reconnaissance equipment.
> That is why it is necessary to organize diversionary operations
> skillfully and set up dummy installations.[12]

This difference in emphasis is also reflected in the results that both
armies look for as a result of their deception efforts. Battlefield
deception seeks to induce the enemy to take an action which is favorable to
or exploitable by us. In order to induce this action it is necessary for us
to "control and manage hostile commanders' perceptions of friendly
capabilities and intention."[13] While Soviet writings convey that they like to
achieve such results from maskirovka, their efforts are focused on
maintaining the secrecy of their own dispositions and intentions. If this
can't be achieved through denial, then distraction and diversion will be
added. Shchedrov points out that while modern technologies have made passive
measures alone inadequate, the main effort now is to confuse the enemy.
Confusing the enemy, or increasing his uncertainty, is clearly easier to
achieve than is inducing the enemy to take a specific desired action. The
latter requires not increasing the enemy's uncertainty but increasing his
conviction of a falsehood.

These more limited results sought from maskirovka are wholly in line with
its purpose--to contribute to the achievement of surprise. Colonel J.
Zeltowski offers the following definition for surprise:

> a phenomenon produced by unexpected vigorous action by the enemy,
> action which exerts a powerful psychological effect, disrupting
> one's inner equilibrium and thus depriving one of the ability to
> react quickly and effectively to a threatening danger."[14]

In addition to the psychologically disorganizing and incapacitating

effects mentioned, Soviets also look to surprise to cause fear, weakened morale, and perhaps panic. Combat operations conducted in accordance with the principles of mobility and high tempo, creation of the necessary superiority, and concentration of effort will provide the "vigorous" action. maskirovka, in conjunction with the other means of achieving surprise, must insure that these vigorous action are unexpected.

In the end, it is this difference in the role and prominence of the principle of surprise that explains many substantive differences in how the Soviets approach maskirovka and how we approach deception. While our doctrine recognizes the importance of surprise, it does not emphasize this principle as do the Soviets. According to Taktika (1984), "the element of surprise has long been the most important principle of the art of war."[5] Beyond the degree of emphasis for surprise as a principle, there is difference in the role surprise holds within the two doctrines. Clausewitz cites the utility of surprise as twofold--as a means to gain numerical superiority and as a means to effect the enemy psychologically.[6] Our doctrine is more focused on the first of these effects while consideration of the psychological aspects is far more evident in Soviet thought.

V. CONCLUSIONS.

The study of Soviet maskirovka reveals by contrast some distinct differences in how they approach deception and how our doctrine treats deception. The question at hand, then, is how this study suggests that we might improve our doctrine. The value of the study in answering this question is not limited to seeing specific pieces of maskirovka which we should borrow and incorporate into our doctrine. Rather, the value of the study is in the examination of our doctrine from a different perspective. From that different perspective, areas for improvement do become apparent.

The first improvement we could make would be to increase our doctrinal emphasis on surprise and its effects. The first tenet of our AirLand Battle doctrine is initiative and our keystone manual states that, "initiative requires a constant effort to force the enemy to conform to our operational purpose and tempo while retaining our own freedom of action."[17] This clearly indicates that initiative is not merely exercised but, due to the interactive nature of war, is something which must be seized and maintained. Surprise, "a phenomenon produced by unexpected vigorous action," can provide the opportunity for seizure of the initiative. It is a key in being active as opposed to reactive. In discussing initiative, FM 100-5 mentions surprise for the attack. Surprise is also addressed as a characteristic of all successful offensive operations. Surprise is not addressed with regard to the defense, as it should be noted, Soviets do. In the sections where it is addressed our treatment of surprise tends to be somewhat negative or at least reserved as indicated in the following:

> To sum up, surprise can be a vital ingredient of succesful offensive operations. But it can never be guaranteed, and even when achieved, rarely lasts.[18]

Total surprise is indeed very difficult to achieve, as our doctrine recognizes. Partial surprise, however, can still be affective and can be achieved more easily. The effects of surprise are by nature temporary but present lucrative opportunity when aggressively exploited. The principle of surprise has increased in importance with the advent of AirLand Battle doctrine and needs to be given more emphasis and positive treatment.

The second area suggested for improvement concerns our complex of programs and functions that are related to the elements of surprise and security. In pursuing these two principles, our doctrine seems to have violated a third principle--that of simplicity. Despite the fact that these programs are mutually supporting, that deception can support or be supported

by UPSEC, the fact remains that these are two separate programs that develop two separate annexes for our operations plans. When we turn to the UPSEC annex as presented in AR 630-1, we find that protective measures under UPSEC may include deception, jamming, camouflage, or physical destruction. These, less camouflage, are the components of C3CM, a strategy covered by a third regulation and defined as the integrated use of UPSEC, military deception, jamming and physical destruction.[79] What is clear in this confusion is that the same measures are involved in different programs, that any hierarchy is cloudy at best, and that the mere complexity can jeopardize efforts being placed most efficiently toward the true purpose.

Our own experience provides a possible basis for improving this situation. Prior to the 1978 Field Manual 90-2, Tactical Deception, our doctrine included the integrated concept of tactical cover and deception. Cover was defined as:

Measures designed to provide security to a plan, operation, or activity. Cover includes special measures taken to shield the real plan, operation, or activity as well as to intensify normal security and passive defense measures.

As an integrated concept, cover and deception measures were defined as:

those passive measures intended to withhold information from the enemy as through security and concealment (cover) coupled with those active measures accomplished with the intention that the enemy will detect them (deception).

UPSEC was clearly a basic element subordinate to tactical cover and deception.[80] While the tactical cover and deception estimate and annex presented by our old manuals do not show the detail developed in our current publications, the fact that they called for only one planning effort to be accomplished would seem to yield simplicity as well as integration. The similarity between the above definition for cover and deception measures and the Soviet distinction of active and passive maskirovka is also noteworthy.

The third area suggested for improvement in our doctrine is related to

what we expect from deception. In surveying deception failures as well as successes, our new FM 90-2 points out that unreasonable expectations are a common reason for failure of deception efforts. In reviewing our own doctrine, however, it becomes evident that perhaps we tend to set our expectations for deception unreasonably high. As pointed out in the preceeding analysis, our deception doctrine seeks to induce the enemy to take a specific action which is favorable to or exploitable by us. The examples given in our manuals bear out that our deception objectives will be very specific on what it is that the enemy is expected to do. Consequently, these objectives are very difficult to achieve. Our doctrine recognizes that there are some deception objectives that are easier to achieve than others. These include objectives which call for the enemy not to act rather than act, which reinforce preconceptions, or which confuse the enemy by overloading his collection system. Our doctrine could be improved by increasing the emphasis on these types of more reasonable deceptions and decreasing the emphasis on trying to make 'Red Army 51st Bn commander give the command to move the majority of his battalion's troop, armor, and ADA assets from hill 456 to hill 123 no later than 48 hours prior to the commencement of blue offensive.[81] This is not to say that the latter type of deception objective is unreasonable, but that the other types will be more frequently appropriate to enemy situations and availability of resources. Our doctrine includes an excellent methodology for development of deception plans. We need to insure our objectives are attainable.

Lastly, we need to provide our Army with more specifics with regard to deception. Skepticism is likely to remain in much of the army until it sees that deception is indeed executable. While doctrine itself is only intended to provide guiding principles and operational concepts, there remains a void in our training and literature with regard to specific techniques,

capabilities of deception equipment, effects of terrain and weather, signatures of various activities, and capabilities of various surveillance means. While classification of some information would obviously be restrictive, laying out some hard facts and planning factors through such media as training circulars could give leaders and planners throughout the army a better grasp of how to see, how to hide, and how to mislead. The result would be a lot more confidence in the viability of deception and our ability to execute it.

The U.S. Army is heading in the right direction with regard to deception. We have an overall doctrine within which deception can truly be a vital element. Good efforts are being made in developing equipment and fielding force structure that will enhance our capability to perform battlefield deception at the tactical level. Our new battlefield deception manual sets deception within a coordinated framework at the tactical, operational, and strategic levels. These suggestions for improvement can assist in developing a deception capability that will help us to achieve surprise, seize the initiative and defeat the enemy in the next war.

ENDNOTES

1. Sun Tzu, The Art of War, translated by Samuel B. Griffith, (Oxford, 1963), pp.48-100.

2. Ibid, p.67, p.93.

3. Ibid, p.134.

4. Carl von Clausewitz, On War, edited and translated by Michael Howard and Peter Paret, (Princeton, 1984), p.198.

5. Ibid, p.200.

6. Ibid, p.203.

7. Michael I. Handel, ed., Clausewitz and Modern Strategy, (London, 1986), p.58.

8. C.J. Dick, "Catching NATO Unawares: Soviet Army Surprise and Deception Techniques," International Defense Review, (January 1986), p.26.

9. Defense Intelligence Report, "Lexicon of Soviet Terms Relating to Maskirovka," (Washington, 1983), p.4.

10. Ibid, p.1.

11. Clausewitz, op. cit., p.201.

12. FM 90-2 (Final Draft), Battlefield Deception, (May 1987), p. 1-4.

13. Ibid, p. 1-4.

14. AR 525-21, Tactical Deception (TAC-D) Policy, (June 1982), p.4.

15. FM 90-2 (Final Draft), op. cit., p. 1-58.

16. FM 100-5, Operations, (May 1986), p.53.

17. U.S. Army Intelligence Center and School, "Concept Statement for Battlefield Deception," (undated), p.1.

18. FM 90-2 (Final Draft), op. cit., p. 5-2.

19. Ibid, p. 5-21.

20. Ibid, p. 6-1.

21. Ibid, p. 1-65.

22. Ibid, pp. 4-1 - 4-3.

23. Ibid, p. 1-56.

24. Ibid, p. 1-62.

25. Ibid, p. 2-19.

26. Ibid, pp. 5-5,6, and C-4.

27. Official History of the 23d Headquarters Special Troops; Enclosure 1, Digest of Operations; Item IV, Operation BETTEMBOURG.

28. Hugh M. Cole, The Lorraine Campaign, (Washington, 1950), p.50.

29. Ibid, p.162.

30. Ibid, p.173.

31. Concepts and Force Design Group, U.S. Army Combat Development Command, "Tactical Cover and Deception," (Alexandria VA, 1972). Also, U.S. Army Intelligence Center and School, "Battlefield Deception Program Status," (Fort Huachuca AZ, Sep. 1987), pp. 4-5.

32. A.A. Beketov, A.P. Belekon', and S.G. Chermashentsev, Ground Troops Concealment, (Moscow, 1976), p.2.

33. V.A. Yefimov and S.G. Chermashentsev, "Camouflage," Soviet Military Encyclopedia (Moscow, 1976), p.4.

34. Dictionary of Basic Military Terms (Vorshilov General Staff Academy, 1965), as translated in "Lexicon of Selected Soviet Terms Relating to Maskirovka," Defense Intelligence Agency, (Washington, 1983), p.14.

35. Lt. Gen. Rezhichenko, ed., Taktika (1984), p. 48.

36. Maj. Gen. V.A. Matsulenko, Operational Camouflage of Troops, (Moscow, 1975), p.224.

37. Taktika, p.47.

38. Col. Gen. P. Mel'nikov, "Wartime Experience in Camouflage, Concealment, and Deception," Military History Journal (April 1982), p.22.

39. Yefimov, op. cit., p.6.

40. Beketov, op. cit., p.11.

41. Col. V. Shchedrov, "Camouflaging Troops During Regrouping and Maneuver," Voyennaya Mysl (June 1966), p.63.

42. Beketov, p.6.

43. Ibid, Chapter 11.

44. Col. P.M. Simchenkov, "Achieving Covertness," Military History Journal, (June 1986), p.15.

45. Beketov, op. cit., p.6.

46. Yefimov, op. cit., p.6.

47. Beketov, op. cit., p.7.

48. Matsulenko, op. cit., p.5.

49. Beketov, op. cit., p.12.

50. Lt. Gen. Ya. Dashevskiy, "Camouflage, Concealment, Deception: Organization and Execution," Military History Journal, (April 1980), p.50.

51. Shchedrov, op. cit., p.61.

52. Yu. V. Chuyev and Yu. B. Mikhaylov, Forecasting in Military Affairs, (Moscow, 1975), p.56.

53. Dashevskiy, op. cit., p.48.

54. Matsulenko, op. cit., p.230.

55. Ibid, p.5.

56. Mel'nikov, op. cit., p.26.

57. Dashevskiy, op. cit., pp.48-49.

58. Simchenkov, op. cit., p.11.

59. Dashevskiy, op. cit., p.54.

60. see Matsulenko, op. cit., pp. 137-155.

61. Ibid, pp.154,151.

62. Dashevskiy, op. cit., p.53.

63. F. Sverdlov, "Problems in Supporting Combat Operations Camouflage," Military Herald, (May 1984), p.3.

64. Col. Yu. Malisov, "Camouflage--An Important Task," Military Herald, (December 1979), p. 132. Also, FM 90-2 (Final Draft), p. 1-1.

65. Matsulenko, op. cit., p. 173.

66. Mel'nikov, op. cit., p.31.

67. Chuyev and Mikhaylov, op. cit., p.55.

68. Beketov, op. cit., p.4.

69. P.V. Ivanov, "Plans for the Support of Combat Operations," Soviet Military Encyclopedia, (Moscow, 1976), p.8.

70. S.F. Begunov, "Planning the Operation," Soviet Military Encyclopedia

(Moscow, 1976), p.5. Also, Ivanov, p.9.

71. Mel'nikov, p.24.   Also, Maj Gen. P.I. Kunitskiy, "Achieving Surprise
     from the Experience of the Great Patriotic War," Military History Journal,
     (October 1985), p.25.

72. Malisov, op. cit., p.136.

73. AR 525-21, op. cit., p.4.

74. Quoted by Col I Kuleszynski, "Some Problems of Surprise in Warfare,"
     Voyennaya Mysl, (May 1971), p.488.

75. Taktika, op. cit., p.46.

76. Clausewitz, op. cit., p.198.

77. FM 100-5, op. cit., p.15.

78. Ibid, p.46.

79. AR 525-20, p.1.

80. U.S. Army Combat Developments Command, FM 31-40 (Draft), Tactical Cover
     and Deception, (February 1973), n.8.

81. FM 90-2 (Final Draft), op. cit., pp. 4-15,16.

BIBLIOGRAPHY

Books

Beaumont, Roger A. *Maskirovka: Soviet Camouflage, Concealment and Deception*. College Station, TX: Center for Strategic Technology, Texas A&M University, 1982.

Chuyev Yu. V. and Yu. B. Mikhaylov. *Forecasting in Military Affairs*. Washington: U.S. Air Force, 1975. Translated by DGIS Multilingual Section, Secretary of State Department, Ottawa, Canada.

Clausewitz, Carl von. *On War*, edited and translated byu Michael Howard and Peter Paret. Princeton: Princeton University Press, 1984.

Cole, H.M. *The Lorraine Campaign*. Washington, DC: U.S. Army Historical Division, 1950.

Department of Military Art and Engineering, U.S.M.A. *The War in Eastern Europe (June 1941 to May 1945)*. West Point: 1952.

Dupuy, T.N., Col. *Great Battles on the Eastern Front*. New York: Bobbs-Merrill Co.,Inc., 1982.

Garthoff, Raymond L. *Soviet Military Doctrine*. Glencoe, IL: Free Press, 1953.

Handel, Michael I., ed. *Clausewitz and Modern Strategy*. London: F. Cass, 1986.

Rezhichenko, V.G., Lt. Gen., ed. *Taktika* (1984). Bolling AFB MD: Directorate of Soviet Affairs, U.S. Air Force Intelligence Service. Translated By DIS Multilingual Section Canandian National Defense Headquarters, Ottawa.

Savkin, Col. V. Ye. *The Basic Principles of Operational Art and Tactics.* United States Government Printing Office, Washington, D.C., 1972.

Sokolovskiy, V.D., Marshall. *Soviet Military Strategy*, 3d edition. New York: Crane, Russak, and Co., Inc., 1975.

Sun Tzu. *The Art of War*, translated and with introduction by Samuel B. Griffith. Oxford: Clarendon Press, 1963.

Ziemke, Earl F. *Stalingrad to Berlin: The German Defeat in the East.* Washington, DC: U.S. Army Office of the Chief of Military History, 1968.

Articles

Begunov, S.F., "Planning the Operation." *Soviet Military Encyclopedia* (Selected Articles). Translated by Foreign Technology Division, WPAFB, Ohio, from Russian articles in *Sovetskaja Voyennaya Entsiklopediya, Liniya-Obb'yetovaya,* Vol. 6, Moscow, 1976.

Chulanov, A., Lt. Col., "Concealment and Surprise." Soviet Military

Review, January 1981.

Dashevskiy, Ya, Lt. Gen., "Camouflage, Concealment, Deception:
Organization and Execution." USSR Report: Military Affairs no. 1525, 24
July 1980. Translated by the Foreign Broadcast Information Service from
the Russian article in *Voenno-istoricheskii zhurnal,* (April 1980):
46-52.

Dick, C.J., "Catching NATO Unawares: Soviet Army Surprise and Deception
Techniques." International Defense Review, 1/1986, pp. 21-26.

Donnelly, C.N., "The Human Factor in Soviet Military Policy." Military
Review, March 1985, pp. 13-22.

Kuleszynski, Lt. Col., "Some Problems of Surprise in Warfare,"
Voyennaya Mysl (1971:5) p.108.

Ivanov, P.V., "Plans for the Support of Combat Operations." Soviet
Military Encyclopedia (Selected Articles). Translated by Foreign
Technology Division, WPAFB, Ohio, from Russian articles in
Sovetskaya Voyennaya Entsiklopediya, Liniya-Obb'yetovaya, Vol. 6.
Moscow, 1976.

Korzun, L., Maj. Gen., "Achieving Surprise," Soviet Military Review,
November 1979, pp. 15-17.

Kunitskiy, P.I., Maj. Gen., "Achieving Surprise from the Experience of
the Great Patriotic War." USSR Report: Military Affairs, 27 February
1986. Translated by the Foreign Broadcast Information Service from the
Russian article in *Voenno-istoricheskii zhurnal,* October, 1985,
pp. 24-30.

Limno, A., Maj. Gen., and Col. A. Gorkin, "The Effectiveness of
Maskirovka," excerpted in Strategic Review (VIII:3) Summer 1980. p. 103.

Malisov, Iu., Col., "Camouflage-- An Important Task," *Voennyi
vestnik,* Number 12, 1979, p. 75.

Mel'nikov, P., Col. Gen., "Wartime Experience in Camouflage,
Concealment, and Deception." USSR Report: Military Affairs no. 1707 (20
Sep 1982):22-33. Translated by the Foreign Broadcast Information Service
from the Russian article in *Voenno-istoricheskii zhurnal,* (April
1982):18-26.

Paleski, Z., Major-Manager, "Psychological Aspects of Surprise,"
Voyennaya Mysl (1971:7) p.103.

Shchedrov, V., Col., "Camouflaging Troops during Regrouping And Maneuver,"
Voyennaya Mysl (1966:6) pp. 61-69. Translated By Foreign Documents
Division, Central Intelligence Agency.

Simchenkov, P.M., Col., "Achieving Covertness." USSR Report: Military
Affairs, 14 November 1986. Translated by the Foreign Broadcast Information
Service from the Russian article in *Voenno-istoricheskii zhurnal,* June,
1986, pp. 17-24.

Stevens, Jennie A., and Henry S. Marsh, "Surprise and Deception in Soviet Military Thought." Military Review, June and July 1982, pp. 2-11 and 2

Yefimov, V.A. and S.G. Chermashentev, "Camouflage." Soviet Military Encyclopedia (Selected Articles), 2 April 1979. Translated by Foreign Technology Division, WPAFB, Ohio, from Russian articles in Sovetskaya Voyennaya Entsiklopediya, Liniya-Obb'yetovaya, Vol. 5, Moscow, 1978.

Ziyemin'sh, M.A., Major, ". . . Plus Military Cunning," Krasnaya Zvezda, January 24, 1979, excepted in Strategic Review (VII:4) Fall, 1979, p. 100.

Papers and Monographs

Beketov, A.A., A.P. Belekon, and S.G. Chermashentev, "Ground Troops Concealment." Moscow: Military Publishing Office, USSR Ministry of Defense, 1976. Translated by U.S. Army Foreign Science and Technology Center.

Defense Intelligence Report. "Lexicon of Soviet Terms Relating to Maskirovka." Washington, DC: Defense Intelligence Agency, October 1983.

Defense Intelligence Report. "Soviet/Warsaw Pact Ground Force Camouflage and Concealment Techniques." Washington, DC: Defense Intelligence Agnecy, Jan 1978.

Department of the Army. "Official History of the 23d Headquarters Special Troops." Washington, DC: The Adjutant General's Office, Departmental Records Branch.

Hamilton, David L., "Deception in Soviet Military Doctrine and Operations." Naval Postgraduate School, Monterey CA, 1986.

Keating, K.C., "Maskirovka: The Soviet System of Camouflage." Garmisch, GE: U.S. Army Russian Institute, 1981.

Matsulenko, V.A., Maj. Gen., "Operational Camouflage of Troops." Moscow: USSR Ministry of Defense, 1975. Translated by the U.S. Army Foreign Science and Technology Center.

Pirnie, Bruce K, "Soviet Deception Operations in World War II." Washington DC: Army Center of Military History, 30 Aug 1985.

Savoie, Thomas A., Maj., "Tactical Deception: A Lost Art?" Fort Leavenworth: U.S. Army Command and General Staff College, December 1985.

Sobik, Erich, "Surprise, Cunning, Camouflage, and Deception in the Soviet Army. Part II. What Conclusions Can Be Drawn?" Charlottesville, VA: Army Foreign Science and Technology Center, 1983.

Sverdlov, F., "Problems in Supporting Combat Operations Camouflage." Washington, DC: Translation Division, Naval Intelligence Support Center, 29 Nov 1984.

Iolochkov, Mikhail Ivanovich, "Camouflage in War." Washington, DC: Army Foreign Science and Technology Center, 1969.

U.S. Army. Combat Development Command. "Tactical Cover and Deception." Alexandria, VA: Concepts and Force Design Group, 1972.

Manuals and Regulations

U.S. Army Combined Arms Combat Developments Activity. Field Circular 90-2, Deception Operations Planning Guide. Fort Leavenworth KS, 1985.

U.S. Department of the Army. Army Regulation 525-20, Command, Control and Communications Countermeasures (C3CM) Policy, 1 July 1981.

U.S. Department of the Army. Army Regulation 5.5-21, Tactical Deception (TAC-D) Policy (including Camouflage, Countersurveillance, and Concealment). Washington, DC, 15 June 1985.

U.S. Department of the Army. Army Regulation 530-1, Operations Security (OPSEC). Washington, DC, 15 October 1985.

U.S. Department of the Army. Field Manual 5-20, Camouflage. Washington, DC, 1968.

U.S. Department of the Army. Field Manual 90-2, Tactical Deception. Washington, DC, 1978.

U.S. Department of the Army. Field Manual 100-5, Operations. Washington, DC, 1986.

U.S. Army Intelligence Center and School. Field Manual 90-2 (Final Draft), Battlefield Deception. May 1987.