HERB ORLINS

A HANDBOOK OF WARNING INTELLIGENCE

VOLUME I

INCLUDES PARTS I-IV, CHAPTERS 1-18

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JULY 1972

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A HANDBOOK OF WARNING INTELLIGENCE

VOLUME I

INCLUDES PARTS I - IV

CHAPTERS 1 - 18

BY: CYNTHIA M. GRABO

PRINTED BY THE DEFENSE INTELLIGENCE AGENCY

JULY 1972

TO RECIPIENTS

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AUTHOR'S NOTE

Some years ago, a group from several intelligence agencies was discussing the question of indications analysis and strategic warning. Reminded by one individual present that analysts who used indications methodology had correctly forecast both the North Korean attack on South Korea and the Chinese intervention in Korea, a relative newcomer to the business said, "Yes, but you can't have done a very good job, because no one believed you." This bit of unintentional humor aptly describes much of the problem of warning intelligence. Why is it that "no one" -- a slight but not great exaggeration -- believes in the indications method, despite its demonstrably good record in these and other crises which have threatened our security interests? Can the reluctance to believe be in part for lack of understanding of the nature of indications analysis or lack of experience with live warning problems?

Within recent years, the effort to improve our so-called "warning capabilities" has concentrated heavily on problems of collection, crisis management, and automatic data processing. Relatively little attention has been paid to warning as an analytical problem, despite the fact that experience shows that the same types (if not identical) analytical problems do recur in crisis situations, and that there are lessons to be learned from a study of the past.

This handbook is the product of more than twenty years practical experience with indications and warning intelligence from the analytical standpoint. So far as I know, it is the first attempt to bring together a body of experience on the warning problem and to set forth some guidelines which may assist analysts, and others involved in the warning process, in the future. Although this work is intended primarily for desk analysts and their immediate supervisors, and for use in intelligence training courses, it is hoped that it will be of benefit also to higher level intelligence personnel, and to those at the policy level who are dependent on the intelligence process for strategic warning. For it is as essential, perhaps even more essential, that they understand the nature of warning intelligence as it is for working level personnel.

This work is not an official project. It has not been written under the auspices of any agency, nor does it necessarily represent the views of any agency. It is being done entirely on my own time in addition to other duties, and all opinions expressed are my own.

This volume is the second printing of the first four parts (Chapters 1 to 18). Both printings have been done by the Defense Intelligence Agency, primarily for use within the military establishment at both intelligence and operational levels. Some distribution is being made to other intelligence agencies and government personnel who have expressed an interest.

There have been no substantive changes in the text for this second printing, only a few minor editorial changes. The pages of each chapter are numbered separately, but each page now also shows the chapter number (e.g., 5-9 signifies Chapter 5, page 9). The dates on the individual chapters are the dates when they were completed.

The remainder of this work (Parts V-IX, Chapters 19-40) is expected to be completed in 1973. It will probably be issued initially in two more volumes, the first in the fall of 1972 and the remainder the following year. Consideration is also being given to the preparation of an unclassified version, provided there is sufficient interest in it. Although the general principles and techniques of indications analysis and the table of contents are unclassified, a number of the examples used in this work -- which give life and validity to the principles -- must remain classified for an undetermined period.

I wish to express my thanks to several people for encouraging me to continue with this work, and for their comments. They include: Dr. Sherman Kent, former Director of the Office of National Estimates; Dr. Thomas G. Belden, Chief Historian, US Air Force; the past and present Directors of the National Indications Center; the staff of the Defense Intelligence School; and other individuals in the Defense Intelligence Agency, particularly those in the Directorate for Intelligence who have arranged for the printing and distribution of this work. Above all, my thanks to two wonderfully efficient and cooperative secretaries, Misses [redacted] and [redacted], who have typed this manuscript and thus made its publication possible.

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Comments on this work would be welcomed, and should be forwarded to the writer at: National Indications Center, 1E821, Pentagon, Washington, D. C.

Cynthia M. Grabo
National Indications Center
June 1972

A HANDBOOK OF WARNING INTELLIGENCE

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CHAPTER 1: GENERAL NATURE OF THE PROBLEM

CHAPTER 1: GENERAL NATURE OF THE PROBLEM

The Function of Warning Intelligence

Warning intelligence, or as it is often called indications intelligence, is largely a post-World War II development. More specifically, it was a product of the early days of the cold war--when we began to perceive that the Soviet Union and other Communist nations were embarked on courses inimical to the interests and security of the free world and which could lead to surprise actions or open aggression by Communist states. Enemy actions in World War II--above all the Japanese attack on Pearl Harbor--also had dispelled many of the conventional or historical concepts of how wars begin. The fear that our enemies once again might undertake devastating, surprise military action--without prior declaration of war or other conventional warning--became very real. The advent of modern weapons and long-range delivery systems further increased the dangers and the consequent need for warning to avoid surprise attack.

Surprise military actions and even undeclared initiation of wars are not, of course, exclusively a modern phenomenon. History has recorded many such actions, going back at least to the introduction of the wooden horse into the ancient city of Troy. The military intelligence services of all major powers during World War II devoted much of their time to collection and analysis of information concerning the military plans and intentions of their enemies, as well as their capabilities, in an effort to anticipate future enemy actions. Many of the problems and techniques which we

today associate with indications or warning analysis were recognized and practiced during World War II. The history of the war records some brilliant intelligence successes in anticipating enemy actions as well as such conspicuous failures as Pearl Harbor, the German attack on the Soviet Union and the Battle of the Bulge.

Thus, warning intelligence as we know it today really is not new. It is only that it has now become recognized as a distinct function of intelligence, as something which the intelligence system should be examining full time, in war and in peace, so long as there are admittedly hostile countries with powerful military forces which could be employed against us or our allies. Warning intelligence today--although closely allied with current intelligence, estimates and basic intelligence--is nonetheless somewhat separate. Its function is to anticipate, insofar as collection and analysis will permit, what the enemy is likely to do, and particularly whether hostile nations are preparing to initiate military action in the foreseeable future. Its role is to provide the policy maker and the military commander with the best possible--and earliest possible--judgment that some action inimical to the security of the nation may be impending.

Now there are many things that can occur in the world which could be inimical to US interests and which might entail some US action, either political or military. A coup in Bolivia, the outbreak of civil war in the Congo, the kidnapping of a diplomat in Guatemala, conflict between Pakistan and India, new Soviet military aid shipments to Algeria, the assassination of a pro-Western chief of state anywhere--all these and a host of other military and political developments are of concern to the US, and it is a function of intelligence, insofar as possible, to anticipate such developments and to

alert the policy maker to them. In this sense, "warning" could be said to be an almost unlimited responsibility of the intelligence system and to involve potentially almost any development anywhere in the world. The current intelligence process is involved daily with this kind of problem. Throughout the system, at both the national level and overseas, operational centers, alert centers and watch offices are concerned day and night with keeping up with problems and potential crises of this type.

For warning intelligence also to attempt to deal with an unlimited number of problems and crises of this nature would obviously result in an unnecessary and expensive duplication of effort. The warning effort would become largely another current intelligence system if it attempted to cope with every or even most potential crises or unexpected developments which might be of concern to the policy maker or commander. Still worse, the warning effort could become so diffused and distracted with secondary problems that its primary function could be impaired.

The term "warning intelligence"--as it has usually been used since World War II and as it will be used throughout this book--is generally restricted to: (a) direct action by hostile Communist states against the US or its allies, involving the commitment of their regular or irregular armed forces; (b) other major developments affecting US security interests in which such hostile Communist states are or might become directly involved; and (c) military action by Communist states against other nations (not allied with the US), including action against other Communist states.

Obviously, no absolute guidelines or directives can be laid down in advance as to when, or under what circumstances, any particular situation or area properly becomes a

subject for analysis or judgments by warning intelligence. Some situations are demonstrably warning problems most gravely threatening US forces or security interests, such as the Chinese intervention in Korea or the Cuban missile crisis. Other situations, although not involving such direct threats of confrontation for the US, nonetheless pose grave risks of escalation or involvement of other powers; a series of Middle East conflicts and crises have been in this category. Some areas--for many years Berlin, and almost continually Southeast Asia--have been long-term, almost chronic, warning problems; while others, such as the Taiwan Strait, may occasionally become critical subjects for warning intelligence. Conflicts or potential conflicts between Communist states--the Soviet suppression of the Hungarian revolt, the invasion of Czechoslovakia, and the Sino-Soviet border--also have been subjects for warning analysis and judgments. And a number of lesser crises, or threats of possible crises or actions, have been examined over a period of years, in order to provide judgments for higher officials.

Whether or not an immediate crisis or threat exists, however, the function of warning intelligence also is to examine continually--and to report periodically, or daily if necessary--any developments which could indicate that a hostile nation is preparing, or could be preparing, some new action which might be inimical to US security interests. It examines developments, actions, or reports of possible actions or plans--military, political and economic--throughout the Communist world, and in other nations when pertinent, which might provide any clue to possible changes in policy or preparations for some future hostile action. It renders a judgment--positive, negative, or qualified--that there is or is not a threat of new military action or an impending change in the

nature of ongoing military actions of which the policy maker should be warned. And it usually includes as well some analytical discussion of the evidence at hand to support the conclusions.

Thus warning intelligence serves both a continuing "routine" function and an exceptional crisis function. Routinely, from day to day or week to week, its report may say little and its final judgment may be negative. Yet it serves as a kind of insurance that all indications or possible indications are being examined, discussed and evaluated, and hopefully that nothing of potential indications significance has been overlooked. In time of crisis or potential crisis, it serves (or should serve) the function for which it really exists--to provide warning, as clear and unequivocally as possible, of what the enemy is probably preparing to do.

US Warning Intelligence: A Synopsis

A full account of the history of US warning intelligence and how it evolved would consume many pages, and would be superfluous for the purposes of this study. A brief discussion of how the system has developed, however, may be useful for the student of indications methodology.

There is a story that President Truman--an avid reader of intelligence reports--was concerned with the quantities of conflicting reports and rumors concerning possible Soviet plans and intentions at the start of the Berlin blockade in 1948. "Who," he is said to have asked, "is keeping track of all these indications?" Whether this is true or not, and if so whether his remark contributed directly to the US indications effort, the genesis of that effort can be traced to about this time. The Berlin blockade, together

with other signs that the USSR and the Chinese Communists were on an expansionist course, inspired an effort in US intelligence agencies, as well as by British intelligence, to bring together the various fragments of information or indications of possible Soviet plans and intentions. By early 1949, at least two US indications groups were at work extracting and compiling information relating to Communist military and political activities and plans both in Europe and Asia. Both groups--one of which met periodically on an inter-agency basis under CIA auspices, and the other in Army Intelligence--produced very informal periodic reports which received a limited distribution and were probably never seen by policy makers. This was most unfortunate, since both groups were gravely concerned with the growing number of indications by the spring of 1950 that the Communist Bloc was getting ready for aggressive action in one or more areas. Across the board, the number of indications was impressive and the outlook ominous.

The North Korean attack on South Korea on 25 June 1950 (which some analysts believe would have been only the first of several aggressive actions, had we not intervened) immediately prompted an expanded and more formal indications effort on an inter-agency basis. (It may be hard for those accustomed to intelligence as it operates today to believe it, but it is a fact that at that time there was virtually no interagency research collaboration and no formal coordinated reporting.) Within weeks, representatives from Air and Navy were attending a weekly meeting under the Army's chairmanship, which became known as the Joint Intelligence Indications Committee (JIIC). Shortly later, representatives from the Department of State, CIA, the AEC and the FBI also joined the

group. As of January 1951, it officially became the Watch Committee under the auspices of the Intelligence Advisory Committee (the predecessor of the United States Intelligence Board). The weekly reports of the US Watch Committee have been numbered serially since the formation of the JIIC in August 1950. From 1950 until 1954, the research and secretarial backup for the committee was provided by the Army, with some assistance from Air and Navy.

In 1954, following extended study, the indications effort was reorganized and expanded to provide an inter-agency working staff for the Watch Committee, known as the National Indications Center (NIC), and a senior CIA official assumed the permanent chairmanship of the Watch Committee. In 1958, NSA formally became a member of the Watch Committee. In 1961, DIA replaced the service representatives on the Committee and the latter became observers. Otherwise, there has been little change in the composition or function of the Watch Committee since its establishment. The NIC remains the only full-time inter-agency staff devoted solely to intelligence analysis and reporting.

Probably more important than these formal changes has been the growing recognition of the importance of warning and indications intelligence throughout the intelligence system. Nearly all intelligence agencies today have some personnel or effort devoted exclusively or primarily to the indications effort. In addition, indications centers have been established in virtually all US military commands under the auspices of DIA, and many of these centers have their own Watch meetings and disseminate weekly Watch Reports devoted to the particular problems of their area. Counterparts

of the US Watch Committee also exist in the British Commonwealth countries (although their functions are somewhat broader), and the weekly reports of these various committees are exchanged.

Further, intelligence analysts in all agencies have a part in the indications effort, either through the contribution of items, briefing of their Watch representatives, attendance at Watch meetings, or review of the draft reports. Indicator lists, once informally prepared, are now extensively staffed and coordinated with specialists in the various agencies (see Chapter 7, Indicator Lists). Tripartite indicator lists (mutually agreed by the US, UK and Canada) are also extensively staffed and periodically reviewed.

There is no question today of the status of warning intelligence and that the inter-agency indications effort, from its modest beginnings in 1948-49, is probably here to stay. From almost no coordination, we have come to almost total coordination. If there is any danger to the system today, it is not that indications intelligence is not recognized, but that excessive formality or emphasis on coordination and unanimity can lead to watered down judgments or suppression of minority views. These problems will be discussed in later chapters.

Major Warning Problems of Recent Years

Since 1946, we have been confronted repeatedly with some crisis or threatened crisis which either has or might have involved the use of force by a Communist power. In the interval between 1953 and 1965 when US forces were not directly involved in a war in Asia, a series of threats in Berlin, the Middle East, the Taiwan Strait, Vietnam,

Laos, and Cuba provided a continuing series of problems to keep the warning system on its toes. No indications analyst was bored.

To refresh the mind of the reader and since reference to these various crises will be made in ensuing pages of this work, it may be well to identify the major problems which have been of concern to warning analysts since 1950. We will consider them here not in chronological order, or even in order of their importance to US policy officials or military leaders, but rather grouped roughly in terms of their significance as warning problems.

- True, major warning problems

In this category are the great classic warning problems to which the student of indications will wish to devote his major attention. It will be noted that only one of the four below involved a commitment of US forces, although a second (Cuba) was possibly our greatest potential threat since World War II. All four of these examples were marked by massive military preparations, secret but also obvious deployments of forces, some attempts at deception, a wide variety of political indications, and (except in the case of Cuba where it was narrowly averted) by ultimate military conflict. They are:

The North Korean attack on South Korea--June 1950--and the Chinese Communist intervention in Korea--October-November 1950

The Hungarian revolt and the Suez crisis (simultaneous but separate crises)--October-November 1956

The Cuban missile crisis--October 1962

The invasion of Czechoslovakia--August 1968

- Long-term, continuing warning problems

In this category are the chronic problems which have plagued the nation year after year. While they have for the most part lacked the drama of the major crises noted above and in one instance (Berlin) did not lead to conflict, they nonetheless hold many useful lessons for the warning analyst. All three have also been marked by periods of acute crisis for warning intelligence. They are:

Berlin -- a continuing problem from World War II, a critical problem in 1948-49 and from 1958-62, and a full-blown crisis in the summer of 1961

Vietnam -- a problem since 1950, with crises in 1954, 1965 and 1968; a persistent indications as well as military problem

Laos -- with Vietnam, a problem since 1950, with several critical periods such as 1960, 1962 and 1964

- Lesser but important crises, or potential crises

In this category we have placed most of the remaining major problems which have confronted the indications effort in recent years. They have little in common, but all involved either the threat of force or actual employment of it. They are listed chronologically:

The Turkish-Syrian crisis -- summer 1957

The Lebanese crisis -- July 1958

The Taiwan Strait crisis -- August 1958

The Sino-Indian border conflict -- October 1962

The Arab-Israeli six-day war -- June 1967

The Sino-Soviet border -- a continuing problem but especially spring-summer 1969

The reader may have noted that, despite the number of crises listed above (and other lesser problems could be added), significant warning problems really have not been as frequent as some believe. While we have had continuing critical national problems, there are only a dozen or so in the past 20 years which merit study as indications problems, and fewer than that which are warning "classics" of enduring value for the analyst. Moreover, these crises have covered a variety of areas extending all around the periphery of the Communist world and to Cuba. They have involved North Korean, Chinese, Vietnamese, Laotian, Arab, Israeli, Soviet and Warsaw Pact forces. Few analysts, even those who have remained on one area for an extended period, have experienced as live problems more than two or three of these crises. Although involving widely separated areas, some of these problems have had considerable similarity as warning problems. For example, the Chinese intervention in Korea and the Soviet invasion of Czechoslovakia are remarkably alike as analytical problems, yet very few analysts were actively involved in both.

This relative infrequency of true warning problems--the lessons most valuable for the training of indications analysts--is one of the major difficulties for the warning system. Unlike numerous other types of intelligence analysis on which there is a continuing flow of live and pertinent material (order of battle, weapons production, budgets, etc.), an analyst may experience a live warning problem only once or twice in his career. He may be trained on his first crisis and have no real personal experience or background to bring to it.

This handbook has been written to help bring some of this experience to analysts who have never worked a true, live warning problem. While there is no adequate substitute for the live experience, it is hoped that the succeeding chapters will provide the analyst vicariously with some of the experience he might gain from the real thing.

A HANDBOOK OF WARNING INTELLIGENCE

PART I: WHY WARNING INTELLIGENCE AND WHAT IS IT? SOME FUNDAMENTALS

CHAPTER 2: DEFINITIONS OF TERMS AND THEIR USAGE

CHAPTER 2: DEFINITIONS OF TERMS AND THEIR USAGE

Unlike many specialized types of knowledge, warning intelligence has developed very few occult or technical terms. For the most part, it uses the same terminology as current or estimative intelligence, and is designed to be intelligible to "lay readers" not familiar with technical or scientific terms as well as to military experts.

There are a number of terms frequently used in warning intelligence, however, with which any writer or reader of the product will soon become familiar and which have acquired something of a specialized meaning. Some of these terms are in "accepted" usage, in that they appear in such volumes as the JCS Dictionary of US Military Terms for Joint Usage; others have a generally well understood or accepted meaning. Some, on the other hand, have never been precisely defined and have been subject to somewhat varying interpretations. Thus, the following "definitions" cannot be described as graven in stone but are only the most usually accepted usage in the warning field.

Indications and Indications Intelligence

The term "indications intelligence" is considered synonymous with "warning intelligence" and is concerned with those pieces of information which relate to what the enemy is or possibly is preparing to do. The JCS Dictionary definition is: "Information in various degrees of evaluation, all of which bears on the intention of a potential enemy to adopt or reject a course of action." By common dictionary definition, the word "indicate" connotes something less than certainty; an "indication" is a sign, a symptom, a suggestion, a ground for inferring, a basis for believing, or the like. Thus,

the choice of this term to denote the nature of warning intelligence was a realistic recognition that warning itself is likely to be less than certain and to be based on information which is incomplete, of uncertain evaluation or difficult to interpret.

An indication can be a development of almost any kind. Specifically, it may be a confirmed fact, a possible fact, an absence of something, a fragment of information, an observation, a photograph, a propaganda broadcast, a diplomatic note, a callup of reservists, a deployment of forces, a military alert, an agent report, or a hundred other things. The sole proviso is that it provide some insight, or seem to provide some insight, into the enemy's likely course of action. An indication can be positive, negative, or ambiguous (uncertain). For example, a continuing buildup of Soviet troops along the Chinese border is a positive indication of Soviet military preparations for possible conflict with China. A lack of evidence of concurrent mobilization or extraordinary requisitioning of transport is (probably) a negative indication that any action is imminent. A simultaneous offer to negotiate is ambiguous or uncertain as an indication--it may be a genuine effort to avert conflict but it could be deception or a device to gain time. Uncertainty concerning the meaning of a confirmed development is usually conveyed by such phrases as: it is a possible indication, it may indicate, it suggests, etc. Uncertainty as to the validity of the information itself may also be phrased this way, but more accurately this is conveyed by a phrase such as: if true, this indicates, etc.

Developments may even be "indications of indications" rather than positive signs that something abnormal has occurred. The issuance of new cards to reservists may indicate that they are to be called up; this may in turn indicate that a partial mobilization

is planned, or it may indicate only that they will be called up for routine refresher training. Or the whole thing may indicate nothing except some procedural change in mobilization plans which required the issuance of new cards.

An indicator is a known or theoretical step which the enemy should or may take in preparation for hostilities. It is something which we anticipate may occur, and which we therefore usually incorporate into a list of things to be watched for, known as "indicator lists" (see Chapter 7). Information that any of these steps is actually being implemented constitutes an indication. This distinction in terms--between expectation and actuality, or between theory and current developments--is a useful one, and those in the warning trade have tried to insure that this distinction between indicators and indications is maintained. Many fail to make this careful distinction, however, and the word "indicator" very frequently is used to mean an actual development which has occurred, or an indication. No one, however, refers to "indicators centers" or "indicators intelligence"--an indication that the difference in meaning is actually generally understood.

Strategic versus Tactical Warning

The term strategic warning somewhat regretably has no single, accepted definition in US intelligence and operational usage. To those in the field of warning intelligence, strategic warning is generally viewed as relatively long-term, or more or less synonymous with the "earliest possible warning" which the warning system is supposed to provide. Thus, in this meaning, strategic warning hopefully can be issued weeks (or even months) in advance, when a large-scale deployment of forces is under way, or the enemy has

made known his political commitment to some course of action entailing the use of force. This judgment--of the probability of military action at some time in the future--is unrelated to the imminence of action. The judgment may be possible only when enemy action is in fact imminent, but it may also be possible long before that. In this sense--and it is the sense in which intelligence normally uses it--strategic warning is an assessment that the enemy has or probably has taken a decision to employ force. When he may implement that decision is another matter. The policy maker needs the warning as early as possible.

In operational military use, however, the term strategic warning has a considerably different meaning and is defined in the JCS Dictionary as: "A notification that enemy-initiated hostilities may be imminent. This notification may be received from minutes to hours, to days, or longer, prior to the initiation of hostilities." Thus, in this usage, the policy or operational level anticipates a definite "notification" of some type (either through intelligence or operational channels) that enemy attack probably is impending in the very near future. This strategic warning then entails decisions by the highest levels of government--the interval between the receipt of strategic warning and the outbreak of hostilities is divided into "strategic warning pre-decision time" and "strategic warning post-decision time."

As the reader proceeds with this book, he may come to perceive some of the unreality in these definitions. It is, for example, most unlikely that decisions would be deferred until enemy action appeared imminent, provided evidence of preparation for such action had previously been available. In practice, it is not the recognition of

imminence of action but the recognition of probability of action that constitutes strategic warning. For the intelligence warning system, strategic warning is likely to remain a judgment of likelihood of action rather than of imminence of such action, regardless of how terms may be defined. It is important, however, that the intelligence system recognize that the term strategic warning also has a very specific operational usage.

Tactical warning is much more easily defined, although even here there is some shading in meaning. Strictly defined, tactical warning is not a function of intelligence (at least not at the national level) but is an operational problem. It is that warning that would be available to the commander on the front line, or through the radar system or other sensors, which would indicate that the attacking forces were already in motion toward the target. The JCS Dictionary defines tactical warning as: "A notification that the enemy has initiated hostilities. Such warning may be received any time from the launching of the attack until it reaches its target." Under this definition, it is obviously too late for the intelligence system to come to any judgments to convey to the policy maker or commander; all evaluation as well as response can only be in the hands of the operational level. In practice, the line between strategic and tactical warning may not be so precise. In fact, many would consider that intelligence had issued tactical warning if it were to issue a judgment that an attack was imminent, particularly if this followed a series of earlier judgments that attack was likely. When would warning of the Tet Offensive of 1968 have become tactical? Would a warning issued in the early afternoon of 20 August 1968 of a Soviet invasion of Czechoslovakia have been strategic or tactical?

For the intelligence warning system, there is one simple rule: Its function is strategic, in the true sense of the term. If it cannot issue a warning until minutes before, whatever adjective is attached to that warning, it will have failed in its job. Whatever word is applied to it, warning must be given far enough ahead to permit the policy maker to make some considered decisions and for the military commander to take some essential preparedness measures.

Definitions of Timing

It is a symptom of the difficulty of ascertaining when, as well as whether, the enemy is preparing to attack or to take some other action that so many different phrases are in use to attempt to describe the when of it. Even negative judgments are plagued by this problem: shall we say that hostile action is not imminent, will not occur in the near future, foreseeable future or what? No clear-cut or accepted definitions of any such terms have ever been formally agreed on, and the following are offered only as general guidelines to the usage over the past twenty years or so at the national intelligence level:

Imminent: Used positively (attack is imminent), the term connotes an immediacy and probability of action that brook no delay--from right now to probably a few days at the most. Used negatively (attack is not imminent), a longer time frame is usually implied, perhaps several days to a week; we mean that we don't see this right now, but we would not be surprised to have it happen before long.

Immediate future: A frequently used term, usually in the negative (we do not expect Arab-Israeli hostilities in the immediate future), it has usually been

interpreted to mean about a week, more or less. However, much depends on context or circumstances. If reached in a weekly report, it often is intended to cover the interval until the next report.

Near future: Somewhat longer than immediate future, but of very imprecise duration. Near future can convey anything from a week or a few weeks up to several months, or even can be used to mean foreseeable future. Used in the negative (we conclude that the USSR will not initiate hostilities in the near future), it has long been standard "warning conclusion" terminology.

Soon: Another indefinite term, usually about equivalent to "near future."

Foreseeable future: Also indefinite, but presumably longer than near future, this term really is intended to convey a greater sense of certainty about things, often without regard to time. "We do not expect a change in Chinese hostility toward the US in the foreseeable future" conveys a sense that they are really pretty set in their ways and that we consider that a change is unlikely for some time. If we were less certain, we would select some other phrase conveying more doubt or a shorter time frame. In fact, many conclusions phrased in language of shorter time frame (such as near future) really mean as far ahead as we can see now. We just want to leave some doubts about how far ahead we can see or how certain we are that we know very much. A prudent precaution.

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A HANDBOOK OF WARNING INTELLIGENCE

PART I: WHY WARNING INTELLIGENCE AND WHAT IS IT? SOME FUNDAMENTALS

CHAPTER 3: WHAT WARNING IS, AND IS NOT

CHAPTER 3: WHAT WARNING IS, AND IS NOT

Before we enter into a detailed discussion of the warning process and the analytical techniques involved, it is necessary to dispel some widespread misconceptions about what warning is and is not. We shall look first at --

What It Is Not

a. Warning is not a commodity. It is not something which the analyst, the intelligence community, the policy maker or the nation has or does not have. This frequent misconception is expressed in casual questions such as, "Did we have warning of the Soviet invasion of Czechoslovakia?" Particularly when taken out of context, this misconception has also appeared in high-level official documents. Thus, one of several years ago said, inter alia, "It cannot be concluded that the US surely will, or surely will not, have strategic warning."

Warning is not a fact, a tangible substance, a certainty, or a provable hypothesis. It is not something which the finest collection system should be expected to produce full-blown or something which can be delivered to the policy maker with the statement, "Here it is. We have it now."

Warning is an intangible, an abstraction, a theory, a deduction, a perception, a belief. It is the product of reasoning or of logic, a hypothesis whose validity can be neither confirmed nor refuted until it is too late. Like other ideas, particularly new or complex ideas, it will be perceived with varying degrees of understanding or certitude by each individual, depending on a host of variable factors. Among them may be: his knowledge of the facts behind the hypothesis, his willingness to listen or to try to

understand, his preconceptions of what is a likely course of action by the enemy, his cognizance of that nation's objectives and its military and political doctrine, his knowledge of history or precedent, his objectivity, his imagination, his willingness to take risks, other demands on his time, the attitude of his superior, his confidence in the man who briefs him, his dependence on others, his health, or even what he had for breakfast and whether he quarreled with his wife. These and other factors may influence his receptivity to the idea.

There are times, of course, when the volume of provable evidence, the sheer number of facts pointing to the likelihood of war is so overwhelming and so widely recognized that the conclusion is almost inescapable. This was the situation which prevailed before the outbreak of World War II and particularly in the week immediately preceding it, when the man on the street if he had read the newspapers probably was as qualified to judge that war was imminent as were the heads of state. In such a case, everybody, in the strategic if not the tactical sense, "has warning."

On the other hand, it is readily apparent that virtually no one--and particularly not the people who mattered--"had warning" of the Japanese attack on Pearl Harbor, although the buildup of Japanese military power and Tokyo's aggressive designs in the Pacific were almost as well-recognized as were Hitler's designs in Europe.

No one can say what situation might prevail on the eve of World War III. We can say that in a series of lesser conflicts and crises since World War II warning rarely has been as evident as in September 1939. The odds therefore are that warning will remain an uncertainty in the years to come.

b. Warning is not current intelligence. This opinion will no doubt surprise a lot of people who have come to look on warning as a natural by-product or hand maiden of current analysis. Who is better qualified to detect and report indications of possible impending hostilities than the military and political analysts whose function is to keep on top of each new development and fast-breaking event? Is it not the latest information which we most need to know in order to "have warning"?

The answer to this is both yes and no. It is imperative that the analyst receive promptly and keep track of each new piece of information which may be an indication of hostilities. The analysts who are to produce the intelligence needed for warning cannot afford to fall behind with the incoming flood of paper lest they miss some critically important item. Both the collection and the processing of information must be as current as possible, for we know of instances in which the delay in receipt of information by even a few hours has contributed to serious failures to have drawn the right conclusions.

Nonetheless, the best warning analysis does not flow inevitably or even usually from the most methodical and diligent review of current information. The best warning analysis is the product of a detailed and continuing review in depth of all information going back for weeks and months which may be relevant to the current situation, and of a sound basic understanding of the potential enemy's objectives, doctrines, practices and organization.

The latest information, however necessary it may be to examine it, will often not be the most useful or pertinent to the warning assessment. Or, if it is, it may only

be because it can be related to a piece of information received weeks before, or because it may serve to confirm a hitherto uncertain but vital fragment of intelligence which the analyst has been holding for months. Only in rare instances where events erupt very suddenly (e.g., the Hungarian revolt in 1956) can indications or warning analysis be considered more or less synonymous with current analysis. Most crises have roots going deep into the past, much farther than we usually realize until after they erupt. Preparation for war or possible war often can be traced back for months once it becomes clear that a real threat exists, and pieces of information which appeared questionable, unreliable or even ridiculous when received will suddenly have great relevance to the present situation, provided the analyst has saved them and can fit them into the current pattern. Further, information which is months old when it is received (and therefore scarcely rates as current intelligence) may be immensely valuable. An indication is not useless or invalid because it occurred months ago but you just found out about it today; it may help to demonstrate that the preparations for conflict have been far more extensive and significant than you had believed.

In normal times, the current analyst must cope with a large volume of paper. In times of crisis, he may be overwhelmed, not only with lots more paper but with greatly increased demands from his superiors for briefings, analyses, crash estimates and the like. It is no wonder in these circumstances that he can rarely focus his attention on the information which he received last month or find the time to reexamine a host of half-forgotten items which might be useful to his current assessment. The night duty officer,

who may be the most "current" of all, will likely as not never even have seen many of the items from the preceding months which might be important now.

In addition, it may be noted that the weeks or days immediately preceding the deliberate or "surprise" initiation of hostilities may be marked by fewer indications of such action than was the earlier period. Or, as it is sometimes expressed, "warning ran out for us" ten days or two weeks before the attack occurred. (The reasons for this seeming lull before the storm, and how to cope with it, are discussed in Chapter 28.) Given this circumstance, the strictly current intelligence approach to the problem can be misleading or even dangerous. Since there are not many new indications to report, the current intelligence publication may convey the impression (and the analyst may actually come to believe) that the threat is somehow lessened, when in fact it is being maintained and may be increasing.

It is important to recognize that, in time of approaching crisis when many abnormal developments are likely to be occurring, the current intelligence analysts more than ever will need the assistance of those with detailed expertise in basic military subjects, such as mobilization, unit histories, logistics, doctrine, a variety of technical subjects and other topics. Even such things as the understanding of terminology rarely if ever noted before may be of vital importance. It is a time when current and basic intelligence must be closely integrated lest some significant information be overlooked or incorrectly evaluated.

There is still another difference to be noted between the current intelligence and warning processes, and that is the nature and content of the reporting. Since the primary

function of the current analyst is not to write warning intelligence but to produce good current items, he will necessarily have to omit from his daily reporting a large number of indications or potential indications. There may be a variety of reasons for this, such as: the indications are individually too tenuous or contradictory, some of them are not current, there are just too many to report them all, they don't make a good current story, and a number of them (sometimes the most important) are too classified for the usual current intelligence publication or the analyst is otherwise restricted from using them. Some persons looking into the warning process or attempting to reconstruct what happened in a crisis have initially believed that the best place to look is in current intelligence publications. While there is nothing wrong with this approach to a point, and providing the situation which prevailed at the time is understood, no one should expect to find the whole story or the real story of what was happening in these publications. To pick an extreme example, in the week between the discovery of Soviet strategic missiles in Cuba on 15 October 1962 and President Kennedy's speech announcing their discovery on 22 October, the intelligence community was precluded in all its usual publications from alluding to the discovery at all, and for obvious reasons.

The foregoing are some of the ways in which warning and current analysis and reporting are distinguished from one another--or should be. It is in part for these reasons that it has been deemed prudent and desirable to have indications or warning specialists who, hopefully, will not be burdened or distracted by the competing demands placed on current analysts and will be able to focus their attention solely on potential indications

and their analysis in depth. To accomplish this, these analysts must also recognize the value of basic intelligence and the importance of understanding how the enemy goes about preparing for war. (This aspect of the problem is discussed at length in Part IV.)

c. Warning is not a compilation of "facts." Nor is it a compilation of possible or potential facts or indications, however useful these may be. It is certainly not the intention of this study to downplay in any way the importance of a diligent and imaginative pursuit of indications. They are the foundation on which warning is built. The more hard evidence which is available, the more indications of high validity and significance, the more indisputable facts which can be assembled, the more likely it is--at least in theory--that there will be warning or that we shall come to the right conclusions. It all sounds so simple, until we are confronted with a condition and not a theory. In retrospect, it all looks so clear.

In actuality, the compilation and presentation of facts and indications is only one step in the warning process, occupying somewhat the same place that the presentation of testimony in the courtroom does to the decision of the jury and ruling of the judge. Just as the seemingly most solid cases backed by the most evidence do not necessarily lead to convictions, neither do the most voluminous and best documented lists of indications necessarily lead to warning. On the other hand, a very few facts or indications in some cases have been sufficient to convince enough people, or more importantly the right people, of an impending grave danger of hostilities or other critical actions. Some facts obviously will carry a lot more weight than other facts. The total number of different

facts, or reported or possible facts, will not be as important as the interpretations attached to them. Too many facts or indications may even be suspect--why should it be so obvious? There must be something more (or less) than meets the eye.

A major portion of this treatise is devoted to a discussion of the relationship of facts and indications to warning, so these problems will not be elaborated here. Using the analogy with the courtroom case, however, we may note a number of possible reasons why the mere presentation of facts or evidence or statements of eyewitnesses may not produce a convincing case for the jury or a conviction:

- The statements of the prosecution's key witness are disputed by other witnesses.

- An eyewitness is demonstrated to be of uncertain reliability or an otherwise questionable reporter of the "facts."

- Several other important witnesses have not been located and therefore cannot be interrogated.

- The evidence, although considerable, is largely circumstantial.

- The defendant has a pretty good reputation, particularly in recent years, and has not done such a thing before.

- There appears to be no clear motive for the crime.

- The jury, despite careful screening, has been influenced by prior coverage of the case in the newspapers.

- The judge, a strict constructionist, rules that certain important material is inadmissable as evidence.

d. Warning is not a majority consensus. Both because of the importance of warning and because the process incidentally will usually involve analysts (and their supervisors) in a variety of fields, a large number of people are likely to participate in some aspect of the production of warning intelligence. Insofar as various specialists are called upon to present their expert opinions or knowledge on various problems of fact and interpretation (What is the maximum capacity of this railroad? What is the estimated TO&E of the Soviet tank division?), this is obviously all to the good. The intelligence community and the policy maker need every bit of expert help they can get on such questions. No one would presume to be able to get along without assistance of this type.

It does not necessarily follow, however, that the more people introduced into the warning process the better the judgment is going to be. Experience has shown that a consensus of all the individuals who have contributed something to the analysis of the problem, together with their supervisors, those responsible for making estimates, and others who may have an interest is not more likely to be correct than the judgments of analysts who have had experience with other warning problems and who are on top of all the information which is available in the current situation. Quite often the effect of bringing more people into the judgment process is to dilute the judgment in the interests of compromise and unanimity.

Lamentable as it may be, the fact is that the most nearly correct judgments in crisis situations over a period of years often have been reached by a minority of individuals. This does not usually mean that one agency is right and others are wrong--it is not that political analysts will come to right conclusions and military analysts to

wrong conclusions, or vice versa. What usually happens is that a majority in all agencies is wrong--or at least not right. Thus the situation is not taken care of by the usual device of a dissenting agency footnote, since it will be a minority in each agency (not a majority in one) which will be in dissent.

Obviously, no one should say that because this situation has prevailed in so many cases from Pearl Harbor to the invasion of Czechoslovakia that it will always be so. (It is the hope that this treatise in some small measure will help to remedy this and bring more persons in the intelligence community to an understanding of the nature of the warning process and the problems of analysis and interpretation which must be faced.) It is important, however, that those involved (and particularly policy makers) understand that this has been the case in the past and that it is enormously important to the warning process that the views of the qualified and experienced minority be given an adequate hearing.

What Warning Is

a. Warning is an exhaustive research effort. Although, as we have noted, warning will not flow simply or inevitably from a compilation of facts and indications, it is also imperative to the process that the facts, potential or possible facts, and other indications be most diligently and meticulously compiled and analyzed. It is impossible to overemphasize the importance of exhaustive research for warning. It is the history of every great warning crisis that the post-mortems have turned up numerous, sometimes dozens, of relevant facts or pieces of information which were available but which, for one reason or another, were not considered in making assessments at the time. This is apart from the information in nearly every crisis which arrives just a little too late and

which in some cases could have been available in time provided the substantive analysts, their supervisors, or their counterparts in the collection system had recognized a little earlier the importance of following up certain facts or leads. (See Chapter 4, Warning and Collection.)

All those associated with the warning business in any way--from the lowest ranking analyst to the policy maker-- should beware first and foremost of the individual who is reaching his judgments on a likely course of enemy action based on something less than the most detailed review of the available evidence which may be directly or indirectly related. While this advice may seem so elementary that it may be taken for granted, the fact is that it cannot be taken for granted in crisis situations. In actuality, experience has shown that a large number of individuals--and often including those whose judgments or statements will carry the most weight--are rendering opinions in critical situations either in ignorance of important facts or without recognizing the relevance or significance of certain information which they may know. Indications and current analysts have been simply appalled, usually after a crisis has broken, to discover how many persons only slightly higher in the intelligence hierarchy were totally unaware of some of the most critical information from a warning standpoint. And warning analysts have been almost equally chagrined and remorseful to look back at the information which they themselves had available or could have obtained but which they just did not make use of or fit into the picture correctly.

How does this happen? How can it be that the great machinery of US intelligence, which is capable of spectacular collection and comprehensive analysis on many

subjects, can fail to deal with all the facts or to carry out the necessary research in a warning situation? The answers to this are complex and some of the factors which contribute to this problem are dealt with at length in succeeding chapters. We will therefore note here only two of the more obvious difficulties which arise and which may impede the research effort and the surfacing of all the relevant facts:

- The intelligence research system is set up primarily to analyze certain types of information which have recognized status as intelligence "disciplines" and on which there is a more or less continuing flow of material--order of battle, economic production, weapons developments, foreign policy to name a few. In crisis situations, great volumes of new material, some of it of a nature not usually received, may suddenly be poured into the system. In order to cope with this, agencies often set up special task forces, analysts put in a great deal of overtime, and various other measures may be taken in an attempt to cover everything. Even so, it is very difficult in such circumstances to insure that items are not overlooked, even when their relevance or significance is readily recognized, and when their significance is obscure or debatable it is not surprising that they may be set aside. No one who has not worked with a developing crisis involving extraordinary military and political developments being reported by a geared-up collection system has any conception of the sheer volume of material which pours in. A ten-fold increase in items which the analyst should do something with, that might be important, is by no means unusual. Analysts, often close to exhaustion, may recall items of weeks back which they know are related to their current work, they may be acutely aware that there is research which needs urgently to be done, and papers which

should be written, but they literally cannot find the time or energy to do it. Even worse, perhaps, the analyst is so pressed that he does not have the time to contact or even learn of the existence of others who might have some additional information or who might already have done some research which would assist him. When it is most needed, communication may break down for sheer lack of time.

- Even more insidious may be the less obvious impending crisis, where the inter-relationship of developments is not readily apparent, and particularly where two or more major geographic areas may be involved. In such cases, the difficulties of conducting needed research are greatly compounded by the fact that items from two different areas--particularly if they seem relatively obscure or questionable at the time--may not be brought together at all. Their inter-relationship is not detected until well along in the crisis, if at all, and only retrospective analyses bring together great amounts of relevant information, the significance of which was not appreciated when it was received.

The foregoing generalities are well demonstrated in two major crises of recent years, the Soviet invasion of Czechoslovakia in 1968 and the Cuban missile crisis in 1962. In the Czechoslovak situation, the intelligence community had a tremendous wealth of information, much of it of high reliability and validity, on both the political and military developments which led up to the invasion. Yet a number of important pieces of information which were extremely relevant to assessing Soviet intentions apparently were never reported to the higher officials of the intelligence community, let alone the policy maker. One reason for this (although fundamental errors in judgment were probably a more important reason) was the sheer volume of material which was received. It was impossible

to report everything, and in the selection process some critical indications did not make the grade.

In the Cuban missile crisis, on the other hand, the intelligence community was confronted with a series of anomalies in Soviet behavior beginning in early 1962 which raised tantalizing questions in the minds of perceptive analysts but whose relationship to Cuba was only to become apparent months later. Up almost to the time that the strategic missiles were finally detected in Cuba, two separate groups of analysts (a Soviet-Berlin group and a Latin American group) were conducting largely independent analysis, which for the most part failed to recognize that the apparent Soviet expectation of a settlement of the Berlin problem that year might in some way be related to forthcoming developments in Cuba. Thus much of the basic research which might have connected these developments was not done until after the resolution of the crisis. Only in retrospect was it apparent that the extraordinary raising of combat readiness of Soviet forces in September probably was timed with the arrival of the first strategic missiles in Cuba. And much of the research on the likely areas and possible nature of Soviet military activity in Cuba was done on a crash basis in the week between the discovery of the missiles and the President's announcement of their discovery.

It is impossible, in a brief discussion such as this, to give adequate stress to (let alone examples of) the importance of research to the warning process. There are many reasons why warning fails, or is inadequate, and it would be unfair to single out the failure by analysts to initiate and produce the requisite research as the major cause. In many cases, it may not be the analyst but rather his superior or the system itself which is

primarily at fault. Nonetheless, whatever the basic causes or extenuating circumstances, insufficient research or the failure to have brought together into a meaningful and coherent pattern all the relevant intelligence must rate as a major cause of inadequate warning. The indications analyst, and others associated with the warning procedure, should never take it for granted that others know all the information available or have truly understood the facts and their implications. For the chances are that most people have not.

The greatest single justification for the existence of separate indications offices or the employment of warning analysts is that they are devoting their full time to research in depth without the distraction of having to fulfill a number of other duties. The warning analyst should never lose sight of the fact that this is his raison d'etre. It is difficult enough to come to a sound warning judgment when all the facts have been considered; it may be impossible without it.

b. Warning is an assessment of probabilities. As we have noted above, it is a rare instance in which impending hostilities will be so evident, or the intentions of the aggressor so unmistakable, that warning is a virtual certainty--or that everyone "has warning." It is likely that there will be some degree of uncertainty concerning the plans or intentions of the enemy even when a great amount of information is available and the collection effort has functioned extremely well. Where the amount of information is scanty, where the validity or interpretation of important data may be in question, or where there are significant delays in the receipt of material, the uncertainty normally will be considerably increased--or at worst, there may be insufficient factual data even to raise serious questions whether some aggressive action may be planned.

Although the foregoing is probably generally accepted in theory--and papers on the warning problem have repeatedly cautioned intelligence officials and policy makers alike not to expect certainty in warning--there is often a tendency to forget this important point when the live warning situation arises. Particularly because it is so important to make the right decision or right response in the face of threatened aggression, the military commander or policy level official more than ever wishes a judgment of certainty from the intelligence system--yes, the enemy is, or no, he is not planning to attack. The official on the one hand may press the intelligence system to come to a positive judgment despite the inherent uncertainties in the situation, or he may on the other demand a degree of "proof" which is absolutely unobtainable.

Now it is, of course, impossible to prove in advance that something is going to happen, when that something is dependent on the decisions and actions of people rather than the laws of nature. It could not have been "proved" in the last week of August 1939 that war was imminent in Europe, even though everyone recognized this to be so, but it could be described as a very high probability, or near certainty.

In contrast, what was the probability that the Japanese would attack Pearl Harbor, that North Korea would attack South Korea in June 1950, that the East Germans would close the Berlin sector borders (and subsequently erect the Berlin wall) in August 1961? The probability of course was actually very high; it was just that we did not know this. History shows that these occurrences in effect were considered by us to be relatively low probabilities at the time--that is, as evidenced by the lack of preparation against these contingencies, neither the intelligence system nor the policy makers considered it very likely that these would occur. We were "surprised," and, at least in the first

instance, disastrously so. Yet, in retrospect, it can be demonstrated at least to the satisfaction of some that none of these events was all that improbable; they were at least good possibilities, or contingencies which should have been given more consideration than they were.

In Chapter 36 we discuss in more detail some of the factors in assessing probabilities, and in Chapter 5 there is a discussion of the related problem of intentions versus capabilities. We will suggest here only certain guidelines for this important problem:

- In any potential warning or crisis situation, it is desirable, if not essential, that the intelligence system attempt to come to as realistic an assessment as possible of the probabilities of hostile action.

- Not only is the end assessment of value but the mere exercise of attempting to judge probabilities will bring out many useful facts, possibilities, precedents and viewpoints which might otherwise be ignored or overlooked.

- A knowledge of history, precedent and doctrine is extremely useful in assessing probabilities; and the citing of such precedents not only may bolster a case but also may tend to make the timid more willing to come to positive judgments. (If it can be stated that the military doctrine and practice of the nation in question calls for a 3-to-1 ratio of forces for attack and that it has just accomplished such a buildup, this will reinforce a judgment of probability of attack which might not otherwise be reached.)

- It is very important in reaching judgments to recognize the limits of our knowledge and collection capabilities and not to expect the impossible. Our capabilities to assess the likelihood of a Soviet move in Europe, for example, are better than against China, by virtue of better and much more expeditious collection. Our understanding

of what goes on in Tibet or North Korea is minimal. Assessments of probabilities of action in these various areas must take this into account and be worded accordingly.

- Policy makers must recognize that warning cannot be issued with absolute certainty, even under the best of circumstances, but will always be an assessment of probabilities. They must realize that they will usually have to accept judgments which are less firm, or based on less hard evidence, than they would wish, but that such types of assessments should be encouraged rather than discouraged.

c. Warning is a judgment for the policy maker. It is an axiom of warning that warning does not exist until it has been conveyed to the policy maker, and that he must know that he has been warned. Warning which exists only in the mind of the analyst is useless. He must find the means to convey what he believes to those who need to know it.

From the policy level, it is this factor probably more than any other which distinguishes warning intelligence from all other intelligence. The policy maker can and does get along without a vast amount of information which is compiled by the intelligence community. Some officials more than others will be receptive to intelligence information and will seek to learn details on such subjects as order of battle, weapons, internal political developments, economic plans and so forth. By and large, considering their numerous responsibilities, most policy officials are surprisingly well informed on the details of many subjects. For the most part, however, that which they are shown will be fairly carefully screened and condensed to the essentials which they most need to know, unless there is some particularly critical subject of national priority. They can

function quite adequately most of the time even if they do not know much about the capabilities of the Chinese infantry division, the organization of the Soviet rear services, or the Polish airborne troops. It has been observed that a great deal of the effort of the intelligence community in recent years is essentially inhouse and consists in exchanging information with or preparing briefings for other intelligence personnel rather than higher officials.

Not so in the event of an impending crisis which may involve the security interests of the country or our allies or which could entail a commitment of US forces. It is essential that the possibility of such a development be clearly, and often repeatedly, brought to the attention of the policy official as the situation develops and that he be left in no doubt as to the potential gravity of the situation or what it might entail for national policy. In these circumstances, more rather than fewer facts, specific rather than generalized assessments, clear and realistic descriptions of the various alternatives rather than vague possibilities, and firm and unequivocal statements of the enemy's capabilities and possible or probable intentions are required.

Intelligence writers and briefers must remember that policy officials are very busy, and that assessments which carry no clear or explicit warning of what the enemy is likely to do may fail altogether to convey what the writer intended. Assessments which state that the enemy can do such-and-such, if he chooses or decides to do so, can convey a sense of uncertainty or even reassurance that no decisions have yet been reached, when in fact the bulk of evidence is that the enemy probably has already decided to do it. Phrases suggesting ominous possibilities which are buried in the texts of long factual

discussions do not provide much warning to the policy maker who may have had time only to read the first paragraph. It is not unusual for an agency seeking to demonstrate in retrospect what a fine job of reporting it did on some subject to cull such phrases from its publications for a period of weeks. Taken in isolation or out of context, they may indeed present an ominous picture, but their impact will have been lost unless they were singled out and repeatedly emphasized at the time so that policy officials could not have failed to get the message.

A distinguished supervisor in the field of political intelligence observed many years ago that, no matter what went wrong, it was always the fault of intelligence. When disaster struck, you might remind the policy official that he had been warned of the possibility or that it had been mentioned this might happen in several briefings in the past month. And he would reply, "Well, you did not say it often enough, or loud enough."

Where warning is concerned, intelligence must be sure that it is saying it often enough and loud enough. It cannot assume that, because it issued a qualified warning last week, it is unnecessary to repeat it this week. Warning has failed more than once simply because what the analysts really thought, and were saying to one another, never was put into print. Or, if it was, it was so caveated in "coordination" or by a series of editors that what the analyst meant to convey was lost. When military action is threatened, it is no time to mince words. If the policy maker has not gotten the message, it is quite likely not his fault but that it was never made clear in the first place.

✓d. Warning is a conviction which results in action. We will assume now that the intelligence system has performed commendably--it has collected the data, it has done the exhaustive research required, it has come to a judgment that a military attack is probable, and it has conveyed this judgment to the policy maker in both its estimative and warning publications. And what is the purpose of all this? The purpose is to enable the policy maker to make the best possible decisions in the light of the facts and judgments sent to him, and if needed to take military and political actions to counter the threatened attack. If he is not convinced, or for some reason cannot or does not take the necessary action, the intelligence effort will have been in vain. Troops caught in an offensive which was predicted by intelligence but ignored by the commander are just as dead as if the warning had never been issued. In these circumstances, no matter how brilliant the intelligence performance, the nation will have failed if no action has been taken. For this is the ultimate function of warning.

It would be rare, although perhaps not unheard of, that intelligence might issue an unequivocal warning which would go totally unheeded by the commander or policy official. A more likely circumstance is that the warning was not explicit or clear enough (see preceding sections) or that there was a serious misjudgment of either the timing, location or nature of the attack, a matter which will be discussed in later chapters. In any case, assuming action could have been taken to avert disaster and was not, there has been a combined failure of intelligence and command or policy.

A more frequent situation in recent years has been that the policy maker--perhaps because he is dissatisfied with or distrustful of the now impersonal machinery of intelligence,

or perhaps only from intellectual curiosity and because he wants to know more first-hand--makes his own intelligence. This may have its advantages, in that it is immediately responsive to policy needs, although it is clear that there could also be dangers in this. It does appear that actions have been taken at the policy level to which intelligence contributed little directly, or that policy makers have run ahead of the formal processes of intelligence in taking action to forestall possible threatened actions of enemy or potentially hostile states.

Now, not all threatened military actions are a potential threat to US security interests. Neither the Soviet suppression of the Hungarian revolt in 1956 nor the invasion of Czechoslovakia in 1968 posed any military threat to the US or NATO, and no military actions were required or even desirable on our part. Politically, however, it would have been nice to have had a little wider understanding of the likelihood of these actions, particularly the invasion of Czechoslovakia, which caused a fair amount of concern in NATO.

Regardless of how intelligence and policy function in relation to one another, or how dependent or independent the policy level may be, the important thing in the end is that appropriate action is taken, when needed, to protect the interests of national security and the security of our allies. Without this, the warning system will have failed no matter how brilliant the collection and analytical effort may have been.

Illustration of the Foregoing Principles

Some of the foregoing principles may be illustrated by the Chinese intervention in Korea in October-November 1950, an event which remains a classic example of the nature of the warning problem.*

The writer has talked with officers who were in Korea in the fateful month of November and with analysts who have researched the records of US front-line units. Their usual statement is, "Why of course we had warning. Our forces were in contact with the Chinese. We had prisoners. We had identified the units." And this is true.

The military analyst will look back at the voluminous reporting on the buildup of Chinese forces in Manchuria and on the numerous reports and indications of preparations for war throughout the Chinese mainland. He will recognize that intelligence was slow in accepting the buildup and that the total Chinese strength was underestimated, but that nonetheless a substantial buildup was accepted both in Washington and by General MacArthur's headquarters. And he will say, "Of course we had military warning."

The political analyst will recall that the Chinese summoned the Indian Ambassador in Peking on 3 October and told him that Chinese forces would enter Korea if UN forces crossed the 38th Parallel. He will look at the sharp change in the Chinese Communist and international Communist propaganda line in early November to an all-out support of the North Korean cause. And he will say, "What more political warning could we have expected?"

* Chinese Communist forces were first contacted in Korea on about 26 October. They launched their massive offensive on 27 November.

The warning analyst will note that President Truman and General Mac Arthur at their meeting on Wake Island on 15 October both brought incorrect assessments--i.e. that Chinese intervention in Korea was unlikely. But the analyst also will reexamine the judgment reached on 15 November by the inter-agency intelligence committee then responsible for reaching an assessment of enemy intentions. And he will conclude that the judgment reached by that time (or 10 days before the Chinese onslaught) did provide substantial warning of the likelihood of major Chinese intervention--a warning perhaps not as clear or loud or unequivocal as it might have been but still a substantial warning. He will ask, "What happened to this? Who read it? Who believed it? Was most of the intelligence community in accord with this judgment? Were the Joint Chiefs of Staff and the President convinced?" And no one, then or now, will really be able to say who read it, how many believed it, or what weight it carried. But they will concur that "a warning" at least was issued.

Why then, is the Chinese intervention in Korea universally regarded as a great intelligence failure which contributed to a near military disaster? It is because no action was taken on any of this intelligence or judgments, because no orders were issued to halt the precipitate advance of US and Allied forces toward the Yalu, because no measures were initiated to prepare military defenses against even the possibility of a major Chinese onslaught. It did not matter, it must be emphasized, how much intelligence was available or who issued a warning judgment unless it resulted in such positive action. A single staff officer, if his warning had carried conviction at the right time and to the right person (in this case, to General Mac Arthur), could have significantly changed the course of events regardless of any other judgments which might have been made by the intelligence community in Washington.

A HANDBOOK OF WARNING INTELLIGENCE

PART I: WHY WARNING INTELLIGENCE AND WHAT IS IT? SOME FUNDAMENTALS

CHAPTER 4: WARNING AND COLLECTION

CHAPTER 4: WARNING AND COLLECTION

It would have been possible to add another section to the preceding chapter under "What warning is not," entitled "Warning is not collection." While true in part or in many cases, this would nonetheless have been an inadequate treatment of so vital a topic. For warning, of course, is most heavily dependent on collection, and indeed so much so that the tendency to regard them as more or less synonymous is understandable.

If collection could function ideally--with total access not only to the enemy's military dispositions and preparations but also to the political decision-making process--warning would be virtually synonymous with collection. Assuming that there were no danger of losing these collection assets, a large part of the rest of the intelligence system also could be dispensed with. If we can obtain a copy of the order of battle with details on equipment and training and supplies, most of the research effort which goes into these topics is of course unnecessary. If we could be sure of obtaining on a timely basis a transcript of cabinet or politburo meetings or copies of high-level political documents and military orders, then clearly much of the effort to deduce the nature of these from second-hand sources or agents would be superfluous. The reason why we devote so little intelligence research effort to the military forces and political activities of our allies is not just that they pose no threat to us (or at least not usually), but because we normally have fairly ready access to most of the information which we need. We may be occasionally stunned that we do not (as in the British participation in the invasion of Egypt in 1956) but ordinarily this is not a major problem.

To state the obvious, it is the effort of our enemies and potential enemies to conceal from us so much of their military activity and political decisions that makes most of the collection effort necessary in the first place. And it is because this collection is imperfect that the warning effort requires more than collection and is also a sophisticated--and inexact--analytical and reporting process.

It has been interesting to note the differing philosophical approaches to this question over a period of years. From time to time, the intelligence community has been asked to prepare analyses of our "warning capabilities"--either in the form of national estimates of our ability to provide warning of attack by the USSR or some other Communist nation, or as special studies. Some persons approaching this problem have tended to look on the question almost exclusively as a collection matter. Some studies have been addressed almost entirely to what various collection methods or systems can tell us about military or political happenings, say in Communist China, and have largely ignored the question of what the intelligence analyst and policy maker do with this information after they receive it. Such studies hopefully may give us a fair appreciation of how long it might take to find out that major troop deployments were under way toward the Taiwan Strait, or how much (or more likely, how little) access we may have to the political decision-making machinery in Peking. But they do not really come to grips with the question of what warning we might actually be likely to give that a decision had been made to take military action, or what the scope and objective of that action might be. These studies thus usually tend to convey a considerably over-simplified picture of the warning problem, and would better be described as estimates of our collection capabilities rather than our warning capabilities.

On the other hand, some persons approaching this problem have virtually ignored our collection capabilities (on the grounds in part that these may be so fluctuating and unpredictable) and have avoided coming to any kind of assessments of our warning capabilities in a specific circumstance. Such studies approach the problem almost entirely from the philosophical standpoint of the analytical problems involved, the difficulties of determining intentions, and the uncertainties which plague the warning problem from beginning to end. One group working on a major warning study on the USSR a few years ago declined, by almost unanimous vote, to address the question of how much warning the intelligence community could give the policy maker of a Soviet attack in Europe. Not only that, it declined to deal even with how much warning we could give that a major Soviet reinforcement of Eastern Europe was under way--without regard to whether or not it was intended for attack against NATO. In another high-level study, it was concluded that it would be "impossible" in the event of Warsaw Pact mobilization to determine whether the action was defensive, an attempt to coerce, or evidence of a firm decision to attack. This assessment was not made contingent in any way on what our collection capabilities might be.

Now, in the view of the experienced warning analyst, a reasonable position lies somewhere between these two extremes. Our potential ability to give warning of hostile action is very dependent on our collection capabilities against the nation or area concerned, but it will be rare indeed that our collection in and of itself will provide us unambiguous or unequivocal warning.

Even a cursory look around the world should convince almost anyone that the likelihood of our issuing timely and reasonably accurate warning should be much better in some areas than in others in large part because our collection is so much better and so much more timely. We have a much better chance of forecasting Communist action in Laos than in Tibet, or in Eastern Europe than along the border between Mongolia and Communist China. And this is almost exclusively the result of far better collection. Nonetheless, it is also true that superior collection and large quantities of high-grade information are no guarantee that firm warning will be issued, as witness the invasion of Czechoslovakia. As we have said above, warning is not a compilation of facts.

Collection Factors Most Critical for Warning

What collection assets, or qualities in collection, are most valuable for warning? What is it that the collection system can contribute which will be most useful in coming to a warning judgment? Without entering into a discussion of specific collection systems and their relative merits and drawbacks, which could be the subject of separate volumes, we may note certain general characteristics of collection which are most valuable for the analyst in a crisis or warning situation.

a. Dependability of source and evaluation. Nothing is more frustrating, misleading or time-consuming for the analyst than to receive large numbers of reports from unidentified sources of unknown reliability or unspecified access to the information they purport to know, which are received from the collector without any evaluation or comment which can assist the analyst in making any kind of assessment of the data. Regrettably, crises or potential crises tend to generate this type of reporting, for at least

three different reasons. First, the collection system itself is usually geared up, so that more sources are sought whose knowledgeability or reliability is uncertain or cannot yet be determined. Secondly, the knowledge of a crisis in itself will generate a lot of "volunteer" reporting, which may range from very good to totally undependable, including some which may be the product of "paper mills" whose sole reason for existence is to fabricate reports for money. And third, the enemy's intelligence and security services for reasons of their own may be engaged in planting reports.

It is more than ever important, in such circumstances, that the collection system be evaluating as precisely as is possible the knowledgeability and dependability of its sources and transmitting some assessment of how the information was acquired and what is known about the source to the analyst. Cryptic identifications of sources by code numbers which mean nothing to the analyst, and evaluations such as F-3 with no explanation at all of where the information came from, are almost useless. Further, such insufficient sourcing or evaluation compounds the always present danger of seeming "confirmation" of information by ostensibly independent sources which are in fact the same.

At the other extreme may be the highly reliable information, from sources of proven access and dependability, which would normally be compartmented or restricted but which is released in normal channels in time of crisis because of its great value. It is lamentable but true that the collector has sometimes been known to run this risk of potential compromise of his source and yet the analyst who received the information did not know how reliable it really was, and failed to accord it the value it deserved.

In time of impending crisis, more rather than less communication is needed between the collector and the recipient, so that valuable time and energy will not be wasted in pursuing false leads, duplicate reports, or highly questionable information. Some of the restrictions which are often placed on identification of sources, particularly those not necessary for security, need to be relaxed.

Where there is reason to believe that information is being deliberately fabricated or planted, the collector will have a particular responsibility to distinguish that which is from a probable "paper mill" (this will often come through a third party), and that which appears to have originated with the enemy's intelligence services. If it can be established with reasonable certainty that someone is fabricating reports purely for monetary gain, then hopefully he will be cut out of the system. If the enemy is fabricating information for purposes of confusion or deception, on the other hand, it is very important that the analytical level recognize where the material is coming from and what its purpose may be.

Probably the greatest progress in intelligence since World War II has been in the sophistication of the collection system. And this applies not only to great technical breakthroughs in collection, such as in photography, which today provide so much valuable and irreplaceable information. The collectors also have made great progress in weeding out the junk which formerly so plagued and confused the analysts. In the summer of 1950, the system was literally flooded with fabricated or otherwise false reports concerning Chinese Communist plans and intentions, to the great detriment of the analysis of the reliable information which was available. It is likely that well over half the analysts' time that summer was spent in reading, "analyzing," and reporting this trash. Not only

has the collection system long since fired most of these sources, it also now usually provides the analyst with a far better description of the source and its dependability than was true twenty years ago.

b. Value of direct access or observation. There is nothing like a live warning crisis to convince the analyst of the value of first-hand observations or access by reliable sources who are under our control and preferably who can be asked for further coverage and details. No amount of reporting from other sources--such as agents or informants, third nations no matter how reliable, the press and other open sources--can take the place of the collection method which provides for such direct access. There are three general types of sources which may provide such access or observation: military attache and other diplomatic personnel accredited to the country in question; intercepted communications or acquisition by other means of military and political documents, decisions or orders; and photography.

The value of such sources has been universally recognized, and it should not be necessary to belabor the point. Thorough coverage of an area of known or suspected military buildup by a qualified military attache will likely be more valuable than a dozen second-hand reports from sources of lesser competence even if they are known to be reliable. One photograph usually is worth a thousand words. The acquisition of valid military messages, documents and orders, etc. is absolutely invaluable. It is from this type of dependable information that the analyst can have some confidence that he is coming to a reasonable judgment of military capabilities and plans, and in some cases such collection may also provide him quite explicit insight into political attitudes and decisions.

The only reason for stressing this rather obvious point is that it is sometimes forgotten by those who should know better. Somewhat sensational reports from sources of uncertain reliability or who may have axes to grind often receive attention out of all proportion to their probable validity. Because such reports also are often short and relatively simple, they may receive rather wide electrical distribution and attract the attention of high-level officials. Meanwhile, other less "interesting" but much more useful and dependable data may receive relatively scant attention. Attaches often have been surprised, not to say chagrined, that their first-hand observations did not receive more credence back home, and that low-level reports which they considered demonstrably false had attracted so much attention.

One cardinal principle which both the collector and the analyst may do well to keep in mind is that good sources and good data reinforce one another. Provided reasonable access is available (and this is an important proviso), it will nearly always be found that a significant development, and particularly any major military preparations or movements, will be reported by more than one source and that they will be in essential if not detailed agreement. The difference in the quantity and quality of information when something really begins to happen, as opposed to the nebulous uncertainties which surround unconfirmed rumors, is often most impressive. The pieces will begin to fit together, and it is not unlikely that dozens of items of corroborative intelligence will be received--if not all at once, over a period of time. It is the measure of good collection that this is so, and it is one measure of a good analyst that he can distinguish fact or probable fact from fiction.

It is when this type of direct access or observation is not available or is limited or delayed that the greatest collection and analytical problems are likely to occur. In these circumstances, the analyst may be forced to fall back on second-hand reporting of uncertain reliability, or on information from other sources which is potentially good but inadequate. One mark of a possible impending military move of course is that the enemy will normally tighten up security measures, so that those first-hand observations by trained military observers may be denied us. Cut off from the kind of evidence he would like to have, the analyst may have to come to conclusions on less satisfactory information, and will have to qualify his judgments accordingly. It is important in this case that he also convey to higher officials the inadequacy of his facts or the deficiencies in the collection which may make him so uncertain.

It is not unlikely, even in these circumstances, however, that there will be a number of relatively low-grade reports which are mutually supporting. Although individually they may be of uncertain dependability, their sheer volume may often give them credibility. Experience has shown, for example, that persistent reports from local citizens or other sources of troop movements through a given area are likely to have some substance even if details of the size and type of forces are conflicting or exaggerated.

c. Specificity of detail. In addition to high quality first-hand access, or as a concomitant of it, the analyst confronted with a potential warning crisis will wish an abundance of specific detail. Exact counts of vehicles in convoys, careful descriptions of various items of equipment (if the observer is highly qualified, he will also

usually know their exact names and models), explicit details on aircraft or naval units, precise analyses of rail traffic, these and dozens of other military details may be the determining factor in whether the analyst can make a good judgment as to the scale and type of military activity under way. Such details, always sought by order of battle analysts, may be even more essential in a period of military buildup when there may be so little time to recheck the information. In late July 1968, when the USSR began a major deployment of forces into Poland for the subsequent invasion of Czechoslovakia, a number of US and other friendly tourists observed the movements and promptly reported them to the US Embassy--but in such inadequate detail that it was really impossible to judge how much was combat troop movement as opposed to logistic movement, and how many units might actually be involved. This, of course, is not a criticism of the tourists who were not trained for this and went out of their way to report the movements at all. It is simply an illustration of how essential detail is for military analysts, and of the obligation of the collector to do everything possible to report such details in a period of military buildup.

The ability of a source to report details and the right details accurately quite often will be a measure of whether he is to be trusted at all, as well as of his powers of observation. This has long been a recognized precept for evaluating defectors. The bona fide defector from a Communist state, particularly an enlisted man, normally will have a detailed knowledge only of his own unit (but should have that), and perhaps a limited knowledge through friends or other observations of some other units. More extensive knowledge, especially of purported military plans, will normally make him

suspect, unless he is a high enough ranking officer that he could reasonably be expected to have that kind of access.

This same principle may often be applicable to a covert source. The number of people in a Communist state or other dictatorship who will have access to unannounced political decisions or military plans is very small indeed. Any source who claims this sort of knowledge without some proof of such access is highly suspect, and it will quite likely be found that he also lacks knowledge of a great many details about people, places and terminology which he should know if he had that kind of access. During the Korean war, an emergency meeting was held at the request of the White House to evaluate a report from a source who purported to have knowledge of a planned Communist attack on Japan. Apart from the unlikelihood that he would have had access to such plans, it developed that he had submitted an earlier report of a purported "order" of an alleged Soviet military headquarters in Manchuria which was so patently false and inconsistent with Soviet military terminology that his credibility could be demolished forthwith.

This attention to detail by both collector and recipient of the report is vital. A crisis is a time to cut down on repetitious Sitreps relaying the same information back and forth, and to concentrate instead on providing all the available details the first time which the analyst will need to know.

d. Timeliness. The despair of the indications analyst is the information which comes in just a little too late, quite often just hours after the military action has been initiated. Sometimes this information was highly critical and, if received in time, might indeed have permitted a judgment that military action was likely

or imminent. Other times, it just seems this way, since in retrospect of course the relevance of particular pieces of information becomes extremely clear. Other information which comes in late but which is wrong or inconclusive tends to be forgotten, but oh, those items that were right. Why didn't we have them sooner? Investigations of intelligence "failures" often have centered on such delays and on tardy items which may suddenly have assumed an importance far in excess of that which would have been assigned them if they had been received earlier. Like the prodigal son, this one is more important than those which were always in the fold.

Setting this human problem aside, however, there is no question that the timeliness of collection and promptness of reporting may be a decisive factor in warning, and in some cases the difference between success and failure, or between victory and defeat. This applies in particular to the crucial piece of evidence, or virtual "proof" that enemy forces are indeed embarked on a course of aggression or are preparing for imminent attack.

Now, it is not often that a single piece or act of collection, planned or fortuitous, can make this much difference, but it can happen. In such a case, the right collection, and at the right time, can literally change the course of history.

The most conspicuous example which comes to mind is Pearl Harbor. Regardless of any other failures of assessment or of planning, military or political, a single act of collection could have saved the US Fleet. This would have been a continuing reconnaissance effort, by carrier-based aircraft and from the Hawaiian Islands, to locate the Japanese Fleet, which had been missing for days. It is hard to conceive that the detection of the Japanese task force approaching Hawaii would not have led at least to the dispersion of

the US Fleet from Pearl Harbor, and it quite likely would have significantly altered the course of the war.

An earlier collection "break" in the Cuban missile crisis also might have substantially altered the course of that confrontation. This has sometimes been cited as the only case in history in which a single photograph provided the ultimate proof of the enemy's plans, and which moreover was the only kind of evidence of those plans which would be totally acceptable or convincing. It is quite likely true that no amount of circumstantial evidence or seemingly reliable reports of Soviet plans could have been used as proof for presentation to the United Nations and that this photographic confirmation was essential to a good "legal" position for the imposition of a blockade, or "quarantine," by the US. But some earlier evidence that the Soviet Union was preparing to move missiles to Cuba, which in theory at least might have been obtainable, could--again in theory--have led to earlier and stronger US warnings and actions which might have forestalled the actual delivery and emplacement of the missiles. Who can say what might have happened if by some happenstance a Soviet ship en route to Cuba with strategic missiles had run aground in the Turkish Straits and its cargo revealed?

One does not have to cite such dramatic examples, however, to demonstrate that timeliness of collection may be vital for warning. This may be true both at the strategic level (in forecasting that attack is likely at all) and at the tactical level (in anticipating the likely timing and area of the attack).

The Management of Collection in Potential Crises

Several useful precepts for collectors (and recipients of their product) in potential crisis situations should have become apparent from the preceding discussion. There are other considerations as well, however, and it may therefore be useful here to point out some of the more important steps in insuring that the best possible collection effort is brought into play and that the results are promptly disseminated:

- It is important that the machinery exist for a close coordination between the collector and the analysts, to insure that the right questions are really being sent to the field and that the collectors understand the priorities, as the analysts see them. Longstanding EEI's and routine collection requests must be set aside, if necessary, for emergency collection. Priority requests must not be delayed by excessive requirements for coordination, or "validation" of the necessity for this collection. This is the time to cut red tape, not add to it.

- As noted above, a potential crisis should call for more specific and detailed evaluations of sources, and the dispatch of this information with the information report itself, not separately. If the analysts have to send a further query about the source, which can well lead to a 48-hour or more delay in receipt of the reply, it could be too late or the two pieces of information may never be brought together.

- It is highly desirable also that the collector and the users of his information meet and have some chance to talk with one another. It may be particularly useful that the managers of covert sources be permitted to provide some better understanding (with appropriate security safeguards) to the researchers of just what they can

collect and how dependable their sources are, or are not. Such contacts can also readily clear up questions such as whether the source can or cannot be contacted for further information, and how long it might take to receive it, etc.

- Inter-agency coordination of collection requests is extremely desirable in potential crisis situations, and indeed may be indispensable. It is curious that, despite the great amount of inter-agency coordination which exists at the research and reporting levels of intelligence, there is often very little effort made to insure that specific collection requirements are being dispatched to the field by some agency, or by the agency best qualified to obtain the data. On the one hand, a fairly simple collection requirement may never be dispatched at all. On the other, there may be needless duplication of effort, or the waste of valuable covert sources on something which could be readily obtained rather openly. It has been found very useful for inter-agency committees and working groups responsible for substantive warning also to have a voice in the collection process. In the process of reviewing indications in detail, collection gaps often become readily apparent. The various agency representatives at a watch meeting often can rapidly agree among themselves as to who should undertake to dispatch certain collection requirements. Such meetings also provide an excellent forum for indications analysts to propose specific collection requests for inter-agency consideration--often with very useful results.

- To insure prompt and timely reporting and in sufficient detail, the most essential factor often may be that the field collector realize how crucial his

information and its timeliness may be. If the intelligence system--and particularly in this case its field collectors--has not been sufficiently alerted to the danger or likelihood of some impending critical action, vital information may fail to be reported in time. The state of alert of the intelligence system itself is a very important factor in warning--both at the analytical and collection levels. (This subject is further discussed in Chapter 37.)

To Alert Collection Could Avert Disaster

For the intelligence system to come to any unusual state of alert, it must first have reason to do so--and that reason will often be that it has collected something unusual. And for the collection system to obtain that which is unusual, it must sometimes have been alerted to do something unusual. If the failure to undertake the right collection and at the right time can lead directly to disaster, so may the initiation of the right collection at the right time help avert disaster.

It follows that the single greatest contribution which the indications or warning system may be able to make in some cases is simply to insure that all possible collection effort has been undertaken. It may be impossible to draw any firm conclusions as to the plans or intentions of a potential enemy, still less to convince one's superiors or the policy maker that any great danger lies ahead. But it may not be impossible to convince others that a stepped-up collection effort is desirable, or essential, to obtain more information on which to make a judgment. The earliest possible warning of aggressive action may not be any firm assessment--and usually is not--but rather a sense of unease conveyed to others that some preliminary actions should be taken against the

contingency of a crisis. For the political policy maker, such preliminary action may be diplomatic soundings. For the military commander, it may be a precautionary alert or limited troop movements. For the intelligence system, it will usually be more collection. To have induced such preliminary action, to have initiated an extraordinary collection effort, may sometimes be all that any warning system can do.

If the intelligence system cannot guarantee warning, it should at least be sure that it has done everything possible to insure that we will not be taken by surprise if the worst should occur. If the intelligence system really has done everything possible through collection to insure that the policy and command level is duly alerted to the possibility of a crisis, it may well have fulfilled its function even if its analysis is somewhat less than perfect.

The North Korean attack on South Korea in June 1950 was a successfully implemented surprise attack at least in part because no extraordinary collection effort had been directed against North Korea in expectation of such action. It is probably impossible in retrospect to say how much better our warning could have been if more intensive collection (such as aerial reconnaissance) had been initiated, but it seems almost certain that we could have been better alerted. At least, with an all-out collection alert, the US military attache in Seoul presumably would not have filed quite the same routine report as he did the day before the attack. The report reached Washington some hours after the attack, and it said in essence: "There is considerable movement of units and equipment north of the 38th Parallel. The significance of the movements cannot be judged but possibly they are in preparation for maneuvers."

A HANDBOOK OF WARNING INTELLIGENCE

PART I: WHY WARNING INTELLIGENCE AND WHAT IS IT? SOME FUNDAMENTALS

CHAPTER 5: INTENTIONS VERSUS CAPABILITIES

CHAPTER 5: INTENTIONS VERSUS CAPABILITIES

A time-honored military precept, still quoted with some frequency, holds that intelligence should not estimate the intentions of the enemy, but only his capabilities. Sometimes this has been extended to mean that we can judge his capabilities but that we cannot judge his intentions.

The precept that intelligence properly deals only with, or should only assess, capabilities derives, of course, from the requirements of the field commander. Confronted with military forces which may attack him or which he is preparing to attack, it is essential that the commander have the most accurate possible assessment of the capabilities of enemy forces and that he prepare his defenses or plan his offense against what the enemy is capable of doing rather than attempting to guess what he might do. There is no doubt that battles and probably even wars have been lost for failure to have followed this principle and that the commander who permits his judgment of what the enemy intends to do override an assessment of what he can do is on a path to potential disaster. (The near disaster to US and Allied forces in the Chinese Communist offensive in Korea in November 1950 was directly attributable to the failure to follow this principle. The Allied campaign proceeded without regard to the capability of the Chinese to intervene and there were no defensive preparations against this contingency--since it was presumed, erroneously, that the Chinese did not intend to intervene.)

The validity of this concept, however, does not mean that intelligence at the national and strategic level should be confined to the assessment of enemy capabilities.

For the fact is that intelligence at all levels, but particularly that which is prepared for the guidance of policy officials, is expected also to deal with the question of intentions. Not only the executive branch of the government, but also the congress and the public at large, believe that the function of intelligence is to ascertain what our enemies and even our friends are going to do, not only what they can do or might do. And, considering the cost of intelligence today in money and personnel and the potential consequences of misjudgment of intentions, it is hard to argue that the nation is not entitled to expect this.

It should be noted that nearly all inquiries into the presumed failures of intelligence or criticisms of its competence are addressed to why it did not provide forewarning that something was going to happen. Rarely does the policy maker or the congressional committee complain that intelligence failed to make an adequate assessment of enemy capabilities, even when this in fact may have been the case. The criticism almost invariably is: "You did not tell me this was going to happen. We were not led to expect this and were surprised." Or, "You mean for all the millions that were spent on collection, you were not able to tell us that this was likely to occur?" Protests that officials had been warned of the possibility or that the capability had been recognized are not likely to be very satisfactory in these circumstances. Like it or not, intelligence is seized with the problem of intentions. However brilliant its successes may be in other ways, its competence often will be judged in the end by the accuracy of its forecasts of what is likely to happen. And indeed this is what the warning business is all about.

Let us now examine the validity of the idea that we can judge military capabilities with a high degree of accuracy, but that intentions can never be forecast with any degree of certainty and that it is therefore unreasonable to expect the intelligence process to come to judgments of intent. How can we tell that something is going to occur before it happens? Is this not demanding the impossible? On the other hand, we can easily tell you how many troops there are deployed in this area and what they are capable of doing against the opposition.

Just how such concepts have gained prevalence or are seemingly so widely believed is a mystery. For in practice, as most experienced military analysts can testify, it may be very difficult to come to accurate assessments of the military capabilities of any nation, even when information on the area is readily obtainable. And when one is dealing with denied areas, where elementary military facts are never publicly revealed and the most rigid military security is maintained, it is often extraordinarily difficult to come to accurate estimates of such basic factors as order of battle or the strength of the armed forces. (These problems are dealt with at some length in Section IV, particularly Chapters 14 to 16.) Given enough time, and this often has been measured in years not months or weeks, intelligence has usually been able to come to fairly accurate assessments of the order of battle of most Communist nations. Total strength figures have proved extremely elusive, and the seeming certainty on such matters reflected in estimates over a period of years is of course no guarantee whatever that the estimate was accurate. And we are speaking here of situations where military strengths and dispositions have remained relatively static. Given a situation where changes are occurring, and particularly

when mobilization of new units is in process or large deployments are under way in secrecy, estimates of capabilities as measured in terms of total force available may be very wide of the mark.

As a general rule, although not always, intelligence will underestimate the strength of forces, particularly ground forces, involved in a buildup and sometimes will greatly underestimate the scale of mobilization and deployments. In nearly all cases of recent years where subsequent proof was obtainable, this has been the case. The scale of the North Korean buildup for the attack on South Korea in June 1950, although recognized as formidable, was underestimated. Chinese Communist deployments to Manchuria prior to the offensive in Korea in late November 1950 were probably at least double that of most estimates at the time. The extent of North Vietnamese mobilization in 1965-66 was considerably underestimated. The Soviet response to the Hungarian revolt in late October 1956 was a precipitate deployment of units into that country which defied order of battle or numerical analysis at the time, and even today the total Soviet force employed never has been accurately established. Similarly, we do not know with any certainty how many Soviet troops were moved into Czechoslovakia in June 1968, ostensibly for Warsaw Pact exercise "Sumava," but it is highly likely that estimates are too low. Further, despite exceptionally good order of battle information on the buildup for the invasion of Czechoslovakia, several units were not identified until afterward.

Logistic capabilities, as measured in terms of ammunition, POL and other supplies immediately available for the offensive, are even more difficult to establish. In fact many logistic estimates are based not on any reliable evidence concerning the scale of the supply buildup but on an assumption that the requisite supplies will be moved forward

with the units. Since the availability of supplies of course is vital to the conduct of warfare and indeed may constitute the difference between a high capability and no capability whatever, the movement of one or two items of supply may be absolutely critical. Yet it is usually unlikely that the collection system will provide much specific information on the movement of numerous important items. Few estimates have proved to be more slippery than assessing when a logistic buildup may be completed and hence when the enemy forces may actually have the capability given them on paper.

Consider further the problem of assessing the presence or absence of specific weapons, and particularly new or advanced weapons, capable of inflicting enormous damage. As everyone now knows, the so-called "missile gap" of a few years back was an intelligence gap; the US was unable to make an accurate estimate of the strength of Soviet missile forces and in fact considerably overestimated Soviet capabilities in this field. It may be certain that Japanese assessments of US capabilities were revolutionized with the dropping of the first atomic bomb on Hiroshima. Did or did not the USSR have nuclear weapons in Cuba in October 1962? We think so, but we are not positive.

Add to these tangible and supposedly measurable factors the intangible factors so critical to the performance of armies and nations--such as the quality of training, leadership and morale--and it is still more apparent why estimates of capabilities may be so wrong. Nearly all Western nations at some time or another have been victims of gross misjudgment not only of the intentions but of the capabilities of other powers. In short, it is not a simple problem.

If capabilities may thus be so difficult to establish, does it follow that the ascertainment of intentions is virtually impossible? I have sometimes asked those wedded

to this belief to put themselves in the position of the German High Command in the spring of 1944 as it looked across the English Channel to the enormous buildup of Allied combat power in the United Kingdom. Would their assessment have been, "Yes, there is a tremendous capability here, but can we really judge their intent? Perhaps this is only a bluff and they will launch the real invasion through southern France, or perhaps they have not yet made up their minds what they will do." Merely to pose the question reveals the fallacy of presuming that it is not possible to come to reasonable judgments of intentions. Of course, the Nazis could tell that the invasion was coming and that it would be made across the Channel. It is ridiculous to presume that such a buildup of military force would have been undertaken with no intention of using it or that no decisions had yet been made.

Now, the reader will say, you have picked the most conspicuous military example in the history of the world (which is probably true) and you can't make generalizations from this. In other cases it has just not been that easy or clear-cut. And of course that is right. The problem of assessing intentions rarely is this simple. But neither is it necessarily as difficult as many believe, particularly if one tries to look at it in terms of probabilities, precedents, national objectives and the options available rather than absolute either-or terms. As this treatise has already noted and will emphasize again, in warning we are dealing with probabilities, not certainties, and judgments should be made and worded accordingly. Nothing involving human behavior is absolutely certain before it occurs, and even a nation which has firmly decided on a given action may change its mind. But judgments can be made that certain courses of action are more or

less probable in given circumstances, or that it appears that the enemy now plans (or intends) to do such and such. While predictions of the behavior of individuals and nations may be difficult, it is not impossible to make reasonable assessments and often with a quite high percentage of accuracy.

Although some analysts may not recognize it, the intelligence process every day is making judgments concerning the intentions of other nations, not only our enemies but many other states as well. Nor are these judgments confined to the national estimative or warning process. All analysts are making judgments all the time about the information which they receive and assessing whether or not it suggests that some nation may be getting ready to do something unusual or different from what it has been doing. Now most of the time nations are pursuing and will continue to pursue the same general courses of action which they have been following for some time, that is their attitudes and intentions will not have changed significantly and there is no requirement to be coming to continually new assessments or to be constantly reiterating what is widely recognized or accepted. While judgments of intentions of other nations thus are continually reviewed, the judgments are generally implicit rather than explicit. To cite an example, there may be no need for months or even years to reaffirm in print that it is unlikely that Communist China will attack the Nationalist-held offshore islands, i.e., that it does not intend to do so in the forseeable future, when there are no indications that it is getting ready to do so. The intelligence judgment of intentions on this, as on many other subjects or areas, has been right and quite likely will continue to be right unless there is some discernible change in the situation. But it is essentially a negative judgment that there is nothing new that needs to be said because nothing new is going to happen.

The idea that the intelligence system either cannot or should not be making judgments of intentions usually arises only when there are sudden or major changes in a situation requiring a new judgment, and particularly a positive judgment whether or not aggressive action may be planned. Analysts who hitherto had been quite willing to make negative judgments that nothing was going to happen or that things will continue as they have will suddenly realize that they cannot make that judgment any more with confidence but also will be unwilling to come to any new positive judgments. They may thus take the position that intelligence cannot (or should not) make judgments of intentions, although they have in the past been doing just this, and will quite likely be willing to do so again in other circumstances. (The various factors which contribute to unwillingness to come to judgments in new situations are discussed in later chapters on the analytical method and the judgment process.)

Not only is it true that the intelligence process continually comes to judgments on intentions and that its errors are the exception rather than the rule, it can also be demonstrated that in some circumstances it is actually easier to reach judgments concerning intentions than it is to assess capabilities. This has often been true, for example, of the wars in both Vietnam and Laos. There is little doubt that North Vietnam for years has intended to move sufficient supplies through the Laotian Panhandle to sustain the combat capabilities of its units in South Vietnam, yet it has proved very difficult to estimate the actual through-put to the South, let alone the supplies which may reach any given unit. Similarly, it has often been possible to forecast at least several days in advance that a new Communist offensive effort was coming, i.e., intended, but the capabilities of Communist units to carry out the planned operations might be very difficult to determine

and subject to considerable error. Captured documents and prisoners in both Vietnam and Laos have sometimes accurately described planned operations for a whole season; the intentions of the Communists to carry them out may be relatively clear, but other factors, most notably friendly counteractions, may be soeffective that the capability to carry out the action is seriously disrupted.

It would be misleading to leave the impression that the writer believes the assessment of intentions is somehow more important than capabilities or is advocating that military precepts on assessing capabilities are outmoded or should be scrapped. Nothing could be farther from the truth. If there is one lesson to be learned from the history of warning intelligence--both its successes and its failures--it is that there is nothing more important to warning than the recognition and accurate and realistic description of capabilities. It is not only the field commander but also the policy official who first and foremost needs to understand the capabilities of the adversary. Assessments of intentions without due recognition first of the capability can be as dangerous, perhaps even more dangerous, at the national or strategic level as in the field. The greatest contribution which a military analyst can make to warning often may be to explain in clear and realistic language, for those who may not have his detailed knowledge, exactly how great a capability has been built up, how great the preponderance of force actually is, how much logistic effort has been required, or how unusual the military activity really is. Policy makers and those at lower levels as well more than once have failed to appreciate the likelihood of military action in part because no one really ever made it clear in basic English how great the capability was.

It is the history of warfare, and of warning, that the extraordinary buildup of

military force (i.e., capability) is often the single most important and valid indication of intent. It is not a question of intentions versus capabilities, but of coming to logical judgments of intentions in the light of capabilities. The fact is that nations do not ordinarily undertake great and expensive buildups of combat power without the expectation or intention of using it. Large and sudden redeployments of forces, with accompanying mobilization of reserves and massive forward movements of logistic support, are usually pretty solid evidence of an intention to attack unless there is some really valid or convincing evidence to the contrary. The greater the buildup of offensive capability versus that of the adversary, the greater the deviation from normal military behavior, the more probable it usually is that military action is planned. Not certain, but probable. As someone said, "The race may not be to the swift, nor the battle to the strong, but it's still the best way to place your bets."

This principle is almost universally recognized when hostilities already are in progress. Once it has been accepted that a nation is committed to the waging of war, analysts nearly always are able to come to realistic and generally correct judgments of intentions on the basis of an extraordinary buildup of military forces in some particular area. It is when war has not yet broken out or the commitment to resort to force has not become clear or generally accepted, that there may be great reluctance to draw conclusions from the same type of military evidence which would be readily accepted in wartime. This psychological hurdle is a very serious problem in reaching warning assessments. In some circumstances, a surprising number of individuals will prove unable to reach straightforward or obvious conclusions from the massive buildup of military power and will offer a variety of other explanations, sometimes quite implausible or illogical,

as to why all this combat force is being assembled.

There is, of course, one very important factor to be considered in a buildup of combat force prior to the outbreak of hostilities which differs from the wartime situation. Even if the potential aggressor has firmly decided to carry out military action if necessary to secure its objectives, it is always possible that an accommodation will be reached which will make the military operation unnecessary. There may be a negotiated political settlement, perhaps through mediation, or the other country may simply capitulate in the face of the threatened attack. Such an occurrence, however, does not invalidate a conclusion that the nation in question was determined to obtain its goals by force if needed, or that it had intended to attack unless a solution satisfactory to it was reached. Obviously, nations will not usually undertake costly and dangerous military operations if they can obtain the same objectives without them. It has been argued that, because the US did not attack the Soviet missile bases in Cuba in October 1962, no conclusions could have been drawn as to US intentions--and that the foregoing discussion concerning intentions is therefore invalid. This line of reasoning of course is entirely specious and avoids the issue. The US did not attack the bases because it did not have to--the USSR agreed to pull out the missiles. And the Soviets removed the missiles because they considered that an attack was likely--as indeed it was.

Another pitfall to be avoided is the tendency to give inadequate emphasis to the capability when its logical implications may be too alarming or unpopular. In any crisis or potential crisis situation, the military analyst should be particularly careful that he is in

fact making and conveying to his superiors an accurate and adequate assessment of the military situation. He has the same responsibility as the field commander to judge capabilities first without regard to his personal predilections as to intentions. Nothing can be more dangerous than for the analyst to let his preconceptions of what is a likely course of action for the enemy influence his analysis and reporting of the military evidence. It is regrettable but true that some analysts who have rejected military action by the enemy as unlikely or as inconsistent with their preconceptions have also been known to downplay or even fail to report at all some evidence which indicated that a massive buildup of capability was in progress.

Power talks. Realistic descriptions of the buildup of military power often will convey a better sense of the likelihood of action than will a series of estimative-type judgments which fail to include the military details or reasons on which the assessment is based. To understand the capability, and to be able to view it objectively, is a prerequisite to the understanding of intent.

A HANDBOOK OF WARNING INTELLIGENCE

PART II: ORGANIZATION AND TOOLS OF THE TRADE

CHAPTER 6: PROBLEMS OF ORGANIZATION AND MANAGEMENT

August 1970

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From modest beginnings, there has been a proliferation in recent years of indications and watch offices, situation rooms or other alert centers whose function is to monitor developments on a 24-hour basis and alert appropriate individuals to items or events. These offices are found at both intelligence and operational levels, now up to and including the White House. While their functions vary, the great majority of them are concerned primarily with current situations on which action may be required immediately. By their very size, most such offices cannot undertake much substantive analysis, which is left for the most part to regular analysts assigned to area offices. There has been much confusion on this subject, and it is important to recognize that many offices have been somewhat erroneously dubbed indications centers and hence considered duplicative of other work, when in fact their real functions are primarily to perform night watch duty, liaison with geographic offices, alerting of appropriate analysts and higher officials, dissemination of incoming material, communications with other alert centers, and the like. There is no question of the need for offices of this type. But we are here concerned with substantive intelligence and with the organization and functioning of offices responsible for the analysis of indications in depth--in short with strategic warning.

Advantages vs. Disadvantages of Separate Indications Offices

On the face of it, there would seem to be many advantages to establishing separate offices or centers whose sole function is indications and warning intelligence. Nearly all investigators, official and unofficial, who have looked into the functioning of intelligence have seemed to be convinced that the advantages of such separate specialized indications shops outweigh the disadvantages. At the least, they are considered good insurance against that hypothetical day when the US may indeed be threatened with attack, as well as for a variety of lesser crises. There is no doubt that separate indications centers, and particularly an inter-agency center such as has now existed in Washington for over 15 years, do have a number of points in their favor, among them being:

a. Since they have no formal geographic divisions and are so small, they can readily bring together, at least in theory, all information regardless of source or area which may be pertinent to a given warning problem.

b. The analysts do not have to devote their time to a variety of other current intelligence functions and thus are able to devote full time to the assembly and analysis of information of potential indications significance.

c. The organization is extremely flexible and adaptable and can readily reallocate personnel from one area or crisis problem to another, and permit individual analysts to work on problems which involve two or more major geographic areas.

d. Such separate indications offices provide a continuity on warning problems which is unique in the community and, particularly where personnel have long experience, are almost irreplaceable sources of knowledge and expertise on warning crises and indications methodology regardless of geographic area.

e. They serve as a ready mechanism or channel for the rapid exchange of all available information among agencies on any particular indications problem or crisis, and provide the conference space and secretarial and other supporting personnel for inter-agency indications meetings and preparation of watch reports.

f. They provide one more check that significant indications material is not being overlooked, and they are free in theory to do independent indications analysis without the restraints and coordination problems so often imposed in large organizations.

Nonetheless, there are also very significant disadvantages to separate indications offices, some of which can be so serious as virtually to negate the purpose for which they were established and destroy their usefulness. Indeed, this problem has become more pronounced in recent years and, unless those whom the system is supposed to serve are alert to what may happen, they may find that the independent warning effort they thought they had does not exist at all.

The root of the problem is that intelligence and policy offices today are extremely large, with numerous diverse and overlapping functions and coordination mechanisms. As the system has expanded, formal coordinated papers have tended increasingly to replace informal papers of individual analysts or even the views of agency

chiefs. Pressures have increased for uniformity of views within the intelligence system so that the policy level will hear the single, coordinated (and hence presumably best) opinion. As the demand for "coordinated intelligence" increases, so do the mechanisms for coordination, so that all sorts of estimates, studies and other papers are subjected to inter-agency reviews, often very extensive and exhaustive ones. From a system which involved almost no inter-agency coordination at the time of the outbreak of the Korean war, we have come to almost total coordination. The room for formal expression of differing opinions or even independent innovative analysis has narrowed. It has become extremely difficult, if not almost impossible, for low-level minority views to reach the policy level through formal channels.

Not surprisingly, these changes in the system of doing things have also affected the warning mechanism. And it has peculiarly affected the separate or independent indications office which is such a minor part of the great establishment.

What may happen in fact, and herein lies the potential danger for warning, is that an indications analysis becomes just another paper to be reviewed and coordinated in the several agencies by analysts and supervisors who in many cases will already have published analyses or opinions on the general subject if not the specific topic. With pressures for conformity and consistency with the already established agency position what they are, the chances that contradictory opinion will receive the stamp of approval and be forwarded up through the system to the policy level are slight at best. And the problem is compounded for the separate indications office in that it has so little status

in the system, no representatives at the top to argue its views and is so small that many people have never heard of it and/or tend to forget that it exists.

To add to the difficulty, the small separate office will usually have no separate communications of its own (and hence cannot dispatch collection requests to the field even in a warning emergency except through channels of another agency). It will lack a printing shop and dissemination facilities of major agencies, so that its papers or analyses receive extremely restricted distribution, and very rarely if ever reach higher echelons of the government or overseas offices or commands. And analysts assigned to indications offices quite often are not invited to participate in analytical working groups even when they may be experts on the subject at hand.

Thus the system works, unless checked, to make ivory towers of indications shops. The intellectual challenge may be enormous and the opportunities for research unlimited, but the analyst assigned to the indications office may find himself for most practical purposes removed from the life of the intelligence community. It does not matter how exhaustive his research or how competent his analysis, if there is no accepted channel through which it can be published or disseminated. The effect of this may be to drive the most competent analysts out of the indications effort (very few have chosen to stay in it) and to attract conformity and mediocrity. The best analysts, when such a situation prevails, are likely to be those on short-term assignments (one or two years) who may do very excellent work but are then lost to the indications office, with a resultant loss in continuity.

The effect of this has been that most people with long experience in the matter incline to the view that the best analysts should remain in area intelligence offices rather

than enter the indications system, since the opportunities to do and publish creative or useful research are likely to be so much better. The analyst, sometimes with long experience on a problem, who sees his work repeatedly rewritten or rejected not by his superiors but often by his juniors cannot help but become disillusioned.

Now, of course, the system is not supposed to operate this way, and many have been surprised to learn that it so often does. In theory--and this in fact is the reason for independent indications centers--the indications analytical effort receives a co-equal hearing with the current intelligence effort, just as the estimative process is co-equal with current intelligence. But to be equal, it must have the same opportunities, and to insure that it does it must have the vigorous, active and continuing support of the chiefs of the intelligence agencies and the understanding of the policy level. Without this support, the indications system as any kind of independent watch-dog over national security has no status whatever. It may become the scapegoat for errors, but it can never actively perform the function for which it was intended. Possibly more than any intelligence function, the indications system in the end is dependent on the good will, understanding and personal interest of those at the top.

Selection of Personnel for the System

Outside investigators looking into the indications process sometimes have expressed surprise that the "best minds" of intelligence are not assigned to the effort, as indeed they rarely if ever are. The best minds in intelligence move on to estimates offices, supervisory positions, policy levels, military commands, or out of the system to private law practice, but they do not tarry in the warning system.

Some of the reasons for this have been set forth in the preceding paragraphs. Good minds cannot long be attracted to jobs which lack opportunity for intellectual expression, however desirable they may be in other ways. But this is not the entire problem.

A corollary difficulty is that the warning effort a good bit of the time has no requirement for the best minds, except perhaps on some long-term basic aspects of the problem. Most of the time, in the day to day course of events, the indications effort and the current intelligence effort are not very different and there will not be a great deal new for the indications analyst to do. The need for the independent indications effort on most current problems is not very great, since most current problems (even many hot crises) are not the forerunners of hostilities. The need for the independent indications effort (as we have noted in Chapter 1) is not very frequent, because it is not very often that nations are trying to conceal from us that they are getting ready for some surprise action which may threaten our national security or invoke our overseas commitments. The demand for genuine separate warning analysis thus is most erratic. A great deal of the time it may not be needed at all, but when it is needed it is desperately needed--and it is indeed a tremendous intellectual problem which warrants the detailed attention of the finest minds available.

The problem in essence is to identify early enough the existence of an impending crisis or major warning problem and to insure that adequate intellectual effort is in fact brought to bear on it. Most agencies tend to set up special task forces to deal with crises or impending crises when they are clearly evident, but usually these task forces are set up too late for detailed early warning analysis. They are most usually established after

the crisis breaks to deal with its operational aspects, which of course may be much more demanding of the time of analysts than the period of buildup for the event.

In separate indications offices, which are rarely reinforced with additional personnel to cope with crises, reallocations of the work load and concentrated effort on the critical problem (including much overtime) are the usual attempted solutions. No conscientious analyst who has ever worked through the buildup phase of a major crisis (such as the Chinese intervention in Korea or the invasion of Czechoslovakia) has felt that he did anywhere near an adequate job from a warning standpoint. The more dedicated and hardworking the analyst, the greater is his sense of failure in these cases. He is haunted by the memory of all the people he should have seen and did not, the analysis he did not get to, the papers he should have written and could not find the time for, the people he couldn't convince.

There is no simple solution to this problem, even if more resources of the community should be made available. Some modest reinforcement of indications offices in times of impending crisis does seem to be desirable but only if truly qualified people are available. The unqualified analyst, or one who lacks confidence in the indications method, not only is no help in such situations but may be a positive hindrance. Experience in crises has shown that the constructive substantive indications work is usually done by a handful of individuals. Quality, rather than quantity, is what is needed.

A note on the assignment of personnel, which will probably already be evident. The mere assignment of an individual to an indications shop will not automatically make him a diligent and competent warning analyst or a believer in the method. In fact, one

of the greatest dangers to productive analysis can be the assignment of the wrong people. It is better to have no indications or warning offices than to assign yes-men or uninterested, timid or lazy analysts to the system. For they will not produce when the effort is needed and thus can provide a false sense of security that the work in fact has been done.

In a later section we discuss the basic principles of the indications analytical method, the qualities which make a good warning analyst, and raise the question whether analysts can be trained in indications methodology. Obviously, there is a great deal of work still to be done in this field. From the standpoint of management, it would appear extremely desirable to identify in advance those individuals who have shown an aptitude for such work, or at least have had some experience in it, and to have them earmarked for selection to indications or crisis work when the need arises. It may be possible if sufficient research is done to develop some type of aptitude tests. Even without them, however, experienced personnel and perceptive supervisors can identify those individuals with real aptitude and interest in such work. It does not have to be entirely a matter of chance whether the right people are assigned to the indications effort at the right time.

How Can Management Best Support the Warning Effort?

There are several things which management can do to improve and support the warning effort. The most important is to be sure that the voice of independent warning analysis is in fact being given an equal hearing with current or estimative analysis when there is a difference of opinion between them. To insure this requires the active encouragement of responsible officials; often they must ask if there is a minority or differing view which they have not heard and request that this view be presented to them. To get the right answers, they must often initiate the questions. To be sure that the research is

done, they must take an active interest in insuring that people, and the right people, are assigned to it. This may sound so elementary as not to need saying, but the fact is that warning has failed for no more reason than that supervisors or management failed to assign competent people to the effort or didn't ask the right questions. The assumption that all necessary work is automatically being done is a fallacy. In impending crises, a great deal of the work will not automatically be done. Even most of that which is most important may not be done for the simple reason that the situation is so different from normal and that the intelligence system is basically organized and staffed to take care of normal situations.

A second and extremely important responsibility of supervisory and policy levels is to insure that all pertinent information is indeed made available to the warning system. The compartmentalization of information--both intelligence material under special clearances and policy or operational information by executive action--is a serious enough problem in normal circumstances. In time of possible impending hostile action, it could be disastrous. The gulf which separates the Joint Chiefs of Staff from the desk-level military analyst may be immense. The operational and policy information available to the National Security Council may be almost totally unknown to the working level analyst. All sorts of extremely vital but often puzzling information may become available in very restricted collection systems when in fact the enemy is getting ready to do something. From day to day it may not make much difference whether or not the analyst is privy to much of this material; he may make some minor slips for lack of it, but the security of the nation will not be at stake. But it is entirely different when the enemy is getting ready

for some surprise action, for then the analyst's "need to know" may be as great if not greater than that of the policy maker.

If the gulf between the analyst and the policy maker or military commander is not bridged, both sides may be victims of fundamental and dangerous misassumptions. The policy maker assumes, often erroneously, that the intelligence level has all the information it legitimately needs--he may not really know how much has been denied to it by intermediate and zealous security officials, or he may not see why intelligence has a need to know. The top official often presumes, again mistakenly, that somewhere between the desk analyst with all his low-level facts and the top echelon "somebody" is putting all the intelligence and operational information into some meaningful pattern and that nothing has been overlooked. And if he thinks this, he will usually be wrong. The intelligence analyst, on the other hand, may have no real comprehension of how much is being denied to him or what is going on. Lacking this knowledge, he may set aside some extremely relevant information because he does not think it important, does not understand it, or wants to seek some further confirmation before he alerts his superior. And he also may presume erroneously, particularly if he has not had much experience, that "somewhere" all the essential integration of information is being accomplished. As a general rule, the sophisticated and perceptive analyst will have a greater and earlier recognition that something important is being withheld from him than will the policy maker realize that intelligence has not been alerted to the possibility of danger and that relevant information is therefore likely not to be reported to him. Good analysts develop an almost sixth sense that something is up that they have not been informed about, but this will not necessarily help them to conduct

the right research and report the right information upward unless they are told exactly what is wanted and why. The tendency of most analysts, even very conscientious ones, will be to wait for some directions or to be told what it is they need to know.

These problems, of course, are not easily soluble, and few would suggest that everybody should know everything or that all operational or policy plans and actions should be made freely available to everyone in intelligence. One may be confident that information on highly restricted collection systems designed specifically for emergency situations will continue to be tightly controlled. Nonetheless, it is extremely important that the policy level recognize the seriousness of this problem and take steps to insure that restrictions on dissemination are not capricious or arbitrary and that standing directives for the release of operational information to intelligence are in fact being complied with (often they are not). The inconsistencies in policy sometimes have appeared almost ludicrous. Newspapermen are repeatedly briefed "off the record" on important information and policy matters which are being denied to intelligence except at its very highest levels. All intelligence analysts learn early to read the US press for policy and operational information, and they usually become adept at perceiving which columnists are most likely to receive the most accurate information on which they can rely.

Possibly the single hottest piece of information collected since World War II was the detection of Soviet strategic missiles in Cuba. Although the information was extremely tightly held for a week, the working levels of intelligence who needed to know it (including of course the indications analysts) were immediately informed. Yet these same analysts could not obtain information, which was known to thousands of US servicemen and their families, on the deployments of US units to Florida and other US military

preparations. Even months after the crisis, when post-mortem studies were attempting to determine when the USSR might first have learned from our military alerts and actions that we had found the missiles, an official request for information on the timing of US alerts and deployments was denied to intelligence. Khrushchev's famous secret letter to President Kennedy on 26 October was never released to intelligence but was finally surfaced in Elie Abel's book on the crisis. The intelligence analyst who did not know that the Pueblo was off North Korea prior to its seizure, and most did not, was not likely to have alerted his superior to some minor anomaly in North Korean naval activity. The list of such examples is endless.

If intelligence is to do its job for the policy maker in his hour of greatest need, the latter must insure that the intelligence system really knows what actions the policy level is planning and that some relevant information on operational plans and movements is released. In addition, steps should be taken before something happens to be sure that highly compartmented intelligence will not be bottled up when it is important to national security that the analysts know of it. Since most security regulations are extremely rigid and require the formality of specific clearances and briefings before the analyst can be introduced into the inner sanctum, it may be imperative that executive action be taken at a very high level to streamline the procedures and cut out the red tape when an impending emergency arises. As a matter of fact, security regulations nearly always are relaxed when the need to know becomes widespread. What may often happen is that the analyst and policy maker alike learn almost by accident of highly classified material and hence may not realize how tightly compartmented it normally is, or why. In such circumstances, security is much better served if those who learn anything learn more rather

than less. The greatest dangers to security come from those who have had access to very classified material without knowing that it is very restricted or why.

Broadening the Horizons of the Indications System.

In order to insure that indications analysis does not become a compartmented shop, divorced from the real life of the intelligence system, it is very desirable that indications analysts be given opportunities to participate in some activities outside the daily or weekly routine. They should have at least some of the same chances to attend briefings, intelligence seminars, and schools, and even to travel, that are accorded to current and basic intelligence personnel. On the occasions when indications analysts have been invited to participate in substantive working groups or the preparation of estimates on topics related to their specialties, it has usually proved very beneficial to all concerned. After all, there is no rigid line between indications analysis and estimates, or between indications and basic intelligence. All are dealing with the same data for somewhat different purposes, and the benefits of exchange of views and mutual participation in projects are considerable.

A corollary to this, which as of this writing has yet to be tried, would be to give indications analysts a chance to publish studies or articles in the regular current and basic intelligence publications of the major agencies. The greatest single frustration to warning analysts probably is that there is no channel or accepted intelligence vehicle through which they can express their views, not even in agency "inhouse" publications, so that the warning approach to problems really has no voice in the community today, either as applied to a specific current intelligence problem or as a theoretical analytical

method. The most junior analysts in the fields of current and basic intelligence are given opportunities to write and publish which are denied to the most senior warning analysts.

The indications office may also benefit greatly from contacts outside the strictly intelligence field, for example with the operational and planning levels of the major departments. In the end, these are the people whom the warning system is designed to serve in the hour of crisis. It is beneficial for these functions to become acquainted with one another and to learn what each is doing. There is an affinity of interest between a number of major offices in the Department of Defense (such as the National Military Command Center, Systems Analysis, and the operational support offices of the services) and the indications effort. Both sides should take advantage of the opportunities for mutual education in each other's activities. The warning system has much to learn about what the operational level is doing and what kind of support it needs, and the operational and policy levels can profit from a better understanding of the nature of warning intelligence.

Also for these reasons, it is probably desirable to rotate intelligence personnel in the indications system rather than leave them too long in the effort. While this does, of course, result in a loss of continuity, this can be overcome in some degree by the maintenance of specialized crisis and indications files, the preparation and publication of warning and crisis studies, and perhaps the recall to the indications effort of experts when the need for augmentation becomes apparent. Perhaps a combination of rotation of personnel and the assignment of a few for extended tours would be the best solution.

At least as the system has operated thus far, personnel who remain too long in the indications effort become frustrated for lack of opportunity to do research and to get it published, and so few people have actually been assigned to the effort that most analysts really have little idea how the system functions.

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PART II: ORGANIZATION AND TOOLS OF THE TRADE

CHAPTER 7: INDICATOR LISTS

CHAPTER 7: INDICATOR LISTS

Indicator lists are believed to be a post World War II development, although it is not unlikely that similar techniques had been used in the past. In about 1948, the intelligence agencies (US and British) began developing lists of actions or possible actions which might be undertaken by an enemy (specifically the Soviet Union) prior to the initiation of hostilities. From this beginning, the intelligence services of the US (and those of the UK, Canada and other nations) have gradually developed a series of indicator lists. The earlier lists, reflecting the then apparent monolithic structure of the Communist world, generally were intended to apply to the "Sino-Soviet Bloc" (as it was then called) as a whole. Little effort was made to differentiate actions which might be taken by the USSR from those which might be taken by Communist China, North Korea or the Communist Vietnamese (Viet Minh). In recognition of the differing nature of conflicts and preparations for conflicts in various areas of the world, however, numerous special lists evolved in the 1950's dealing with such topics or areas as Southeast Asia, the Taiwan Strait and Berlin. These early lists had varying degrees of coordination, formality and stature in the community, but most were prepared at the working level as tools for the analysts or by field agencies or commands, primarily for their own use.

Since the late fifties, the intelligence community has attempted to reduce this proliferation of lists and to use the resources of the community as a whole to prepare single, coordinated and formally issued lists. In recognition both of the Sino-Soviet split and the differing nature of the Soviet and Chinese Communist states and military establishments, separate lists are in use today for these areas.

Content and Preparation of Indicator Lists

The philosophy behind indicator lists is that any nation in preparation for war (either general or localized) will or may undertake certain measures (military, political and possibly economic), and that it is useful for analysts and collectors to determine in advance what these are or might be, and to identify them as specifically as possible. Because of the large variety of actions which a major nation will or may undertake prior to initiating hostilities or during periods of rising tensions, indicator lists have tended to become quite long and detailed. Thus, instead of referring simply to "mobilization of manpower," the list may have a dozen or more items identifying specific actions which may be taken during the mobilization process. While some of these specifics are intended primarily for collectors, they may also be very useful to the analysts. Because of the length of lists, however, it has sometimes been found useful to issue brief lists of selected or consolidated items as a guide to those actions deemed of most critical immediate importance, if they should occur.

In compiling indicator lists, analysts will draw on three major sources of knowledge: logic or long-time historical precedent; specific knowledge of the military doctrine or practices of the nation or nations concerned; and the lessons learned from the behavior of that nation or nations during a recent war or international crisis.

The first of these (logic or long-time precedent) is obviously essential. Regardless of what we may know about the doctrine or recent performance of any country, history tells us that all countries either must or probably will do certain types of things before they initiate hostilities. They must, at a minimum, provide the necessary combat

supplies for their forces, redeploy them or at least alert them to varying degrees, and issue the order to attack. Depending on the scale and geographic area of the attack and on the likely resulting scope of the hostilities, they may undertake a large variety of additional military measures, both offensive and defensive. Most nations will probably take some measures to prepare their own populace and perhaps world opinion for their actions And, if the conflict is to be of major proportions or is likely to last for a prolonged period, they may also begin major economic reallocations before hostilities are under way.

Both analyst and collector, however, will wish more specific guides than these general precepts. For this, a knowledge of military and political doctrine and practice of the nation in question will be of invaluable assistance. Indeed, most refinements in indicator lists over the past 20 years have been based primarily on our growing knowledge and understanding of the military organization, doctrine and practices of our potential enemies, as derived from a variety of sources. As we learn more, for example, about Soviet doctrine for the employment of airborne troops in wartime or about civil defense planning for the protection of masses of the population in the event of nuclear war, we are better able to write specific indicators of what we should be looking for.

Equally valuable to the compilers of indicator lists, although usually less frequently available, will be the actual performance of a nation in a "live" warning situation. No amount of theory replaces the observance of actual performance. Preferably for the analyst, the crisis should have resulted in actual war or commitment of forces, since there will then have been no doubt that it was "for real." A crisis which abates or

is adjudicated before an outbreak of hostile action is never quite as useful since there will always be some doubt how many of the observed developments were actually preparations for hostilities. The greater and/or risky the crisis and the greater the preparedness measures undertaken, the more useful for future indications purposes it is likely to be. In addition, the more recent the crisis, the more likely it is to reflect current doctrine and practice. Because of changes in Chinese Communist military forces and procedures as well as other factors, a study of the Chinese military intervention in Korea, invaluable as it is, cannot be considered an absolute guide to how the Chinese political leadership and armed forces might perform were such a situation to occur again. Similarly, an understanding of what the Soviet and Warsaw Pact forces did in preparation for the invasion of Czechoslovakia in 1968 is much more valuable today than a review of what the USSR did to suppress the Hungarian revolt in 1956. In fact, the most useful intelligence we have had since World War II on Soviet mobilization and logistic practice comes from the preparations taken for the invasion of Czechoslovakia. A number of refinements in Soviet/Warsaw Pact indicator lists were made as a result of the Czechoslovak crisis.

It is thus evident that the carefully researched and well-prepared indicator list will contain a large variety of items, some theoretical, some well documented from recent practice or doctrine, and covering a whole spectrum of possible actions which the potential enemy may undertake. No list, however, purports to be complete or to cover every possible contingency. Each crisis or conflict, potential or actual, brings forth actions or developments which had not been anticipated on an indicator list and which in fact may be unique to the particular situation and might not occur another time.

Still more important, it must be understood that even a major crisis involving a great national mobilization and commitment of forces and many obvious political and propaganda developments may involve only a relatively small fraction of the actions set forth on a comprehensive indicator list. And, of these actions, the best intelligence collection system can reasonably be expected to observe a still smaller fraction. Some of the most important developments, particularly those immediately preceding the initiation of hostilities, are unlikely under the best of circumstances to be detected, or at least to be detected in time. A judgment that a specific indicator is unlikely to be detected, however, should never preclude its inclusion on an indicator list, since there is always a chance that the collection system, perhaps fortuitously, will learn of it. As someone once said, an indicator list is a desideratum, not an absolute guide to what may occur, still less a statement of what we are likely to know.

At one time, it was considered desirable to divide indicator lists, not only into various subject categories (military, political, economic) and sub-categories of these, but also into time phases--usually long-range, intermediate-range and short-range. This procedure rested on the hypothesis, which is not invalid in theory, that some preparations for hostilities are of a much longer term nature than others and require much longer to implement, whereas others could reasonably be expected to occur very shortly before the initiation of the attack. Experience, however, has shown that such pre-judgments of likely time phases of actions are of doubtful practical use, and can be misleading or even dangerous. Some preparations may be so long term (the start of a program to build large numbers of new submarines, for example) that their relevance to the initiation of

hostilities at some date in the future is questionable, at best. Other time-consuming logistic preparations (such as construction of new roads which would be useful for support of military operations) may be of a long-term contingency nature or can be indicative of a relatively short-term intention to make use of them as soon as possible.

Similarly, dependent on circumstances, an action which would usually be considered very short-term in nature may occur weeks or even months before the military attack or action is finally carried out. (Some of the Soviet units which finally invaded Czechoslovakia on 20-21 August 1968 were mobilized and deployed to the border on 7-8 May and were held in readiness for operations for over three months. According to a defector from one of the units involved, troops in his regiment were actually issued the basic load of ammunition on 9 May, but it was then withdrawn.) On the other hand, in a rapidly developing crisis calling for immediate military action, all preparations may be telescoped into a few days--as in the Soviet suppression of the Hungarian revolt in 1956. Still another factor to be considered is that the collection of information on a given action may run days or weeks after the occurrence, so that actions which may appear to be recent have actually been in progress for some time.

Thus, for these and other reasons, most indicator lists today have dropped a distinction between long and short-term preparations for hostilities. At the same time, some preparations judged to be so long term in nature that they are of doubtful validity as indicators have been dropped altogether. The focus today is on the collection and evaluation of all indicators, regardless of timing, which may point to a likelihood or possibility that a nation has begun preparations for the initiation of hostilities. The assessment of the

timing of these actions, individually and in relation to one another, has become a part of the evaluation and interpretation process, rather than a part of the indicator lists themselves. The problems involved in assessment and interpretation are discussed in detail in later sections of this study.

Uses of Indicator Lists

Any analyst who has participated in the preparation of a detailed indicator list and its coordination with other agencies will have learned a great deal in the process. In fact, the most useful aspect of these lists may be that the analysts who work on them must examine in detail the steps which a prospective enemy is most likely to take before initiating hostilities. For beginners, such experience is invaluable, and even analysts with long experience always learn something new in the process of preparing or revising such lists. The process serves as an extremely useful medium for an exchange of expertise between basic analysts (with their invaluable knowledge of the nuts and bolts) and current indications analysts who may be very knowledgeable on the theory of warning and the general types of things to be looking for but rather ignorant on the specifics. Thus, if nothing further were done with indicator lists, the time spent in preparing them would probably not have been wasted.

The usual reason for preparing such lists, however, is to give them wide dissemination to other analysts, supervisors, collectors and field agencies in order to guide them on what it is we want to know. At least in theory, every attache is armed with an indicator list (together of course with all his other guidance and directives on what to look for), and each current analyst frequently consults his list to see how many indicators are

showing up "positive" or where his collection gaps may be. It is not uncommon for those new to the intelligence process to expect the indicator list to be a kind of bible or at least the master guide on what to be watching for. "Let me see your indicator files" is not an unusual query.

Of course, it is not all this simple, as was probably evident from the preceding section. To attaches, the indicator list (even if they have received it which sometimes they have not) is one more piece of collection guidance and one more document to keep in the safe. Practically never will the attache receive a query specifically pegged to an item on the indicator list. He may receive a query on a subject on the indicator list, and quite likely will, but it will not be related to the list and there will be no reason to consult it. Further the attache or other field collector who takes time to examine the list in detail quite likely will find: (1) there are an enormous number of items on the list which he could never collect against or which are entirely beyond his field; (2) on those items on which he is competent to collect, the list is far too general to be of use to him; (3) he has a far better sense of what is potentially significant or abnormal or of indications significance in his area than could possibly be conveyed by any indicator list; and (4) when he does have something of warning significance, or potential warning significance, to report, it cannot readily be fitted into a particular category on the list, and needs a fuller explanation of its possible meaning. And of course he will be right on all counts. What the field collector needs when something begins to happen which has potentially ominous connotations is not to sit down and reread his indicator list, but rather to have specific guidance on exactly what to look for in his

area (and where) and to be relieved of a lot of routine requests when he should be concentrating on what is of immediate importance. He needs to know that there may be an impending crisis (sometimes he will not know this unless his home office tells him), that he should be devoting greater than normal attention to field collection and to prompt reporting, and he needs to have lateral reporting from other areas on subjects which he may assist in evaluating.

Does it follow that an indicator list is really of very little value for small field offices and would better never be sent to them? Many might say yes, and that the proper time and place to study general indicator lists is prior to departure. This is probably a question best answered by those who have been in the field collection program. The difficulty of course is that the value of such lists can really only be judged when there is a crisis, when there are some real indications to report.

In the interests of more specific guidance and of not burdening the field office with a detailed list, some attempts have been made to compile very specific lists of things to look for in specific cities or areas in event of possible preparation for major hostilities. Obviously, such lists can only be prepared by those with the most detailed knowledge of the area. Much more remains to be done in this field, but it is one which might prove to be quite fruitful. By reducing the general to the specific and for a specific area, indicator lists in the future may prove to have a greater usefulness for the field than has heretofore been the case.

And what use is the indicator list to the analyst back at headquarters? What is he doing with it? The chances are that he also has it somewhere in the office but has not

looked at it very often. If he has helped to prepare it in the first place, he will probably have very little need to consult it since he will know almost automatically that a given report does or does not fit some category on the indicator list. Hopefully, he will from time to time consult his list, particularly if he begins to note a number of developments which could indicate an impending outbreak of conflict or some other crisis. In this event, even the very experienced analyst may find it helpful to compare what indications he has against those which either have not occurred for sure and those on which he does not have enough information to know one way or the other. On the latter (the gaps) perhaps some specific field guidance may be in order--can it be ascertained whether or not the military has requisitioned trucks from the civilian economy or is it just impossible to find out in this particular area? If he does not expect too much, and remembers that at best he may hope to see only a fraction of all the indicators on the list, he may find that the list is a useful guide to give him perspective on his present crisis.

In normal times, when the situation is reasonably quiet and no disturbing military or political developments are evident, an indicator list is not going to be much use--unless one needs to be reassured periodically that things are pretty normal. An indicator list is really not for all the time--it is a sometime thing. And even when that "some time" occurs--that twice a decade perhaps when we are confronted with a real warning crisis--no one should look on the indicator list as a solution to the warning problem. The mere ticking off of items on an indicator list has never produced warning--and it never will. It is a tool but not a panacea.

In the next section we discuss some other tools of the warning analyst and offer some helpful hints on what and how to file. We would offer one "don't" here. Don't set up a list of detailed file headings to conform with all the items on the indicator list and wait for items to come in to file under them. You will end up with lots of headings and very little to put under them, and you will have lots of reports and items which you have no place to file. Headings to conform to many of the broad general categories of the indicator list, on the other hand, will be very useful and permit one to file information on general trends or basic data on these subjects (e.g. mobilization procedures) which may be very helpful background to evaluate an abnormality when and if it appears. But a file set up to take care of nothing but abnormalities (some rarely noted and some never) will likely become a white elephant. In a lifetime career of watching indications, you might never receive a report in time that a company on the front line had been issued tactical maps of enemy territory immediately across the frontier. But if you get it, you won't need a heading in your card file to tell you that it is important. And you also probably won't have time to file it before the war starts.

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PART II: ORGANIZATION AND TOOLS OF THE TRADE

CHAPTER 8: THE COMPILING OF INDICATIONS

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This chapter is a discussion for basic indications and current analysts, and those not concerned with such working level details may wish to skip it. It is a response to many questions which the writer has been asked over a period of years on what should be filed and what are the best and most reliable methods of compiling indications so that data may be recovered and analyzed.

As all analysts know, it is possible to collect an enormous amount of paper in an extremely short time on almost any current intelligence problem, and the greater the current interest in the subject, the greater will be the amount of verbiage. In no time at all, the analyst can collect drawers full of raw material plus current intelligence items and special studies on an ongoing situation like the war in Vietnam. The measure of the importance of a crisis is sometimes the amount of reporting it engenders. The Cuban missile crisis or the Soviet/Warsaw Pact military buildup for the invasion of Czechoslovakia will result in an avalanche of reporting, not all of it original unfortunately. Sitreps repeating raw data received 48 hours before pour in on the analyst who is hard put to it to read everything, let alone put it into some kind of filing system where he can recover what he needs to know.

There are no panaceas to this problem, at least none have been found yet, and the writer does not wish to imply that the following suggestions will necessarily be the best method in a crisis or even from day to day when things are relatively quiet. Nothing yet has been found to replace a retentive memory, a recognition of what is important and what is not, and a sense of how things fit together.

There are perhaps four basic filing or compiling problems which the indications analyst should be prepared to deal with. They are: (1) the extracting for files of current raw data or information of potential indications significance; (2) compiling the highlights of such data into a readily usable form by topic or area; (3) coping with the sudden but short-term crisis; and (4) long-term warning or indications files.

Extracting Indications Data

The first principle is that the indications analyst must have the basic raw data, extracted verbatim or competently summarized if the item is very long, with the original source notations and evaluation and the date of the information (not just when it was acquired). He can, if necessary, dispense with all current intelligence summaries of such data, all special sitreps (unless they contain new data), and a variety of other reports, but he cannot do without the basic information.

An excellent system, which has proved very useful, is to assign to duty officers, with clerical assistance, a responsibility for extracting raw information deemed to be of indications value in a daily informal publication for the use of analysts and also supervisors who want a quick review of indications highlights. In addition to the items selected for inclusion by the duty officers on an around-the-clock basis, the substantive indications analysts may ask to have additional items put in, sometimes with their comments or interpretations. The individual items can then be clipped by the analysts for their own use and assembled under appropriate subject headings. An ideal method is to put them onto 5x8 cards or cut them to card size. Alternatively, they may be assembled

in folders by topic, although this is usually less satisfactory. Obviously, discrimination is needed to retain what is of some lasting indications interest and to pitch out a lot of current information which may be of no interest next week.

If he lacks this type of round-the-clock assistance, the analyst hopefully should have some clerical help in extracting the data which he needs to retain.

For indications purposes, the material should be filed under the date on which the development occurred, not when it was reported or received. You are interested in the inter-relationship of events in time, not when the information became available.

As noted in the preceding chapter, the general headings of indicator lists may be good headings for some portions of the file, but specific items from the indicator list usually should not be used as file headings. Above all, however, the analyst should maintain a flexible system, in which he can start new headings or revise their titles as required, or break some category down into sub-headings. Don't get trapped in a rigid system which cannot be readily expanded or modified as new developments occur. For this reason, pencil headings at the tops of cards, rather than ink or typewriter, are preferable, and numbered headings and sub-headings should be avoided. The system should be designed to serve you, not you the system.

If you are maintaining files on more than one area, set up separate sections for each. Do not attempt to file Chinese troop movements toward the Soviet border together with Chinese troops in North Vietnam. It won't work.

The microfilming and indexing of such files by country and key words has also proved useful in recovering specific items. The analyst should remember, however, that when he keeps his own subject files he is doing much of his research as he goes along. If he relies on any library system such as microfilms, he will have to recover each item separately and really do the research from scratch. Where large numbers of items may be involved, this can be very time-consuming. The microfilm system is really of greater assistance for a spot check of some specific question, rather than as a continuing research aid.

Compiling Highlights: The Indications Chronology

Even a good card file or similar system, hopefully weeded out from time to time, will leave the analyst with a great deal of material to cull through if he wishes a succinct summary of the highlights of any developing indications problem. Further, the possible relationship of items under different headings may be overlooked and important items forgotten. Also, of course, no one else can use the material without going through all the cards.

The writer believes that no indications methodology yet devised is as useful or meaningful as the properly prepared indications chronology. The method is applicable both to relatively normal situations, for recording the highlights, and to budding crisis situations in which large volumes of material are being received. While its advantages are numerous, it must also be observed that it is a very time-consuming task requiring the most conscientious effort, which is probably the chief reason that so few are prepared.

The purpose of the indications chronology is to record briefly in time sequence (by date of occurrence, not date of reporting) all known developments, reported facts, alleged actions or plans, rumors, or anything else which might be an indication of impending aggressive action or other abnormal activity. For the initial chronology, it is not necessary to prove any inter-relationship of the various items, but merely to note them (obviously, there must be some possible connection, even if remote, to include an item). Some notation as to the validity of the information is desirable (particularly unconfirmed or dubious items), and it is often helpful to note the source as well, but the items should be as brief as possible. The chronology should also include significant actions by our side (or other nations) which might cause some reaction or help explain some enemy activity.

In a slow-building crisis of many months (which is the usual, not the unusual crisis), the inter-relationship of old and new material may become immediately evident once the information is approached chronologically. Decision times may be isolated, or the likely reason for some action may become apparent. Where serious military preparations are under way, it will quite likely appear that a number of actions were initiated at about the same time. Events which appeared to have no relationship at the time they were reported may suddenly assume a meaningful pattern. Moreover, the method provides an almost foolproof way that the analyst will not overlook something, perhaps because he did not understand it when received or did not know where to file it. A chronology is a catch-all for anomalies--and while not all anomalies lead to crises, all crises are made up of anomalies.

In addition to insuring that research is done and items not ignored, the draft chronology can rapidly be edited in final form for distribution on a crash basis, and the analyst also can readily produce a written analysis or summary of the evidence from the chronology. Where a great deal of material is coming in, a page for each day can be maintained and new items added as received, and only those pages need be rerun to insure that it is current.

The method is also very handy for just keeping an historical record of major developments in some area or country (say the USSR and Eastern Europe, the Sino-Soviet border, or Laos) even when no particular crisis is evident.

Further, once an item has been briefly recorded, a large amount of paper can be thrown away. It is a tremendous saver of file space.

Good chronologies of major crises can be kept indefinitely, most of the other data can be destroyed, and the document will remain the most useful document on the crisis which you could have.

The Sudden, Short-Term Crisis

Desirable as the preceding methods may be, the pressure of time during a major crisis will probably preclude the preparing of chronologies and possibly the maintenance of any types of files until the crisis is resolved. Analysts are likely to be so overworked simply keeping up with incoming material and current reporting requirements that the best that can be done is to sort material into some makeshift system which will permit the location of the highlights. Unfortunately, when research may be most essential and the detailed chronology would be most desirable, there is no time for it.

Put first things first. Your files are not more important than getting out analyses and summaries or comments on the significance of items which others may have overlooked. Find space to sort and keep the the material you really need, and get some clerical help in doing it if possible. Call on basic analysts for help if you can get it. Let your files and even a chronology go if necessary to insure that you are not overlooking new material which should be reported and analyzed.

Long-Term Warning Files

Unlike current intelligence files, which rapidly become out-of-date, good warning files improve with age. Some of the most valuable files in intelligence today are the few extant on the Chinese Communist intervention in Korea, since most analysts' research files of this have been destroyed and anyone seeking to review the basic data from the original raw material would have an almost insurmountable task.

One of the most useful things which an indications office can do is to keep files of crisis situations and warning problems. This may include extracts of the original material in card form as described above, and also the chronologies and special studies. Post-mortems of what happened and how it was analyzed and reported at the time are extremely useful for future study of indications and warning methodology. If such files are well compiled, virtually all other current information on the problem can usually be destroyed. Don't throw out crisis files and studies just because they are old and there has been no demand for them in years. There was little demand for ten years for studies on the Soviet reaction to the Hungarian revolt of 1956, but interest perked up noticeably

in the summer of 1968. Similarly, studies of Soviet reaction in the Suez crisis of 1956 were suddenly in demand at the time of the six-day war in June 1967.

Another type of file which the indications analyst or office should maintain is the basic data on how a nation goes to war: alert and combat readiness procedures, mobilization laws, studies of major war games or exercises, civil defense doctrine and practice, and a host of other similar material which is rarely needed but of absolutely vital importance when there is a threat of employment of military force. (See next chapter, "Can Computers Help?")

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CHAPTER 9: CAN COMPUTERS HELP?

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The writer makes no claim to any expertise in the field of computers or automatic data processing, either with regard to the technical aspects or the types of data which should be programmed. Certain observations concerning the potential usefulness of automatic data processing for warning, however, may be made from the standpoint of the indications analyst who at least is qualified to say what it is he may most need to know in a hurry in a live crisis situation. The question of whether the programming of such data is feasible may then be left to the experts.

Generally, of course, computers are most useful and applicable to problems which either are primarily quantitative or mathematical in nature (i.e., where an exact answer can be obtained) or repetitive (where there is a broad data base against which normalcy or variations from normalcy can be measured in terms of frequency or probabilities). Computers generally are least useful or not useful at all where the problem is abstract, not measurable, unique or rarely repetitive, or involves a complex interplay of factors from which a judgment of human behavior must be made. As is also well known, an error in programming where one piece of critical information is incorrectly entered or omitted may lead to a large margin of error by the computer--as witness the mistakes which have sometimes been made on election night because the data put into the computer were not quite the right selection.

Because of these factors, most indications experts believe and computer experts have generally concurred that the usefulness of computers for strategic warning is limited and in fact could be quite dangerous if too much weight were to be ascribed to the

computer's "judgment." For the warning process is not only a complex analytical problem, it is also essentially non-repetitive, non-mathematical, does involve a judgment of probabilities of human behavior, and must work from a data base which is inexact, certain to be incomplete, and in which the validity of some of the most important available information cannot be established. Further, it must be noted that the question of what data should be fed into the computer in a live warning situation would be absolutely critical to the judgment it might reach. Just as indications can be selected to support completely diverse opinions, so might the computer come to completely different judgments dependent on whether certain particular pieces of information or indications were or were not selected for inclusion. Thus the judgment of what to put into the computer might and probably would be the most critical decision of all, and the person who does that (not normally a very high-ranking or experienced expert) could theoretically have more influence on the final decision than the policy maker.

Since the computer's judgment essentially is quantitative rather than qualitative, there is also reason to suspect that it might be more vulnerable to a clever deception effort than would the alert and sophisticated analyst. The successful deception effort, of course, builds up a case which is inherently probable and believable--seemingly more probable and believable (or at least so the designer hopes) than the real plan. The analyst who sees through the deception effort, if he does, must rely on something other than quantity and superficial plausibility or consistency of the evidence to come to the conclusion that it is suspect, or that something is amiss. This sophisticated sense of perception, almost intuition, of the experienced analyst is not measurable and almost

certainly never will be computerized, whatever other progress there may be in the state of the art.

Thus, the question whether a computer even under the most ideal warning conditions could be expected to do better than, or indeed as well as, the human mind or a number of human minds together is at best debatable. And whether its judgment would or should be trusted, particularly if the security of the nation were at stake, is even more crucial.

Does this mean that there is no use for computers or automatic processing of information in the warning system? On the contrary, there are a variety of ways in which the computer probably could contribute to the warning field--provided its limitations are understood and the responsibilities of coming to human judgments are not evaded.

First, it is important to recognize that warning or indications analysts are dealing with the same basic information which current, basic and estimates personnel are dealing with, and that their requirements for the processing of much information are essentially the same as well. There is nothing unique about the warning analyst's requirement for information on an airfield, a ground force unit, the defense budget, the location of SAM sites, and a host of other subjects. He will need much the same information to do his job which the current order of battle analyst or logistics expert will need. It follows that any system which will simplify or speed up the recovery of many types of basic information for the current analyst may also incidentally serve the warning analyst.

There is one important factor to be remembered in computer processing of data, however, which could be peculiarly important for warning. This is the question of timeliness and of insuring that all the new data which could be of indications value is in fact being put into the system. Experience in many crises has demonstrated that analysts and the intelligence system in general are often barely able to keep up with the flow of material for essential current reporting, let alone take care of less immediate requirements such as the filing or computerization of data. It would be optimistic indeed to presume that this problem is likely to be soluble by any administrative measures or that more people to prepare the computer data can be found in a hurry during an impending crisis.

Collection systems which have been designed specifically for tactical warning or to detect unusual deployments or preparedness measures of enemy forces in many cases collect data which is subject to computerization. Increasingly, data collected by various sensor devices and such material as electronic emissions are being computerized or at least being considered for such programs. In the period immediately prior to surprise attack or while major covert deployments of forces and other preparedness measures were in progress, there might be a substantial increase in information of this type. Obviously some central effort, assisted by ADP, to bring all such data together and to evaluate them rapidly, almost instantaneously, could be of crucial importance. Planning is essential for the day when all sorts of abnormalities might suddenly appear and when there would be no time to devise new means of coping with, evaluating or displaying the material. In the hour of crisis, it may be absolutely essential that the data processing system be as rapid as possible and that the collation of various types of measurable data be centralized. At such

a time, the strategic and tactical warning problems tend to merge. Warning analysis, if it has not already done so, passes from the intelligence system to the policy maker and the military commander, if for no other reason than that time does not permit the normal process to function. Decisions must be made immediately. The potential usefulness of computers in these circumstances is obvious and it has been recognized.

Far less attention has been given to another potential use of computers to assist the analyst and policy maker in recognizing and assessing the importance of certain information in crisis situations. Because the live warning situation is unique and involves preparedness measures rarely if ever observed in normal circumstances, the community may suddenly be confronted with a number of developments and reports whose significance is not appreciated simply because they have never been seen before. In many cases, these are the true indications, the developments which distinguish real preparations for hostilities from exercises or which may mean that forces have been brought to an exceptionally high state of readiness, have been issued weapons which are never issued in peacetime, or have converted from a peacetime to a wartime organizational status or nomenclature.

All indicator lists and collection systems recognize this type of truly unique or exceptional preparation as extremely vital to warning. Many assets, in men and money, have been expended in an effort to acquire the enemy's classified military documents or other reliable evidence concerning such vital facts as who will control the release of nuclear weapons, where the alternate military command posts are, what the wartime designation and status of an administrative headquarters is to be, how civil defense

evacuation orders will be issued, where the chemical warfare stocks are located, and what happens when a unit is brought to "full combat readiness."

Yet, when the crisis occurs, all too often this critical basic intelligence, which is so vital to the interpretation of current reporting, is not readily available. It may have been reported only once or twice before, perhaps by a defector or in an obscure document long since relegated to the library or half-forgotten in some analyst's safe. To learn the significance of some seemingly simple fact, or the meaning or validity of a military term, may literally require a basic research effort for which the intelligence system and the policy maker do not have time to wait. When the Cuban missile crisis broke, and the first reports were received that some Soviet units were at "combat readiness number one," it is literally true that those responsible for US warning judgments were unable to find out through readily available channels whether this was the highest or lowest state of Soviet military readiness. Yet the information was available in Soviet documents and was brought to light--after the crisis was over.

This is not an isolated example; it is typical of what occurs in a crisis. It may be the first and only time in history that anyone has needed to know in a hurry whether reservists are normally called up suddenly at night or notified ahead by mail, what is the exact term in the enemy's language for a certain type of chemical shell, or whether the medical support unit of a division is to be raised from company to battalion strength in the event of mobilization.

The intelligence system has enough to do in a crisis situation that it should not also have to take time out to locate such essential basic information, or even to find

out whether the answer is available or not. Every effort should be made to insure that such vital basic material is readily available, can be located immediately, is not dependent on the memory or files of some analyst who may happen to be on leave, and that the information is the latest authoritative data regardless of classification. The last point may be very important, since some data of this type may be extremely classified and thus will not be brought forth in response to an inquiry through normal channels.

It would seem that computers, while not a panacea for this problem, might do much to cut down the time-consuming effort to locate essential basic data when extraordinary developments, particularly military developments, begin to occur. Simply stated, what the computer needs to have built in is the language of war. The computer which is to serve warning intelligence should be programmed not to handle the routine but the exceptional, to serve as a repository for the known facts and exact terminology about how the enemy will go to war. Examples, by no means intended to be exhaustive, of the types of information which the computer might store in its memory bank are:

- A glossary of the enemy's military terms (in the native tongue and in translation uniformly agreed on in the community) to include particularly terms for various types of alerts, stages of combat readiness, mobilization, nuclear or other special weapons.

- Lists of inactive or demobilized units, to include cover names and honorifics.

- Slang terms used by enemy troops for weapons, mobilization and the like.

- Terminology of any special wartime legislation; exact names of government or military organs or commands which may be activated only in wartime, together with description of their functions; wartime designations of administrative headquarters.

- Civil defense and medical terms.

- Locations of alternate or wartime military command posts or headquarters, alternate or auxiliary airfields, naval dispersal bases or areas, assembly areas for ground force units, civil defense headquarters, governmental evacuation sites, nuclear and chemical weapons storage areas.

- Possibly, political terminology or propaganda terms either used in past crises or wars, or which research has established as indicative of rising tensions.

It cannot be overemphasized that any information of the foregoing types which is computerized must be the result of the most exhaustive and careful research by the most qualified analysts, and that the community at its highest level must insure that compartmented data is considered as well as that which is readily available. If highly classified information serves to confirm that which is generally known, that is fine and there is no problem. If it can contribute more or if it contradicts information generally available, then it is essential that this be flagged in some way. Further, if such a computer effort is to be of use when it is needed, it must be periodically reviewed and updated by real experts in the field. An inadequate or inaccurate effort could be worse than nothing. This is no job for amateurs.

To insure the accuracy and quality of the data in any such computer system, its contents should probably be reviewed annually under the auspices and direction of the highest levels of the intelligence system. It should be given the same care and attention, and enjoy the same degree of authority, as a national estimate or the NIPP.

A HANDBOOK OF WARNING INTELLIGENCE

PART III: INTRODUCTION TO THE ANALYTICAL METHOD

CHAPTER 10: SOME FUNDAMENTALS OF INDICATIONS ANALYSIS

CHAPTER 10: SOME FUNDAMENTALS OF INDICATIONS ANALYSIS

Most of the remainder of this handbook is devoted, in one way or another, to some aspect of indications analysis. We will be considering both general and specific aspects of the analytical problem, both theory and precepts and how to tackle specific problems such as order of battle or logistics in an abnormal or crisis situation. And we will also be considering the end product of the analytical effort--the reaching of the assessment or warning judgment and its transmission to the policy maker.

Warning involves several stages or levels of activity within the intelligence community. In practice, these will overlap in some degree, but for descriptive purposes we may define them as follows:

a. The collection of the raw data--obviously a necessity.

b. The selection from the mass of incoming information of those pieces which appear to have some relevance to the enemy's course of action or intentions--the isolation of the indications or the potential or possible indications.

c. The evaluation of these indications, or assessment of their validity, meaning and significance, in so far as they relate to the establishment of the relevant facts pertinent to the problem (for example, do these reports and indications collectively provide evidence that mobilization is in progress?)

d. The assessment of the meaning of the relevant "facts" for the enemy's possible course of action--i.e., what does the totality of the available evidence indicate, or suggest, that he is likely to do?

e. The preparation of a paper or briefing for the policy maker or military commander conveying the assessment of the evidence--i.e., the issuance of the warning judgment.

Each of these steps may be critical, and normally no one of them can be ignored without some detriment to the warning judgment. While it is possible in rare cases to move directly from the collection to the judgment of intent, it is much more usual that the final warning judgment will be a product only of the most painstaking collation of indications, and evaluation and assessment of the factual information. Normally, before we can come to a judgment of what the facts mean, we must have been through a lengthy process of determining what the facts are. To slight any step in the process can be dangerous.

It may be observed that there is seemingly very little difference between this process of analysis and judgment and that in any other field of intelligence. Why study indications analysis? What's different about it?

Many would maintain that there is no difference and that indications analysis is a fancy name for what intelligence is doing all the time. Hence, anyone can do indications analysis, or at least any good analyst can.

Interestingly enough, the warning specialist would not differ greatly with this view. As a general rule, an exceptionally good analyst in another field will also make an excellent indications analyst. A good analytical mind is usually capable of doing more than one type of analysis well. Diligence, an aptitude for detailed research, imagination and objectivity are talents applicable to any number of fields in intelligence, as well as to warning.

The difference between warning analysis and other intelligence analysis is largely one of degree or, one might say, of intensity. The analytical factors and techniques most useful or essential for warning also are required in varying degrees in other fields of intelligence analysis. Nonetheless, the analytical problems of warning, if not unique individually, pose a complexity of difficulties in combination which are certainly exceptional and would seem to warrant some special consideration.

Let us examine first some of the fundamentals of indications research which analysts, their supervisors and higher level officials as well should understand.

Recognition of the Inadequacy of our Knowledge

Warning analysis must begin with a realistic understanding of how much--or more accurately, how little--we know about what is going on in the areas of the world controlled by our enemies or potential enemies on a current day-to-day basis. Large numbers of people, in fact probably most people who are not actively engaged in collection or research on these areas, often have quite distorted ideas about what we know about the situation right now or what our current collection capabilities really are.

For the most part, people with a superficial rather than a detailed knowledge will tend to believe that we know more about the current situation than we really do. This tendency to exaggerate our current knowledge or collection capabilities is the product of several factors. Most important perhaps is that our overall, long-term, basic intelligence on our adversaries is often quite good, or even excellent. We may really know a good deal about the Chinese transportation system, the locations and

strengths of Soviet units, military production in Poland and innumerable other subjects all pertinent in some degree to the capabilities and intentions of the nations concerned. What the inexperienced observer may not realize is how long it has taken to obtain such information, or that our knowledge is the product of literally years of painstaking collection and meticulous analysis. He may not understand that our best information (for example that from a high-class defector or clandestinely acquired documents) may be months or even years old before we obtain it; and that it is rare that information of such quality is available on a current basis.

It cannot be denied also that the managers of certain collection systems may tend to create the impression that they really know far more--or have reported far more--on a current situation than is actually the case. Post mortems and retrospective analyses are notorious vehicles for setting forth all sorts of detailed military facts and interpretations as if all this had really been available and in the hands of the intelligence users at the time the event occurred. Such self-serving reporting may be useful for budgetary purposes (indeed, this may be the most frequent reason for this type of distorted reporting) but it does a real disservice to the rest of the intelligence community. Small wonder that outside investigators (and congressional committees) may have an altogether erroneous impression of our current collection capabilities--and thus may tend to blame the analytical process for errors which were only in part its fault.

Some finished reporting of intelligence agencies also contributes to the impression that our knowledge is more current than is actually the case. Order of battle summaries will "accept" the existence or move of a unit months or sometimes

even years after it has occurred--but often without mentioning the actual date of the event. Similar time lags in the acquisition and reporting of other important basic data may be well understood by the analysts immediately concerned but not by most readers.

Another, and somewhat more subtle, factor is that the intelligence community from day to day is expected to make judgments about the current situation (including the state of military preparedness or combat readiness) in a variety of countries which habitually conceal or attempt to conceal from us nearly all strategic information. Nonetheless, the intelligence process--looking at the overall situation insofar as it can perceive it and seeing nothing obviously abnormal--concludes that the situation is generally normal, or routine, or that all forces are in their usual locations and in a relatively low state of combat readiness. In fact, such judgments if made on a daily or weekly basis may be based on the most superficial knowledge of what is actually happening at the time and can be quite erroneous. However, the chances are high that such judgments are right--but this will not necessarily be because we know what is happening but rather because about 95 per cent of the time things really are pretty normal. Thus, even if no current information were being received, the odds are that the statement would be correct. The impression nonetheless is left, probably in the minds of most readers, that these judgments are the product of considerable evidence. And if we know when things are "normal," then clearly we should also know when something is "abnormal."

Now, there are some types of developments--both military and political--which we have a fair chance of detecting on a current basis in many countries and

which, if they occur, can often be regarded as abnormal. In the case of military activities, these will most often be developments, particularly movements, which occur in the forward areas or near the borders where our detection capabilities are usually the best. Certain very obvious political anomalies--such as cancellations of planned trips by the leadership, or extraordinary diplomatic or propaganda developments--also can often be described as abnormal even though their purpose may not be clear. But these obvious developments may be only the smallest fraction of what is really going on, and the activity could well include the initial preparations for future hostile actions--which could be totally concealed.

What we observe from day to day of what goes on in the Communist world--even in those areas in which our collection and basic intelligence is the best--is actually something less than the tip of the iceberg. Disasters--natural and man-made--insurrections, major internal struggles even including the ouster of key officials, mobilization of thousands of men, and a host of other military preparations have been successfully concealed from us and almost certainly will be again. The capabilities of our enemies for concealment are probably fully appreciated or recognized only by a relatively small percentage of those associated with, or dependent upon, the intelligence process. It may take a really surprise hostile action by our adversaries right under our noses for us to realize that fact. But the intelligence system has been burned often enough, and in relatively recent years at that, not to have learned this lesson.

The spectacular aspects of the Cuban missile crisis and the delay in detection of the strategic missiles in Cuba have tended to overshadow the important question of

what was going on in the Soviet Union in the spring and summer of 1962 as the USSR was making its preparations for the deployment of the missiles and the accompanying military forces to Cuba. We tend to overlook the fact that our appreciation of what was happening was almost entirely dependent on what we observed on the high seas and in Cuba, and that even today we have only the most limited understanding of the steps which were taken in the Soviet Union itself. A minimum of 20,000 combat troops (and quite probably more) were moved from unknown points in the USSR to Cuba, together with the equipment for entire SAM battalions and MRBM regiments, as well as tanks, short-range missiles and quantities of air, naval and electronic equipment--all without a discernible ripple in the USSR itself. Thousands of troops staged through the Baltic port of Kaliningrad, less than 25 miles from the Polish border, without a rumor of the movement ever reaching the West. Only the fact that this small expeditionary force was then moved by ship permitted us to recognize that anything unusual was under way. Although even by Soviet standards this was perhaps an extraordinary accomplishment in security, it nonetheless should serve as a constant reminder of how little we may know.

A second example of a very well concealed move was the closure of the Berlin sector borders in the early morning hours of 13 August 1961.* The warning analyst who often complains that the available indications were overlooked or not appreciated is hard put to find the evidence which was ignored in this case. In fact,

* Contrary to widespread popular opinion, the Berlin wall was not constructed that night; it was not even begun until about 10 days later. The sector borders were initially closed by road blocks, barbed wire and troops.

the available indications were carefully analyzed and did not in themselves support a likelihood that the Soviets and East Germans would move to close the sector borders. Such evidence as was available tended rather to indicate that they would seek to cut down the enormous flow of refugees to the West by closing the zonal borders (i.e., access to Berlin from East Germany itself), a less drastic but also less effective move which would not have violated the four-power agreements on the status of Berlin. The preparations for the closure of the sector borders were actually carried out almost under the eyes of Western patrols and yet achieved almost total surprise. This success was the more remarkable in that our collection capabilities in East Berlin and through it into East Germany were then considered unusually good--and superior to those in any other area of the Communist world. At all levels, the community suffered from a misplaced confidence that this collection would give us insight into what the Communists were most likely to do--that there would be a leak of some kind as to their plans.

The lessons which the analyst should derive from such experience are at least two:

a. The observed anomalies--those which are apparent--will likely be only a small fraction of the total, and it must be presumed that far more is under way than is discernible to us; and

b. Even in areas or circumstances where collection is very good and we may have much information, our seeming knowledge may be deceptive and the enemy may be capable of far greater concealment than we would normally expect.

Years ago, it was fashionable to have signs hanging in intelligence shops which

read, "Do not reason beyond your data." One is happy to note that they have long since disappeared. The intelligence analyst--and above all the warning analyst--must recognize that his data almost certainly will be inadequate. He must be capable of drawing reasonable inferences from that which he does know about that which he does not know.

The Presumption of Surprise

Closely related to the recognition of the inadequacy of our knowledge, and fundamental to the indications method, is the presumption that the enemy usually will attempt to surprise us. If he cannot or does not attempt to conceal completely what he is getting ready to do, he will at least attempt to deceive us on some aspects of his plans and preparations.

It follows that the warning analyst must be inherently skeptical, if not downright suspicious, of what the enemy or potential enemy may be up to from day to day--whether or not there is any great cause at the moment to be particularly worried about his intentions. The indications analyst will examine each piece of unusual information or report for the possibility that it may be a prelude to hostile action or some other surprise move, even though the situation at the moment gives no special cause for alarm. He will not discard information of potential warning significance until he can be sure, or at least reasonably sure, that it is erroneous or that there is some really satisfactory "other explanation" for the anomaly. He will not accept the most reassuring (or least worrisome) explanation for some unusual development which could prove to be ominous. He will endeavor consciously to go through this analytical process and to maintain his alertness for unexplained anomalies--and he will hold on to

those fragments of information which are potentially of indications significance.

This approach is thus somewhat different--in some cases markedly different--from that of the current or basic analyst, or even from that of the estimator, though all are using the same basic information. It is the function of the warning or indications analyst to be alert for the possibility --however remote it may seem now--that the enemy has begun preparations for hostile action. At least in theory, the indications analyst will be running ahead of the rest of the analytical community in his perception of this possibility. It is his function, if the system operates as it should, to be continually raising questions concerning the enemy's possible motives, to be reminding others of pieces of information which they may have overlooked, to be urging more collection on items of possible warning significance. He is the devil's advocate, the thorn in the side of the rest of the community. This method is sometimes also described as assuming "the worst case."

There has been much misunderstanding about this, and many have derided indications analysts for their presumed proclivity for crying "wolf! wolf!" Warning intelligence is held in ill repute by some--often those with the least contact with it--because they assume that indications analysts are continually putting forth the most alarmist interpretations, in part to justify their existence or because that is what they feel they must do in order to earn their pay. Thus the indications analyst proposes, but fortunately wiser heads prevail and the current intelligence or estimative process disposes and puts those scaremongers in their place.

It is necessary emphatically to dispel the idea that the perceptive and experienced warning analyst is continually rushing to his superiors with the most alarmist

interpretations or is an irrational and undependable character. No responsible indications analyst takes the "worst possible" view of every low-grade rumor or is continually searching for the worst possible explanation of every anomaly. Rarely if ever will he regard a single report or indication as a cause for alerting the community. To maintain an open and skeptical mind and to be diligent and imaginative in the collection and analysis of evidence against the possibility of the unexpected does not require that one go off half-cocked.

Indeed, experience has shown that qualified warning analysts, well-versed in their facts, often have been able to play the opposite role--they have sometimes been able to dampen down potential flaps engendered by a few alarmist rumors or unconfirmed reports, particularly when the international situation is tense or a general crisis atmosphere prevails. One product of the diligent collection of facts is that the analyst is able to make a reasoned and hopefully more objective analysis than he would otherwise be able to do.

The Scope of Relevant Information

As a product of the diligent collection of facts, and possible facts, the indications analyst hopefully should be able to assemble and analyze all the available information which may bear on the problem and not just that received most recently or that which is most apparent or readily acceptable. Warning intelligence must deal not only with that which is obvious but with that which is obscure. It must consider all the information which may be relevant to the problem at hand. If one accepts the premise of surprise, it will follow that what the enemy is preparing to do will not necessarily be that which is most obvious or seemingly plausible.

We have earlier (in Chapter 3) discussed the importance for warning of the exhaustive research effort and the requirement that the analyst have available the basic raw data. Again, the importance of this can hardly be overemphasized. We have also (in Chapter 8) discussed the preparation of chronologies as a method whereby the analyst can assemble in readily usable form a variety of reports and fragments of information which may relate to the problem even though their relevance cannot yet be positively established.

These tools of analysis are invaluable; they cannot be dispensed with. They permit the analyst--assuming that the system has functioned as it should and that he really has at hand all or nearly all the potentially relevant data--to begin to fit his pieces of information together into some meaningful pattern, to check out various hypotheses against the available data. But these tools will not, in and of themselves, solve the problem of relevancy. They will assist the analyst to think and to prepare an argument which may be convincing to others, but rarely will such techniques provide "proof" that a given piece of information is pertinent or is something which should be considered in reaching an assessment of the enemy's intent. In the end, the question of what is relevant and what is not is a problem for human judgment.

It is a characteristic of impending crises or of periods of great national decisions and extraordinary preparations that there are likely to be a large number of unusual developments and often a still larger number of unconfirmed, unexplained and otherwise puzzling reports or rumors. Some of these will be true but unimportant. Some will be false but--had they been true--potentially important. Some will

be true, or partly true, and very important. But a lot of these reports simply cannot be determined with any certainty to be either important or unimportant. It cannot be demonstrated with any certitude whether they are or are not relevant. And, interestingly enough, this may never be established. Time will neither prove nor disprove the relevance of some information. Which is one reason that postmortems, even with all the benefit of 20-20 hindsight, often do not reach agreements either.

The problem of what facts, what known occurrences, what reported developments, which rumors, and how much of what is happening in general are actually pertinent to what the enemy may be getting ready to do is one of the most difficult problems for warning intelligence. It is probably safe to say that no two people are likely to reach complete agreement on what is relevant in any really complicated situation. One of the most frequent criticisms levied against the indications method is that it tends to see all unusual or unexplained developments not only as potentially ominous but also as related to one another. This same criticism is often made against chronologies on the grounds that they tend to pull together a lot of developments or reports simply because they occurred at the same time when there is actually no demonstrable causal relationship between them. Obviously, such criticisms can have much validity if in fact the indications analyst has been tossing in everything but the kitchen sink in an effort to demonstrate ominous connections between a variety of reports and developments of uncertain validity and/or significance.

Nonetheless, in justice to the indications method, it must also be said that in retrospect--when the crisis is over--more rather than less information is nearly

always judged to have been relevant than was appreciated by most people at the time. The imaginative rather than restricted or literal approach has almost invariably proved to be the correct one. The ability to perceive connections, or at least possible connections, between events and reports which on the surface may not seem to be directly related is a very important ingredient in the warning process, and one which has probably been given too little attention. The formal process of intelligence and the emphasis on coordination and "agreed positions" have tended increasingly to suppress the independent and often more imaginative analysis. "Think pieces" and speculative analyses need to be encouraged rather than discouraged. Information which may be relevant to the problem, whether or not it can be "proved" to be, must be considered in coming to warning assessments. It was the inability to see the relevance and interconnections of events in the Soviet Union, Germany and Cuba which contributed in large part to our slowness to perceive that the USSR was preparing for a great strategic adventure in the summer of 1962.

When we are attempting to assess what may and may not be relevant in a given situation, it may be well to be guided by an important and usually valid precept. As a general rule, the greater the military venture on which any nation is preparing to embark, and the greater the risks, the more important the outcome, the more crucial the decisions--the wider the ramifications are likely to be. And the wider the ramifications, the more likely it is that we will see anomalies in widely varying fields of activity as the nation prepares for the great impending showdown. In these circumstances, many seemingly unrelated things really do have relevance to the situation--if not directly, then indirectly. They are part of an atmosphere; they

contribute to the sense of unease that things just are not right or normal, and that something big is brewing. To discard a series of such fragments as irrelevant or unrelated is to lose that atmosphere. The intelligence system will usually come out ahead if it is prepared in these circumstances to consider as relevant a broader field of information than it might in other circumstances. It will be better prepared to accept the great dramatic impending event if it has already perceived a series of anomalies as possibly relevant to such a development. In the words of Louis Pasteur, "Chance favors the prepared mind."

Objectivity and Realism

No factor is more important for warning than objectivity in the analysis of the data and a realistic appreciation of the situation as it actually is. The ability to be objective, to set aside one's own preconceptions of what the enemy ought to do or how he should behave, to look at all the evidence as realistically as possible--these are crucial to indications analysis and the ultimate issuance of the warning judgment at every stage of the process. The greater experience any individual has in the warning field the more likely he is to believe that objectivity, and the accompanying ability to look at the situation as the other fellow sees it, is the single most crucial factor in warning. There have been too many warning failures which seemed attributable above all to the failure of people--both individually and collectively--to examine their evidence realistically and to draw conclusions from it rather than from their subjective feelings about the situation.

One of the foremost authorities on warning in the US Government, when told by this writer that she was planning this book, said, "So what have you got to

write about? It is the same thing every time. People just will not believe their indications."

The rejection of evidence incompatible with one's own hypotheses or preconceptions, the refusal to accept or to believe that which is unpleasant or disturbing or which might upset one's superiors--these are far more common failings than most people suspect. One of the most frequent--and maddening--obstacles which the warning analyst is likely to encounter is the individual who says, "Yes, I know you have all these indications, but I just do not believe he'll do that." Korea, 1950; Suez, 1956; Hungary, 1956; Czechoslovakia, 1968. In none of these cases did we lack indications--in some of them, there was a wealth of positive indications--it was that too many people could not or would not believe them.

Now, the reaction of most people to the mere suggestion that they may not be thinking objectively is one of high indignation--it is an insult both to their intelligence and their character to imply such a thing. Of course, they are thinking objectively; it's you or the other fellow who is not, or it is you who are leaping to conclusions on the basis of wholly inadequate evidence while they are maintaining an open mind. In these circumstances, the atmosphere often becomes highly charged emotionally. Positions tend to harden, and with each side taking a more adamant position, reconciliation of views becomes less likely, and objectivity more difficult to obtain.

One of the first things which we all must recognize if we are to make progress in the warning business is that nobody achieves total objectivity. We are all influenced in some degree by our preconceptions, our beliefs, our education, early

training, and a variety of other factors in our experience. Some people--and for reasons yet to be fully understood--are capable of more objectivity than other people. Or, perhaps more accurately, they are capable of more objectivity on some subjects which other people find it difficult to be objective about. But no one is perfect.

We must also recognize that the ability to think objectively is not necessarily correlated with high intelligence, and that objectivity in one field may not necessarily carry over into other fields. The history of both religion and of politics provides ample illustrations of men of great intellectual achievements who were nonetheless totally biased and dogmatic in their outlook. Cases can be cited also of brilliant scientists--presumably capable of very objective analysis in their fields of specialization--who have seemed almost unbelievably naive or unrealistic when they have attempted to engage in other pursuits. Whole communities and even nations (Salem, Massachusetts, and Nazi Germany) have been victims of mass hysteria or guilty of such irrational conduct that it is difficult for the outsider to comprehend it at all. None of us is immune. We are all emotional as well as rational.

It is important, both for the analyst and the intelligence community as a whole, to recognize and face this problem. It should not be a forbidden subject or no progress will be made. The rules of the game generally have precluded challenging a colleague publicly, and certainly not one's superiors, as to why they will not accept certain evidence or why they think as they do. Yet this may be the most crucial factor in their assessment. It would help greatly in such cases if people could be induced to explain their thought processes as best they can, or what is really behind

the way they feel. The mere process of discussing the subject, dispassionately one would hope, may help them to see that they are not really assessing the evidence on its merits, but evaluating it in the light of their preconceptions. Still better, other listeners less involved in the problem may perceive where the difficulty lies.

For years, experienced indications analysts have maintained, and not facetiously, that warning was a problem for psychologists. What happens to some people that they cannot examine the evidence with greater objectivity, that they will consistently reject indications which seem self-evident to another analyst? Why will one analyst view certain information as tremendously important to the problem and another tend to downplay it as of not much importance or discard it altogether? How can there be such a wide divergence of views on the same information--not little differences, but 180 degree differences?

These feelings that psychological, rather than strictly intellectual, factors are involved in warning have recently had support from the academic community. A number of studies by social scientists have inquired into the formation and nature of individual and group beliefs and their relationship to national decision-making. Some conclusions which have emerged from these studies are that:

- Individuals do not perceive and evaluate all new information objectively; they may instead fit it into a previously held theory or conceptual pattern, or they may reject the information entirely as "not relevant."

- If the individual has already ruled out the possibility of an event occurring, or considers it highly unlikely, he will tend also to ignore or reject the incoming data which may contradict that conclusion.

- A very great deal of unambiguous evidence is required to overcome such prejudgments or to get the analyst to reverse his position even to the point of admitting that the event is possible, let alone probable.

- If the individual is unable to assimilate this contradictory information into his existing frame of reference or cannot be brought to modify his opinion, the extreme result may be a closed-mind concept of the situation with a high emotional content.*

All of the foregoing reactions have been observed in warning situations. It is unquestionably true that this is precisely what has happened in more than one crisis, to the detriment of the issuance of warning.

To recognize that a problem exists at all is the first step toward attempting to solve it. If we can accept that objectivity is a real and very serious problem in warning situations, and that lack of objectivity can affect the Chiefs as well as the Indians, we may begin to cope with it. If this handbook does nothing more than to teach this precept, it will have served its purpose. In fact, much of the rest of this treatise is designed to help the analyst, his supervisor and the policy official as well to analyze, evaluate and come to judgments that are more objective and hence more accurate.

The Need to Reach Conclusions NOW

The problems of indications analysis, which at best are complex, are

* A very good, brief summary of these studies was contained in an article by Loren R. Larson entitled "Objectivity in Intelligence," published in the DIAAP Journal of Intelligence, January 1970.

immeasurably compounded by the requirement to reach conclusions or judgments long before all the evidence is available or can be adequately checked, evaluated or analyzed. The warning analyst usually does not have the luxury of time, of further collection and analysis, of deferring his judgment "until all the evidence is in." In many ways, he must act in defiance of all that he has ever been taught about careful research--to be thorough, to wait until he has looked at everything available before making up his mind, to check and recheck, to take his time, to come to the "definitive" rather than the hasty judgment. The more extensive his academic training, the more he may be dedicated to these principles or habits, and the more difficult it may be for him to revise his methods when confronted with the real life of current or indications intelligence. Some analysts are never able to make this adjustment. They may make good analysts on some long-term aspects of basic intelligence, but they should not be assigned to the indications field.

The requirements of warning analysis--for both the individual and the system as a whole--in fact may seem to present almost irreconcilable contradictions. The analyst and the community are confronted with the requirement to come to a positive judgment on the elusive and complex problem of the actual intentions or impending course of action of an enemy nation, which may be attempting by all means at its command to conceal that intention or course of action. And, lest it be too late tomorrow to do so, the analyst must come to some judgment today even though the evidence is clearly inadequate, highly conflicting, and the relevance of some of it (even if its reliability could be established) unknown or subject to differing

interpretation. If it is not too late tomorrow to issue the warning, there will likely be more information at hand--but this in turn may not necessarily clarify the situation or permit a firmer judgment. It may only serve to introduce new factors or considerations and further compound the doubt and confusion. On the other hand, it could lead to a markedly different conclusion, either positive or negative, from the day before. The situation probably is indeed highly fluid.

The reluctance of people, both as individuals and as members of a group, to come to positive judgments in such situations can well be understood. It is not just a concern that a judgment reached today may be refuted tomorrow, nor can it be ascribed just to timidity and fear of being wrong--a matter addressed at greater length in Part VIII (Reaching and Reporting the Warning Judgment). The analyst, despite every effort to be objective, may be genuinely uncertain and confused as to what the available evidence means. He really may not know what to think in the face of information so conflicting, tenuous, and elusive. Further, his opinions may be subject to marked fluctuations almost from hour to hour as more information becomes available.

The tenuousness of it all, the uncertainties, the doubts, the contradictions are characteristics of every true warning problem. Only in retrospect can the relevance, meaning and reliability of some information ever be established, and some of it (often a surprising amount) is never established. In retrospect, however, much of the uncertainty is either forgotten, or it seems to disappear. Even those who actively worked the problem tend, after the event, to think that they saw things more clearly than they really did at the time. And outsiders--including those assigned to do

critiques of what went wrong or to investigate the intelligence "failure"--can never truly see how complex and difficult the problem was at the time.

It is simply impossible (and the word is deliberately selected here) to recover in retrospect all the thought processes of those who participated in the analysis and assessment in a true warning crisis. The situation can never truly be reconstructed or relived. Post-mortem reexaminations of the information which was at hand, particularly if done in great detail from the original source material and administrative logs, can help, but they cannot really recapture the atmosphere. Only if everyone associated with the problem kept a completely honest diary, almost hour by hour, could the intellectual and emotional experience be fully recovered. This has been done in part, however, for some crises. The student of warning is referred in particular to some of the published history of the Cuban missile crisis which at least gives some sense of the tremendous uncertainties which plagued both the intelligence and policy levels of the government.

Some appreciation of how it really is in a crisis--however inadequately it has here been described--may help to give the analyst new to the business a little more confidence in himself. The fact is that if you are doing a good job you will have some doubts and uncertainties. No one who has tried to look objectively at all the available evidence can come to judgments with full certainty--there is bound to be some doubt, if only about those things you do not know.

Excessive certainty (or seeming certainty) in these circumstances is likely the mark of the closed mind--of those who will not examine the evidence objectively lest it upset their already preconceived hypotheses.

If the analyst has doubts and uncertainties, that's normal. If he is nonetheless willing to come to a judgment as best he can, to put his money on one probability or another, he probably has some aptitude for warning analysis. If he cannot do this--if he must forever "reserve his position"--he would better be assigned to some other field of endeavor.

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PART III: INTRODUCTION TO THE ANALYTICAL METHOD

CHAPTER 11: SOME SPECIFICS OF THE ANALYTICAL METHOD

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Inference, Induction and Deduction

As should be evident from the discussion this far, the analysis of indications and the reaching of the warning judgment almost always will be a process of inference. Also, it will in large part be the result of inductive rather than deductive reasoning. Or, to simplify what is a very complex problem, the warning judgment will be derived from: a series of "facts" or more accurately what people think are the facts, the inferences or judgments which may be drawn from these conceptions of the facts, to a final conclusion or series of conclusions which will be expressed as probabilities rather than absolutes. The process is highly subjective; neither the inferences nor the final conclusion follow necessarily from the facts and are therefore not provable, and, as a result, individuals will vary widely in their willingness to reach either specific inferences or general conclusions.

This is not a chapter in the nature of logic, and for our uncomplicated purposes we may use the relatively simple dictionary (Webster's) definitions:

Inference: the act of passing from one or more propositions, statements or judgments considered as true, to another the truth of which is believed to follow from that of the former;

Induction: reasoning from a part to a whole, from particulars to generals, or from the individual to the universal;

Deduction: reasoning from the general to the particular, or from the universal to the individual, from given premises to their necessary conclusion.

From the nature of the evidence which will be available to the warning analyst, he will normally have no choice in the warning situation. He must proceed from fragments of information and from particulars to general conclusions, and he will not have given premises which will lead logically or necessarily to certain conclusions. He must normally come to his judgments -- both as to the facts in the case and their meaning -- on the basis of very incomplete information, on a mere sampling of the "facts," and often without knowing whether he even has a sampling of some of the potentially most important data. Unlike the scientist who can select his cases and who will usually be able to judge whether he has a "statistically significant" sampling, the indications analyst must work with the samples or crumbs which fall his way and which may or may not be representative of a broader trend. Nonetheless, he must do the best which he can with the data at hand since, as we have noted, time may not be on his side.

The problem of how much evidence is necessary in order to come to certain inferences or to some type of generalized conslusions is peculiarly applicable to certain types of military information -- above all, to order of battle and mobilization -- and these problems are discussed in greater detail in the next major section (Specific Problems of Military Analysis). For purposes of illustration, however, we will note here that there is a fundamental difference in analytical approach between the conventional order of battle method and the indications method.

The normal order of battle approach to assessing the strength and locations of enemy forces is to examine each unit individually. Ideally, the order of battle analyst seeks the total sample before he wishes to make a judgment on total strength.

He usually requires positive evidence for each individual unit before he is willing to make a judgment (to "accept") that the unit has been reequipped with more modern tanks or higher performance aircraft, or that it has been mobilized with additional men and equipment to bring it to wartime strength. The conventional military analyst normally will be extremely reluctant to accept that any new military units exist or are in process of formation until he has positively located them and identified them -- until they meet some type of order of battle criteria. This is likely to be the case even if there is a great deal of other information to indicate that a major mobilization of manpower is in fact in process. The same general precepts apply to movements of units. It is not enough that there are numerous reports of movements of ground units and aircraft; what the order of battle analyst wants is evidence that this or that specific unit has moved. His method is thus essentially restrictive rather than expansive. He will not normally conclude that more units have moved than he can identify, or that several units have been mobilized because he has evidence that one or two have.

The indications analyst, on the other hand, must consider that what he sees or can prove may be only a fragment of the whole and that he may have to come to more general conclusions about what the enemy is doing from his sampling of the evidence. If available information -- unspecific though it may be -- suggests that large-scale callups of men to the armed forces are in progress and if some units which he can observe are known to be mobilizing, the indications analyst will consider it a good chance, if not certain, that other units also are being mobilized. If one unit in the crisis area has issued the basic load of ammunition, it will be

likely that others have. If some units are known to be deploying toward the front or crisis area but the status of others is unknown, the indications analyst will be inclined to give greater weight to the possibility that additional units are deploying than will the order of battle analyst. At least he will consider that what is provable is probably the minimum that is occurring, rather than the maximum.

The warning analyst does not take this approach because he wants to draw broad judgments from inadequate data or because he is inherently rash and likes to jump to conclusions. He takes this attitude because this is the nature of warning problems. In times of crisis, the more leisurely and conventional analysis may be a luxury which we cannot afford. Much as we might wish to have all the data before we draw our conclusions, we may have to make general judgments based on only a sampling of the potentially available data, or whatever we can get. How great a sampling is needed before a general conclusion can be drawn will vary with the circumstances and is likely in any case to be a hotly debated subject between warning analysts and more conventional military analysts. The point here is that the principle of inductive (or more expansive or generalized) analysis must be recognized as valid in these circumstances, even though judgments will necessarily be tentative and subject to some margin of error. Historically, as we have noted in Chapter 5, intelligence has usually underestimated the scale of mobilization and troop deployment in a crisis situation.

The problems of reaching general judgments from limited data are of course applicable to other types of information which are received in a potentially critical situation. Even assessments of the meaning and significance of political information

or propaganda trends must be based on a sampling of what is actually occurring and are essentially inferential or inductive in nature. Because so much political planning and preparation may be concealed, however, and because other political evidence may be so ambiguous or uncertain, political analysis in a crisis situation may be even more complex and subjective than the ascertainment of the military facts.

The Acceptance of New Data

It is a phenomenon of intelligence, as of many other fields of investigation and analysis, that the appearance of new types of information or data of a kind not normally received poses difficult problems -- and that the reaction is likely to be extremely conservative. This conservatism, or slowness to accept or even to deal with new information, is a product of several factors. One is simply a basic tenet of good research -- that judgment should be withheld in such cases until sufficient unambiguous data are available that we can be sure of the meaning and significance of the information. A related factor often is that there is no accepted methodology for dealing with new types of information; since it is new, the analyst is not sure how to tackle it analytically, and he wants more time to think about it and to confer with other analysts. Still another and often very important factor may be that the intelligence organization is not prepared to handle this type of information or analysis; there is no one assigned to this type of problem, so that it tends to be set aside or its existence may not even be recognized. And finally, there is an inherent great reluctance on the part of many individuals and probably most bureaucratic organizations to stick their necks out on problems which are new,

controversial, and above all which could be bad news for higher officials and the policy maker.

The effect of these factors and possibly others, individually and collectively, can be to retard the analysis and acceptance of data in the intelligence system by weeks, months and sometimes even years. Few people outside the analytical level have probably ever recognized this, but examples can be cited of delays in the analysis and reporting of data which seem almost incomprehensible in retrospect. Even individuals normally extremely perceptive and imaginative seem to have lapses in which they are unable to perceive that something new is occurring or that things have changed. They may be reluctant to accept evidence which in other circumstances -- particularly when there is adequate precedent -- they would accept without question.

Lest the writer be accused of exaggerating all this, a few examples may be in order.

A very intelligent and sophisticated supervisor of political intelligence on the Soviet Union resisted for weeks (and finally took a footnote in opposition to) a judgment that the USSR was preparing in the mid-1950's to export arms to the Middle East. His reason -- although the evidence was almost overwhelming and no one would question it today -- was that the USSR had never exported armaments outside the Communist world, and therefore never would.

Numerous examples could be cited of delays in the acceptance of information on troop movements, other order of battle changes and mobilization, which were attributable to the fact that the evidence was new rather than insufficient by

criteria later adopted. Since the order of battle problem is dealt with in greater detail in Part IV, two instances from the Vietnam war may suffice here.

- It required ten months for order of battle to accept the presence in South Vietnam of the first two North Vietnamese regiments which arrived there in the winter of 1964-1965 (one other which arrived slightly later in February was, however, accepted in July). With the acceptance at the same time of several other regiments which had arrived in 1965, and with it the acceptance of the fact that North Vietnam was deploying integral regiments to South Vietnam, the time lag between arrival and acceptance thereafter rarely exceeded two months and was often less.

- North Vietnam began an expansion of its armed forces in 1964 and conducted a major expansion and mobilization in 1965. Much of the evidence for this mobilization was derived from public statements and other indirect evidence of large-scale callups to the armed forces, rather than from conventional order of battle information. (Confirmation by order of battle ran months and in some cases years behind what could be deduced from what Hanoi was saying about its mobilization effort.) Just why there was so much reluctance to accept Hanoi's transparent statements that thousands (sometimes tens of thousands) of men were required to fight at "the front" (i.e., in South Vietnam) was then and is now very difficult to understand. Overreliance on OB methodology and mistaken notions that anything said by the enemy should be dismissed as "propaganda" no doubt contributed. In time, however, the value of Hanoi's press and radio comments came to be recognized.

A few years later, public statements that callups to the armed forces were being increased were routinely accepted as evidence that this was in fact under way, whereas much larger volumes of similar evidence were not considered acceptable in 1965-66. (See more detailed discussion of the North Vietnamese mobilization problem in Chapter 15.)

These examples are cited for purposes of illustration only. Many other instances, some probably more serious, could undoubtedly be found from the annals of warfare. The fact is that the reluctance to cope with or accept new types of data is a very serious problem for warning intelligence, and one to which supervisors in particular should be constantly alert. A review of draft indications items, when compared with what was finally accepted for publication, will consistently show that indications analysis tends to run ahead (sometimes weeks ahead) of what is usually acceptable to the community as a whole, particularly on new intelligence. One is happy to note, however, that this gap appears to be narrowing -- which may reflect somewhat greater willingness to use indications methodology and new types of data than was once the case.

Together with the need for objectivity, the ability to perceive that change has occurred and that new information must be considered even though it may not yet be fully "provable" is a fundamental requirement for successful warning analysis. In warning, delay can be fatal. Both the analyst and the system as a whole must be receptive to change and the acceptance of that which is new.

Interestingly enough, experience suggests that experts in their fields are not necessarily the most likely to recognize and accept changes or new types of data. The greatest resistance to the idea that Communist China would intervene in Korea

in 1950 came from "old China hands," and by and large it was Soviet experts who were the most unwilling to believe that the Soviet Union would put strategic missiles in Cuba. There seems to be something to the concept that experts tend to become enamored of their traditional views and, despite their expertise, are less willing to change their positions than those who are less involved with the matter. One student of this subject has concluded that scholars who study the Soviet Union using a theoretical model are less likely to see evidence for change than if they had no model. He concludes:

"It is no accident...[that] American journalists and casual observers are more likely to see change in the Soviet Union...than are the so-called 'Soviet experts'.... We must entertain seriously the...possibility that the 'expert' tends to defend his own theoretical position by virtue of the selective interpretation of ambiguous data." [1]

Understanding How the Enemy Thinks

This heading may be a bit misleading. No one can aspire to total understanding of how someone else, and particularly the leadership of another and hostile nation, actually thinks. A sophisticated student of the Soviet Union (the remark is attributed to Chip Bohlen) once observed that his favorite last words were: "Liquor doesn't affect me," and "I understand the Russians." To which the warning

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[1] Raymond A. Bauer, "Problems of Perception and the Relations Between the United States and the Soviet Union," Journal of Conflict Resolution, Vol. V, No. 3, September 1961, p. 227.

analyst should add a fervent, "I understand the Chinese."

The path to understanding the objectives, rationale, and decision-making processes of foreign powers clearly is fraught with peril. Nonetheless, it is important to try. The analyst, the intelligence system and the policy maker or military planner may have to make a conscientious and imaginative effort to see the problem or situation from the other side's point of view. Fantastic errors in judgment, and the most calamitous misassessments of what the enemy was up to have been attributable to such a lack of perception or understanding. An examination of such errors in perception -- both by individuals and groups -- which have been made over a period of years in warning situations indicates that this is a problem to which we must be particularly alert.

The ability to perceive, or to attempt to perceive, what others are thinking may be the mark of an expert in more than one field. A prominent bridge columnist has observed that an important attribute of the expert bridge player is his "faculty of being able to capitalize on his knowledge of what the opponents are thinking. That is, he views some specific situation not only through his own eyes and mind, but also through the eyes and minds of his opponents." This ability does not seem to come easily to some people -- even when the opponent is making no particular effort to conceal how he feels about the matter, and indeed may be making it quite obvious. Why did so many analysts -- after months of evidence that the Soviet Union was determined to maintain its political hold on Czechoslovakia and in the face of a massive military buildup -- nonetheless bring themselves to believe that the Soviet Union would not invade? One can only conclude that they had not really

tried to understand how the USSR felt about it, how important the control of Eastern Europe was to Soviet leaders, and that these analysts had somehow deceived themselves into believing that a detente with the US was more important to the USSR than its hegemony in Europe and the preservation of the Warsaw Pact.

The root causes of such lack of perception -- whether it be an inability or unwillingness to look at it from the other fellow's standpoint -- are probably complex. Individual, group and national attitudes or images are involved as well as relatively more simple questions such as how much education the analyst has on the subject, how many facts he has examined, and how much imagination he has. The problem of objectivity and realism obviously is closely related; misconceptions, based on subjective judgments of how the other nation ought to behave rather than objective assessments based on how it is behaving, have much to do with this problem.

While one hesitates to suggest that there may be certain national characteristics of Americans which tend to inhibit our understanding of what our adversaries may be planning, one is struck by two prevailing attitudes:

Perhaps because of our historic isolation, prosperity and democracy, Americans traditionally have been optimistic, and often unduly so, about world affairs. A reluctance to believe that World War II would come or that we could become involved lay behind much of the isolationist sentiment of the thirties. We couldn't believe that Japan would be so treacherous as to attack Pearl Harbor, that the Chinese would intervene in Korea, or that our close friends the British would move against Suez in 1956. And so forth. Healthy and admirable as such

attitudes may be in private life, we need to guard against such false optimism in professional intelligence analysis.

Many Americans also -- and this has sometimes been particularly true of military men -- are so convinced of the superiority of American military forces and technology that they cannot bring themselves to believe that more backward and ill-prepared nations would dare to oppose US military power. Perhaps more than any other factor, this lay behind the unwillingness to believe that Peking would throw its poorly equipped and ill-educated troops against the armed forces of the US in Korea. Much of the same attitude prevailed in the early days of the Vietnam war, although probably no longer.

Irrational and misguided as it may seem to us, people often will fight for national causes and objectives in the face of seemingly superior forces, including ours. And great nations will overwhelm little nations. We would do well to recall our past mistakes and to remember that understanding how the enemy thinks, what is important to him and what he will fight for can sometimes be more crucial to warning than the most detailed understanding of the locations and capabilities of his military units.

This perception of the national objectives and priorities of other countries -- and of the strategic importance to them of a particular issue -- is so fundamental to political warning that this subject is addressed at greater length in the section on political warning (particularly Chapters 19 and 20).

The Consideration of Various Hypotheses

The consideration of alternative or multiple hypotheses to explain sets of data is a fundamental of the scientific method which, curiously enough, often is given scant attention in intelligence problems. Various alternative explanations or possibilities may be offered for particular facts or bits of information -- e.g. this photography of new construction activity could be a missile site in its early stages but it may be an industrial facility. Often, however, no particular effort will be made to itemize all the available pieces of information on any complex current situation with a view to considering their relevance to various alternative possible courses of action of the adversary. Even special national intelligence estimates (SNIEs), prepared sometimes to address alternative possibilities, usually do not attempt to deal with all the facts or possible facts before coming to judgments. They are much more apt to be generalized discussions of alternatives, rather than detailed analyses of the relevant information. There have been certain exceptions to this -- on particularly critical military subjects, for example -- but as a general rule estimates do not involve a critical examination of a mass of detailed information and a consideration of various hypotheses to explain it. Still less are other forums of the intelligence community likely to provide an opportunity for detailed consideration of various alternative hypotheses unless a special effort is made to do so and the forum is opened to all who may have something to contribute.

Ideally, the warning system should operate to provide a forum for this type of analytical effort -- but often it does not. The analysts who have the most

detailed knowledge should but often do not get together with analysts of other agencies on warning problems. More often, each agency considers the evidence and comes to its "position" and the various "positions" are what are discussed at the inter-agency forum rather than the detailed evidence itself. The result is that various alternative hypotheses may not be given adequate consideration, or even sometimes considered at all, and no systematic effort is made to insure that some group really goes through all the evidence and considers the various alternatives explanations in exhaustive detail.

One reason for this -- which we have noted before -- is that in crises, or budding crisis situations, there is likely to be an overwhelming quantity of information, the mere scanning and preliminary processing of which is consuming most of the analysts' time. There are simply insufficient resources to cope with all the information in any manner, let alone go through a time-consuming process of evaluating each item of information against several alternative hypotheses.

This is a serious matter. Most of all, in such situations, people need time to think -- to really take the time and effort to look at the available information and to consider what it does mean, or could mean. As we have observed in preceding chapters, facts are lost in crisis situations, and sometimes very important facts whose adequate evaluation and consideration would have made a great difference indeed to the final judgment.

The most useful thing which an administrator or committee chairman can probably do in such circumstances is to devise some method to insure that all the relevant information, or possibly relevant information, is being brought together

and that it is really being looked at and considered against various hypotheses or possible courses of action. Before the validity of various hypotheses can be considered, we must insure the examination of the facts.

Assuming that this can be accomplished, an objective consideration of the meaning and importance of individual pieces of information in relation to various alternative hypotheses can be a real eye-opener. Almost any method which will require the analyst or analysts collectively to examine the data and evaluate each piece will help. One does not need for this purpose some mathematical theorem or other statistical method to insure "reliability" or "objectivity" -- the purpose is to look at the information and to say yes or no or maybe to each piece (to each indication) as to whether it is or is not a likely preparation for (a) hostilities, (b) peace, (c) various stages between full-scale war and total peace, of which of course there may be many, or (d) not significant for any of these hypotheses.

The idea that the analyst should be required to look at each piece of information and to come to a judgment on it and its validity or relevance to various hypotheses is the essence of various systems or theories which have been devised for the purpose of helping to improve objectivity in analysis of information. The best known of these systems, which enjoys considerable popularity today in the information-handling field, is "Bayes Theorem." (We will be considering this and other related techniques in a later chapter entitled "Assessing Probabilities.") In Bayes Theorem, the analysis or judgment concerning each piece of information is but the first step -- the analyst then applies a likelihood ratio to each item and the results are mathematically evaluated to come to an overall probability or likelihood ratio for a given

hypothesis. The theory behind the theorem is that the analyst is more capable of making an objective judgment concerning a given piece of information than he is in coming to an overall objective conclusion on the basis of many pieces of information, and that the method will insure greater objectivity of the conclusion.

Bayes Theorem may or may not have merit in warning situations -- the writer is in no position to say but understands that it has yet to be demonstrated that this is so and that the system, as applied to warning, is still experimental. The proponents of the system, however, have overlooked their trump card -- which is that the mere setting up of hypotheses and requiring the analyst or analysts to evaluate information against the hypotheses is in itself an enormously important step. If this could be done in all crisis situations -- without regard to whether any mathematical formula was then applied -- the intelligence system would come out ahead. For the merit of this system -- or any similar system -- is that it induces the analyst to think, and to evaluate, and not to ignore information which he finds distressing or contradictory to his going hypothesis.

The outstanding successes of warning analysts, and of watch committees, have usually been those which involved the meticulous and objective evaluation of each piece of information and its relevance to war or peace. Any system which requires people individually and collectively to apply some such quasi-scientific method to their data and their analysis is almost certain to be of positive benefit to warning. A distinguished former chairman of the US Watch Committee repeatedly

observed that what the report included and how it was organized was infinitely less important than that the committee painstakingly examine each potential indication and evaluate it.

The advantage of such methods is not just to insure that facts are not ignored, valuable as that is. An even more important result should be that certain hypotheses are not ignored or swept under the rug -- particularly those which are frightening, unpopular, or counter to the prevailing mood or "climate of opinion." It is essential for warning that the intelligence system be able objectively to consider the hypothesis which is contrary to the majority opinion or which runs counter to hitherto accepted precepts or going estimates. In addition to an extraordinary analytical effort, this may require an exceptional degree of objectivity and willingness to consider the unpopular thesis, and the one which might require us to take some positive and difficult or dangerous action.

For warning, we rarely need to be concerned about the "idea whose time has come." It is the fate of the idea whose time has not yet come -- the hypothesis which is in its infancy and has yet to gain adherents -- that should most concern us. There is inertia to new ideas; long-held opinions are extremely slow to change except in the face of some extraordinary development or unambiguous evidence. This is true even when the issues are not important. When the matter is exceptionally important and the new judgment is unpopular or contrary to going national policy, inertia to new ideas or hypotheses may change to outright hostility. The warning system must insure that this does not happen and that new hypotheses and ideas are given "equal time" on the basis of their merits, no matter how unpopular or contrary to prevailing opinion they may be.

A HANDBOOK OF WARNING INTELLIGENCE

PART III: INTRODUCTION TO THE ANALYTICAL METHOD

CHAPTER 12: WHAT MAKES A GOOD WARNING ANALYST?

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It is with some hesitance that one approaches this question, since so far as the writer knows there have never been any studies on this subject, nor is there any literature addressed to this specific topic. Psychologists and other behavioral scientists, however, have begun increasingly to inquire into how people think and the extent to which their basic intellectual and psychological attitudes are fixed early in life or may be modified. There would probably be much room for further research on the applicability of many of these studies to the selection and training of intelligence analysts in general and to warning analysts in particular.

Much of what follows in this chapter will not be based on such studies, however, although some reference will be made to them. Most of this discussion derives from the observation of the attitudes and performance of many people in many crises or potential crises. Thus, although these opinions could be called subjective and no doubt will be open to some dispute, they are not intuitive so much as the product of experience.

Anyone who has been an analyst in the field of intelligence, or any other comparable intellectual pursuit, will usually be able to identify other analysts in whom he has confidence, the ones who can be depended on for hard work and careful judgments, and he can tell the "good guys" from the "bad guys." (Hopefully, the supervisory level will also be able to make such assessments!) It will not be unlikely that many of the following intellectual and personal attributes would be

considered important for any field of research; some, on the other hand, would seem particularly applicable for warning.

Basic Intellectual Attributes

Among a variety of intellectual attributes which the warning analyst (and his supervisor) should have, it may be possible to single out a few as of particular importance:

a. An insatiable intellectual curiosity. Perhaps more than any field of intelligence research, indications analysis involves the piecing together of fragments of information of uncertain reliability and questionable meaning. Unless the analyst is fascinated by the problems of the unknown, unless he regards each new fragment as a challenge to his ingenuity, and unless he cannot rest so long as there are unresolved problems or missing links -- then he is likely to find indications research tedious rather than fascinating. Warning analysis is for seekers after the truth who are unsatisfied with the ready or easy answers, who find the problems of a brewing crisis so intriguing that they cannot set them aside or forget them. Only those who really feel this way about research, and whose curiosity is never satisfied, are likely to make first-rate warning analysts.

b. Aptitude for detailed research. Unfortunately, not all the work involved in these basically fascinating and challenging problems is itself so fascinating. Like scientific experiments which involve a seemingly endless series of repetitive tests and much dull and monotonous work, much of the actual research of indications intelligence can be very tedious and time-consuming. No device has yet been worked out to spare the analyst from having to accumulate, sort and compile

innumerable fragments of information. Some believe that in time computers may be able to take over a part of this and relieve the analyst of some of the tedium -- but there will still be the problem of selecting the fragments to put into the computer system and making some type of assessment of them, which only the experienced analyst is likely to be able to do. Thus there is probably no way out, regardless of what tools to assist him may be devised, which will spare the analyst from spending much of his time in exhaustive (and often exhausting) research work. The good warning analyst thus must have more than an interest in the subject; he must also have an aptitude for, and willingness to undertake, all the detailed work which is involved.

It may be added that this attention to substantive detail is not only an attribute of good analysts; it is also an attribute of good supervisors even up to and including the chiefs of intelligence organizations. It has not been my experience that chiefs who delegate all substantive responsibilities and avoid reading the detailed basic material, or who regard their functions as purely administrative or supervisory, make good intelligence supervisors. The US intelligence system, at the intermediate and highest levels, has had both outstanding and mediocre chiefs. An indispensable attribute of the superior chief is that he has done his homework.

There is an old saying, usually applied to the hostess who would seek to give the flawless dinner party. It may also be the guideline, if not the achievable goal, of the indications analyst: "Details make perfection, and perfection is no detail."

c. Imagination. This point has been discussed, at least indirectly, in the preceding chapters. Basically, imagination is the attribute which permits the analyst to see beyond the obvious, to understand or at least attempt to understand the implications of unusual or extraordinary developments, and to be able to perceive the situation as others see it. It is an attribute of all creative thinkers, and intelligence analysts are no exceptions. While imagination alone, of course, does not make an exceptional analyst -- and it is possible to bring too much imagination to intelligence problems and to lose sight of reality -- it is nonetheless a characteristic of outstanding intelligence analysts. Few warning situations will be so clear-cut or so obvious that the perception of the "truth" will not require the exercise of the imagination as well as the compilation of the "facts." If the situation is that clear, there will likely be little need for analysis at all.

d. A retentive memory. Some studies have suggested that this may be one of the most important attributes for any kind of analytical work, and that the importance of memory as a factor in intellectual achievement has been greatly underestimated. Whether this is valid or not, there is no question that a good memory is invaluable to the warning analyst. The half-forgotten fragments set aside days or weeks ago may indeed be the missing clues. Since time (or rather the lack of it) is usually one of the greatest problems confronting the indications analyst, the ability to recall seeming trivia without having to make a search of the files (if indeed one has had time to do the filing) may make the difference between the good analytical effort and the superficial one, or even between the right answer and the wrong one. It has been demonstrated that motivation or interest often is

the key element in memory -- we remember that which is important to us, or that which interests us, and tend to forget or to ignore that which is unimportant to us. The outstanding warning analyst will often have a phenomenal memory for indications or potential indications which others have forgotten, but will not necessarily recall other facts or events which were not important as indications. Thus the discriminating memory -- which is a product of interest and specialization as well as of an abstract ability to recall things generally without regard to their importance -- is the prime requisite for indications analysis.

e. The recognition of that which is important. And, one might add, the ability to perceive that which is not important, or which is irrelevant to the solution of the problem at hand. There appears to be considerable variation among individuals in their ability to discriminate between that which is important and that which is not, even in their fields of specialization. A surprising number of analysts and supervisors seem to be readily distracted from the problem by information or developments which are either unimportant or largely irrelevant to the issue. Now, intelligence problems can be very complex, and warning problems are likely to be among the most complex of all. Analysts further are usually operating under considerable pressure and they are likely to be deluged with incoming material of the most widely varying degrees of credibility and importance. If they are unable to distinguish that which is of importance, or at least potential importance, from that which is not, they will be constantly led astray on wild goose chases and they will lose sight of that information which they should be considering. They are likely to be particularly vulnerable to sensational but inaccurate reports,

and thus may spend an inordinate amount of time considering spectacular but largely irrelevant trivia while ignoring other basic intelligence of critical importance to the issue.

What causes this misdirection of effort, this inability to define the problem and isolate the material which is important to its solution and to set aside that which is not? Part of the difficulty, of course, may just lie in insufficient native intelligence. A second factor often will be insufficient education or training in the type of information or problem being considered -- it is unfortunately not unheard of for judgments to be made on specialized substantive problems by persons who really are not qualified to do so, no matter how smart they may be. (It is often a bitter complaint of analysts that their expertise is ignored.) One cannot help feeling, however, that something more than these obvious factors is involved. Some people do seem deficient in that attribute known as "common sense" despite other intellectual abilities. In other cases, just plain fuzzy thinking or lack of logic seems to lie behind the inability to isolate the important data and to concentrate on it. In these circumstances, the perceptive supervisor or chairman of the discussion group or committee should seek to define the problem clearly and to require the analysts or the group to evaluate the relevance and significance of each piece of information to the problem. It is amazing what such an approach can sometimes do to focus attention on the important and relevant information and set aside the extraneous. A distinguishing characteristic of both good analysts and of good supervisors is the ability to do this.

f. The ability to entertain various hypotheses. The importance of considering alternative hypotheses, including unpopular or minority ones, was discussed in the preceding chapter. The ability to consider more than one solution to a problem unfortunately is not nearly so widespread among the college-educated as one would like to think. Such ability of course is closely linked to that of objectivity. In critical indications or warning situations, there are always people who seem unable to entertain more than one hypothesis or solution to the problem. They have already made up their minds on the likely course of action of the nation in question, and they evaluate (and even select) their data to conform with their hypothesis. Emotions and preconceptions are substituted for logic. (See discussion in Chapter 10.)

It is by no means easy, even for those who are making every effort to avoid emotional judgments and to maintain objectivity, to consider dispassionately two or more hypotheses. It is particularly difficult to do so in situations in which the facts are not provable or cannot be empirically demonstrated to be more relevant to one hypothesis than another -- in short, where subjective as well as scientific criteria enter into the "solution." It is because this is so and that the facts may not "speak for themselves" that the consideration of various alternatives is both so important and so difficult for warning. No one should be misled into believing that it will be easy to achieve this. A deliberate effort must be made at every stage -- from the analyst on up -- to see that the unpopular hypothesis (or the one which may require the commander or policy maker to take some difficult action) is actually being given equal consideration. The analyst who is

able to set forth dispassionately the case for both sides will be invaluable -- provided, of course, he is also given an adequate opportunity to be heard.

g. Well-reasoned presentations. The analyst is more likely to be given that hearing if he or she is also capable of preparing a well-reasoned and logical analysis and of presenting it both in writing and orally. Brilliant analytical work will get nowhere unless it is disseminated in readable or hearable form to those who need to know it. It is not true, of course, that all people who do good research can present the results well. Although good researchers frequently write well, this is not always so. And many who write well are very inept at oral briefings, and would never be asked to speak twice. Training obviously will help; particularly on oral presentations, training in public speaking and practice in presenting briefings often pay dividends and will give the analyst an opportunity to be heard which he would otherwise lack.

The ability to present the evidence (or to see that someone else presents it) will be very important -- and often will carry more weight than the most careful research which is poorly presented. The analyst who lacks the talent or training to present his case well should do something about it -- either through his own efforts or by enlisting the help of his superiors. And supervisors should take care to insure that good research efforts are not wasted for lack of someone to present the results.

h. Objectivity. We have addressed this before and we will do so again. Objectivity, objectivity and more objectivity should be the goal of every analyst,

but above all of the indications analyst. It must also be the goal of his supervisor and of his supervisor's supervisor and on up the line. It may require a conscious effort at all levels to insure that emotions and preconceptions do not prevail over reason.

Attributes of Character or Temperament

Important as the foregoing intellectual assets are, they will be insufficient if the analyst and his supervisor do not also possess certain important qualities of character and temperament.

a. Interest and motivation. The importance of these can hardly be overstated. These are the accompaniment of the insatiable intellectual curiosity which will insure that it is applied to the problem at hand -- obviously one cannot spread one's curiosity so thin that all problems are equally fascinating or there will be no time to apply oneself to the particular problem. In short, the successful warning analyst must not only be fascinated by intellectual puzzles in general, he must be specifically fascinated by warning and indications puzzles. It must be important to him, or to her. Innumerable studies have shown that interest, motivation and enthusiasm are more important to success than brains. In their field of specialization, good warning analysts are over-achievers.

b. An infinite capacity for hard work. No amount of intelligence or imagination or memory can replace the need to apply oneself to the problem. It's great to be smart, but it does not take the place of having studied the material, and studied it exhaustively. In warning problems, there is simply no substitute for having done the work. In crisis situations, sheer physical endurance

and the ability to work long hours with insufficient sleep can be as important, perhaps even more important, than intellectual ability. This capacity for hard work, moreover, should not be limited to crises -- when demands from on high and the great interest in the problem engender a sense of excitement which sustains enthusiasm. The analyst must also have a capacity for diligent application when it is not exciting and when in fact no one has asked for specific studies or shown much interest in his research. Obviously, willingness to work long hours in such circumstances is a product of high motivation rather than of any other type of incentive.

d. Initiative. For a variety of reasons -- including the uniqueness and infrequency of warning problems and the relatively low interest in indications except in times of clear crisis -- the warning analyst should have an exceptionally high degree of initiative. Unlike other fields of intelligence research, which have relatively set schedules of production or in which there is a constant stream of requests from above, indications analysts usually have to initiate almost all their own projects. In addition, they have to create a market for them and "sell them." In the twenty plus years which this writer has spent in the warning business, probably not more than ten percent of the production effort of indications analysts (except for a routine weekly watch report) has been requested by anybody. This handbook is no exception. Nearly all useful warning studies are initiated by analysts because they perceive a coming problem or crisis which they feel is not being adequately handled by the usual mechanisms of intelligence and which they feel needs to be given more attention. Moreover, they are quite likely to encounter a considerable degree of hostility to these

independent projects or efforts to arouse attention or concern. Brickbats rather than praise for initiating the project are often the fate of the indications analyst. Needless to say, it requires an exceptional degree of initiative to persist in these unfavorable circumstances.

There is usually little reward for new ideas and most analysts will find that they get along best if they are not rocking the boat. And nothing is more likely to rock the boat than a suggestion that the intelligence community has missed coping with something important or is coming to the wrong conclusion about it -- or still worse, that the policy maker might soon be confronted with difficult and dangerous decisions.

d. Independence of judgment. This is a corollary of initiative and particularly of the willingness to assume the initiative when one is in the minority or the atmosphere is hostile. When it comes to judgments, the warning analyst will quite likely find himself a "loner." Indeed, only those who are temperamentally capable of making independent judgments -- which may vary from those of the majority -- are suited to be indications analysts. Those who find it easiest to go along with prevailing opinion or whose judgments are easily swayed because others (particularly their superiors) think differently have little to contribute to warning; they can be a positive handicap. Some analysts -- even when assigned to indications offices which ostensibly exist to produce independent analyses -- seem constitutionally unable to come to a different opinion from that of their superiors or their home offices or agencies. The "company man" -- whose basic philosophy is "my agency, right or wrong" --

no doubt has his place in the system. But it should not be in the warning portion of it. There is no point to having indications analysts who can only go along with majority opinion. It would be better not to have them at all.

To be able to make independent judgments, and to hold to them when they are criticized, the individual must have some confidence in his own ability and interpretations. Experience often will help, and so may the reading of history. The fact is, as we have noted in earlier chapters, that correct judgments in many warning situations (probably in most) have been reached by a minority of individuals. The well-reasoned independent judgment in such circumstances quite likely may be the right one.

e. Willingness to risk being wrong. There is probably no normal person who likes to admit that he has made an error. This is likely to be particularly true of intellectual judgments or opinions based on reasoning, since to admit that one has made a mistake in such circumstances also implies that one has been kind of stupid. It is different from betting wrong on the horses, or guessing wrong on a finesse; it is a matter of professional pride. As in all fields of intellectual endeavor, professional pride is important in intelligence. It is also particularly important to policy makers that intelligence be right. And it thus may be very difficult to move upward through channels an admission, either explicit or implicit, that an agency or an individual speaking for an agency has been wrong on a crucial issue. The results of this are two-fold: both the individual and the agency will seek to avoid making a firm judgment which might prove to be wrong; and once the wrong judgment has been made, it may prove extraordinarily difficult to reverse it. A

preeminent former US policy official and senior advisor in intelligence has called "pride of previous position" one of the most dangerous pitfalls of intelligence.

The intelligence system needs to get over the idea -- and the policy maker even more so -- that intelligence should never be wrong, or, if it has been wrong, that it should never admit it. The analyst who fears to come to a judgment lest it be wrong or who can never admit that he made a wrong judgment contributes to the stagnation of intelligence. Not only will he tend to be so excessively cautious that he cannot commit himself at all, he may also postpone indefinitely the writing of items which might contradict anything he has prepared before. He may even, in his fear of admitting error, suppress evidence entirely which is contradictory to his previously expressed opinion.

The ability of the individual to admit error -- or to take the risk of being wrong -- is a product not only of moral fortitude but also of maturity and of confidence in one's own ability and judgments. Those who feel professionally or personally insecure (for whatever reason) are usually the most adamant in defense of their preconceived opinions and the most reluctant to admit that they could ever have made a mistake.

This is not something which the analyst should be expected to cope with alone, however. The intelligence system -- up to the highest policy levels -- should accept reality and recognize that intelligence cannot accomplish the impossible. It is not only ridiculous, but dangerous, for those in authority to expect perfection of intelligence. Some error is inevitable. It is better to have come to useful, positive judgments which are right most of the time, and

to be wrong occasionally, than to be reluctant to come to positive judgments at all. In warning, above all, it can be fatal.

f. Indifference to rewards and appreciation. It is the fate of those who show many of the preceding attributes that they are likely to be bucking the system, fighting city hall, and often stepping on the toes of both their colleagues and superiors. And anyone who expects to receive much in the way of conventional awards or recognition in these circumstances should forget it.

The warning analyst who would do a good job should not expect also to be "popular" -- indeed the better the work, the less popular he may be. Those who are continually challenging the facts or questioning the analysis or reasoning of others (particularly their superiors) are not likely to be highly appreciated -- and it will not help in the least for them to be right. The individual who seeks to do a good job of indications analysis should accept at the start that his work will probably not receive much recognition and that he is unlikely to be the recipient of many awards. He may even -- in particularly bitter controversies -- have a falling out with his friends.

The warning analyst is likely to suffer from a constant sense of frustration. In routine times, most people are not interested in indications or warning and they do not wish to be bothered with problems that then seem remote. In times of crisis, the analyst has trouble getting people to listen, still more in persuading them to believe that he might know whereof he speaks. In either circumstance, he is likely to find that very few people will consult him and to feel that much of what he does is useless.

If there are nonetheless rewards in all this, they will probably be subjective rather than demonstrable -- and to derive from the interest and fascination of the subject matter and a hope that in the crunch someone after all will listen, and that it will be important.

g. A sense of responsibility. Last, but by no means least, in this list of attributes of indications analysts one must put a sense of responsibility toward others. The analyst must feel -- even he is wrong in this -- that what he does matters and that the judgment of the intelligence system to which he contributes is indeed important to national security or to the safety of US or Allied forces.

If the analyst does not feel this sense of responsibility for the lives and welfare of others, if his approach to the problems before him is wholly academic, or if he feels that it is someone else's problem to "do something" about it -- then he is more than likely to prove inadequate in the real crisis. It was a shattering emotional experience to find, in the summer of 1950, that there were analysts of the Chinese Communist military problem who seemingly saw no relation between their judgments on Chinese military deployments and the lives of US troops in Korea. They could not divest themselves of the idea that they had until next month or next year to come to some judgment on the destination and probable intentions of hundreds of thousands of Chinese troops. They apparently could really not understand that where these forces were was not an academic question and that their judgments of Chinese capabilities and intentions, if wrong, might be measured in the deaths of US servicemen. That was someone else's problem.

The analyst may indeed be a very little cog in the machine -- and the bigger the machine gets and the more wheels there are, the less important any little cog may be. Nonetheless, the analyst must feel that what he does can make some difference, and that he does have some responsibility for national security. He cannot assume that someone else will take care of it.

In warning, you are your brother's keeper.

Can Warning Analysts be Trained?

What a foolish question. Of course, analysts can be trained and are trained all the time. Why not as warning analysts too? Surely this presents no problem. Or does it?

Some interesting studies in recent years have begun to cast doubts on whether it is possible to retrain people, by the time they have achieved adulthood, in how to think. For example, a paper presented at the annual meeting of the American Association for the Advancement of Science in December 1968 by Dr. Robert B. Livingston suggested that the brain mold of the human being is largely set by the age of 12 -- not just psychologically, but physiologically -- and that it is very difficult to make changes thereafter. Such an idea, if not the scientific demonstration of its validity, may not be so new: "Give me the child until he is five."

The new scientific inquiries into brain patterns and into how people, both as individuals and as members of groups or cultures, think and react under various situations may prove ultimately to be one of the most enlightening fields of inquiry for the understanding of intelligence analysis and the decision-making

process. The writer at least feels that a better understanding of the work being done in the behavioral sciences in this area would be very beneficial to the intelligence system -- probably more so than much of the effort now devoted to the computer field. It is also of course a highly controversial field; indeed it could be said to be dynamite.

The longer any person stays in the warning field, the more he or she usually comes to feel that how people think, how they reason, how they put facts together, and how much evidence they require before they are willing to come to judgments (or to change their previous judgments) is what the warning business is all about. This is what we need to understand better before we can decide what kind of training to give to indications analysts. What we need to know is whether there is a basic aptitude for this type of analysis -- perhaps instilled an an early age -- which really cannot be taught to the adult. Certainly, all of us know individuals whose approach to all controversial issues is so excessively conservative, or who are so reluctant to come to judgments before something can be positively demonstrated to be so, that they are of no use -- in fact a positive hindrance -- in the warning crisis. Nothing is likely to make perceptive warning analysts of people of this nature. They probably really cannot be made to change. This may not mean that they are misplaced in the intelligence field altogether -- only that they are misplaced in warning intelligence.

Given a basic aptitude for this type of intelligence effort, and a positive motivation to do this type of work and do it well, however, the writer emphatically believes that there is much that warning analysts can learn, or can be taught. And

so, hopefully, can their supervisors and the higher echelons of the government who are dependent on intelligence. There is much that can be learned from the experience of a live warning problem for those who are receptive to it. And, short of this, there is much that can be learned from history and the experience of others. And this is why this book is written.

A HANDBOOK OF WARNING INTELLIGENCE

PART IV: SPECIFIC PROBLEMS OF MILITARY ANALYSIS

CHAPTER 13: IMPORTANCE OF MILITARY INDICATIONS

April 1971

CHAPTER 13: IMPORTANCE OF MILITARY INDICATIONS

For various reasons, some obvious and some less well-recognized, the collection and analysis of military data or indications is the predominant element in warning. By far the greater number of items on indicator lists deal with military, or military-related, activities. By far the greater portion of the collection effort, and particularly the most expensive collection, is devoted to obtaining data on the military strengths, capabilities and activities of enemy and potential enemy forces. This collection effort has greatly increased in the past decade, largely as a result of breakthroughs in technology, and the future promises a still greater expansion in the volume of military data. Whether this will necessarily result in a great improvement in our so-called "warning capabilities" is uncertain, although improvement in the timeliness of our evidence appears unquestionable. What does appear certain is that military information will consume even more of the intelligence effort in the future -- and hence that military indications may assume an even more important role, or at least will take more of analysts' time, than in the past.

Primary Reasons for Importance of Military Indicators

At the risk perhaps of belaboring the obvious, it may be well to note some of the reasons why the intelligence community is so preoccupied with military indications and why they are so important. (In a later chapter, we will deal with the other side of the coin -- why political indications are so important.)

First, and most obvious, military preparations are a necessity for war. There would be no warning problem, in the sense we use it in warning intelligence, if it were not that nations have armed forces and arsenals of modern weapons which they could commit against us or our allies. The nations of the world which are not thus prepared, whatever other problems we may have with them, are of little or no concern to us for strategic warning. The index of our concern about the intentions of other nations is largely how much military damage they can do to us, rather than just how politically hostile they may be, and our collection effort is usually allocated accordingly.

Secondly, many military preparations, although far from all, are physically discernible or at least potentially discernible to us. They involve movements of troops and weapons, or augmentations of them, which we can observe provided our collection is adequate. As a general rule (at least this has been true historically), the greater and more ominous the scale of military preparations, the more discernible they have been. The advent of weapons of mass destruction and long-range delivery systems, of course, has potentially somewhat altered this. It is now theoretically possible for a nation so equipped to make almost no physically discernible preparations for a devastating nuclear strike. Few analysts now believe, however, that there would not also be other potentially discernible military -- and political -- indications before any nation undertook so terrible and perilous a course of action. The concept of a totally surprise nuclear attack (that is, the attack out of the blue without any prior deterioration in relations or military preparations of various types) no longer enjoys much credence. The problem of providing warning that the situation

had deteriorated to the point that nuclear attack might be imminent is, of course, another problem. The effect of the advent of the nuclear age, in any case, has hardly been to reduce the importance of military indications! The result has been quite the contrary -- the community has devoted far more effort to attempting to determine what ancillary military indications might be discernible and to devising methods to collect such information.

One lesson which we have learned from crises of recent years is that discernible military preparations -- the type of preparations which have traditionally preceded the outbreak of hostilities -- have by no means lost their validity as indicators. The effect of such military episodes as the Chinese military intervention in Korea and the Soviet military intervention in both Hungary and Czechoslovakia has been to reinforce confidence in the value of military indications as less ambiguous and probably more dependable gauges of impending action than political indicators. The amount of preparation undertaken by the Soviet Union and its allies for the invasion of Czechoslovakia has probably served to reduce fears -- once quite prevalent -- that the USSR from a standing start and without a discernible change in its military posture would launch a devastating attack against the West. That portion of intelligence sometimes defined as "hard military evidence" has gained stature for warning.

Another factor which lends importance or credence to military indications is that so many of them are so expensive to undertake -- and that this is becoming increasingly so. It is one thing to undertake a relatively inexpensive propaganda campaign of bombast and threat, or to alert forces for possible movement or even

deploy several regiments or so. It is quite another to call up a half million reservists for extended active duty, or to move a number of major ground force units hundreds or thousands of miles, or to initiate a crash program of production of new combat aircraft or naval landing craft.

Such serious, expensive, and often disruptive military preparations -- and particularly those which take a real bite out of the taxpayer's income or which involve a commitment of national resources from civilian to military effort at the expense of the consumer -- these are measures of how a nation or at least its leadership really feels about a problem and how important it is to it. These are the hard indications of national priorities. They are rarely undertaken lightly, or just for political effect or as a "show of force." There are cheaper ways to bluff or to make idle threats one has no intention of carrying out.

This is not to say, of course, that such major military preparations or reallocations of national resources are necessarily unequivocal indications of preparations for aggression. They may be defensive, or a recognition that the international situation is deteriorating to a point that the nation against its will may become involved in conflict. But such preparations are real and meaningful and important -- a kind of barometer of what a nation will do and what it will fight for. And they are evidence that important decisions have been taken.

Such major changes in military allocations or posture or priorities are not only substantial or "concrete" indications; they may also be particularly valuable as long-term indications. They often give us lead time -- time to readjust our own priorities and preparations, not only in intelligence collection and analysis, but more importantly

our own military preparations and allocations of resources. Provided we have recognized and understood them correctly, they may prevent our being strategically surprised even though our short-term or tactical warning may fail us.

Understanding the Basics: How a Nation Goes to War

Know your enemy. This basic tenet is nowhere more applicable in intelligence than to the problem of strategic military warning. The analyst who would hope to understand what his adversary is up to in time of crisis should begin his education with the study of all that he can possibly find on the subject of how that adversary will prepare his forces for war.

This principle underlies the preparation of indicator lists, as discussed in Chapter 7. The well-prepared and well-researched indicator list should incorporate not only theoretical or general ideas of how the enemy nation will get ready for war; it should also include, insofar as is practicable, some specifics of what we know of the potential enemy's doctrine, practice and plans. As our knowledge of these things increases, we are likely to prepare better and hopefully more usable indicator lists.

It would be virtually impossible, however, to include in any indicator list everything which might occur if a major nation were preparing its forces for war. Where several nations might be involved (e.g., the Warsaw Pact countries), a list which attempted to incorporate all that we know, or think we know, about war plans, missions of specific units, wartime organization and terminology, civil defense preparations and any number of other subjects would become too cumbersome to cope with. Except possibly for very specific problems or areas, indicator lists are likely to remain fairly generalized. The warning analyst needs far more than this.

Other things being equal, the individual best qualified to recognize that a nation has begun serious preparations for possible hostilities should be the analyst who best understands its military doctrine and is best read in its military theory and practice. One unfortunate consequence of the separation of basic and current intelligence (when they are separated) is that the analyst who must make quick judgments on the significance of current information may not be well-grounded or up-to-date in such basic material (see that portion of Chapter 3 entitled "Warning is Not Current Intelligence").

The distinguishing characteristic of preparations for hostilities (versus preparations for exercises or other relatively normal peacetime activities) is that they are real -- and that they will therefore include activities rarely if ever observed in peacetime. Various exercises or mobilization drills or the like no doubt have rehearsed part of the plan, often in miniature form as a command post exercise, but almost never will the enemy have rehearsed in full force all the preparations that he will undertake when he is actually preparing to commit his forces. (Those who doubt this should reexamine the preparations for the invasion of Czechoslovakia.) An understanding of his doctrine and military theory, of what he did the last time that he was involved in a real combat situation and of what changes there have been in his military practice since then will be invaluable, indeed indispensable, to an understanding of what he is up to now.

The military forces of all nations are slaves in large degree to their doctrine and theory. What the staff officer has been taught in school that he should do in a given situation is likely what he will do. If doctrine calls for the employment of

airborne troops in a given tactical situation, the chances are they will be employed. If the unit mobilization plan calls for the requisitioning of trucks from a local economic enterprise, the chances are very high that they will be requisitioned before that unit is committed to combat. If contingency wartime legislation provides for the establishment of a supreme military council (or some such super body), or for the redesignation of military districts as field armies, the warning analyst and the community should instantly recognize the significance of such developments should they occur. If the national military service law (normally unclassified) provides that reservists should be recalled for no more than three months in peacetime, evidence that they are being held longer could indicate that emergency secret wartime decrees had been passed. And so forth. Innumerable and much less obvious examples could no doubt be cited by experts on such topics.

Unfortunately, the experts on such topics are often scattered and engaged in long-term basic research, even when a crisis is impending. Means must be established so that this information is not overlooked or forgotten, or filed in the library, when it is most needed. (One possible method for coping with this problem was suggested in Chapter 9.)

How many analysts assigned to the current or indications effort at various headquarters or various echelons in the national intelligence community have read or studied much of the basic material that might be so crucial to the understanding of actual preparations for hostilities? How many have it catalogued or readily available or know where they could immediately obtain the answers they might need?

Some offices and analysts no doubt are much better prepared than others, but experience suggests that no intelligence office is really fully prepared now for the contingency of real preparations for hostilities by one of our major potential enemies. Every major crisis, at least, has shown this to be true. And those at the supervisory or policy levels, for obvious reasons, are quite likely to have minimal knowledge of a great deal of basic information which could be crucial in a real crisis.

Warning specialists and current military indications analysts could make no greater contribution over the long term than to do their best to review, study and compile the rarely reported and often obscure basic data which might some day be so essential for warning. The scope of potentially relevant military information is vast: doctrine, theory, logistics deficiencies and wartime requirements, applicable legislation, mobilization theory and practice, military terminology, major military exercises and war games, combat readiness and alert procedures, and other similar basic topics. The study of the performance of our potential enemies in relatively recent live crises, as we have noted before, is also invaluable even though the situation the next time will doubtless not be identical. It is not even too much to suggest that there are still many useful lessons in warning to be derived from a study of World War II. The German deception effort prior to the Battle of the Bulge and that of the Allies prior to the Normandy invasion are classics -- and live reminders of how effective deception can be (this topic will be discussed in Chapter 29 - "Deception: Can We Cope With It?") The Soviet buildup for the attack on Japanese forces in Manchuria in August 1945 is a useful example of the difference in

strategic and tactical warning. And the campaign itself, as well as earlier operations of Soviet forces in the same area, provides potentially useful lessons in how the USSR might go about conducting operations against Chinese Communist forces today.

A HANDBOOK OF WARNING INTELLIGENCE

PART IV: SPECIFIC PROBLEMS OF MILITARY ANALYSIS

CHAPTER 14: ORDER OF BATTLE ANALYSIS IN CRISIS SITUATIONS

CHAPTER 14: ORDER OF BATTLE ANALYSIS IN CRISIS SITUATIONS

The best-known, most venerable and most prestigious field of military analysis is "order of battle." In its broadest sense, it is sometimes used to mean almost the whole scope of activity of military forces. In its narrower (and more correct) usage it is defined (by the JCS Dictionary) as: "The identification, strength, command structure, and disposition of the personnel, units, and equipment of any military force." It is in this sense that it is used in this chapter and throughout this handbook.

It is readily apparent that a determination of the order of battle of enemy forces is of decisive importance for warning intelligence. Indeed, insofar as warning rests on a determination of the facts -- as opposed to the more complex problem of determining what the facts mean and issuing some interpretive judgment -- the order of battle facts will often be the single most important element in warning. Whatever other facts may be relevant or significant for warning, nothing is likely to be so critical as the locations, strengths and equipment of the enemy's military forces -- for these determine what the enemy can do. And, as discussed in Chapter 5, the understanding or correct assessment of the enemy's capability is a prerequisite to the assessment of intentions, and the failure to recognize the capability is fraught with peril. Thus, obviously, at every step in the process, order of battle analysis will play a crucial role in the issuance of warning. And order of battle analysts will carry a heavy responsibility.

Order of Battle Methodology

Since most nations are usually at peace and the strengths and locations of their military forces are relatively static, or at least the changes are fairly gradual, order of battle analysis normally tends to be a rather slow and hence conservative process. Over a period of time, certain methodologies or criteria are established (again rather conservative ones) which determine, by and large, whether a given unit can be "accepted" in the order of battle. While the methodologies will vary somewhat from country to country and among various types of forces (i.e., the same criteria for "acceptance" may not apply to a Soviet ground force unit as to a North Korean air unit, still less to a Vietnamese guerrilla unit), the criteria nearly always are relatively rigid. In particular, they call for a relatively high degree of substantiation or "proof" that the unit does in fact exist, is of a certain strength or echelon, and is located in some specific area. Also, some unit number (hopefully the correct one, but at any rate some identifying number or designation) is highly desired by OB analysts. A unit which must be described as "unidentified" (u/i) lacks status, as it were, and is a little suspect. There is always a possibility that it is already carried elsewhere in the OB as an identified unit and has moved without detection. The analyst always seeks to "tidy up" his order of battle so as not to have such loose ends. Ideally, all units are firmly identified and located on a current basis, together with their correct designations, commanders and equipment, and their manning levels are consistent with the accepted table of organization and equipment (TO&E) for that type of unit. Everything fits. No problems. All units have been "accepted" and we have confidence in the OB.

Now, this ideal OB situation, of course, is rarely met -- and almost never so in hostile nations which are attempting to conceal such military facts from us. For a number of reasons -- the difficulties and slowness of collection, the conservative criteria for acceptance of units, the personal views of analysts, the requirements for inter-agency or sometimes international consultation, and even the slowness of the reporting, editorial and printing process -- the accepted order of battle is almost invariably out-of-date. And for some units, it may be years out-of-date. Order of battle analysts are normally loath to admit it -- and few outside their immediate circle probably realize it -- but it has by no means been unusual to have delays of two and three years in the acceptance of new units, determination that units have been inactivated, or recognition that they have been upgraded or downgraded in strength or relocated, redesignated, resubordinated, converted to another type, or split into two or more units. Incorrect numerical designations of units have been carried in OB summaries year after year; only by chance will it sometimes be found that units have been incorrectly identified for five or even ten or more years. Quite often, the last thing we can learn about a unit is its numerical designation.

In short, the "accepted" order of battle and the real current order of battle for enemy nations probably never are identical. The most we can hope for is that it is reasonably close to the facts and that we have made no serious misjudgments of the enemy's strengths and capabilities. In time, we will usually obtain the data which we need to correct the OB -- and we can change the location, designation or whatnot

on the next printing. It is better to be slow or late with a change than to make a judgment too soon that may be erroneous and which we will have to retract later. Such, in general, is the philosophy of OB analysis. This is not intended as criticism; it is a statement of fact.

And most of the time, it does not really matter that it is like this -- which is probably the chief reason that this normal lag on OB acceptance is so little recognized. No one suffers from errors in the order of battle or from delays in information that a unit has been formed, upgraded or moved. Even egregious errors in estimating the strength of foreign forces (or particular components of foreign forces -- like the great overestimate of Soviet missile strength in the late 1950's) have not caused us any real harm. Some might even say that the effects for budgetary purposes have been beneficial. Few care and no lives have been lost.

Except when there is a warning problem -- when we or our allies are in danger of being attacked. Then these order of battle "details" can matter and matter decisively. When enemy units are being upgraded or moved or mobilized or otherwise prepared for combat, then the accuracy and currency of order of battle do matter and lives can be lost -- and many have been -- for errors.

Often, however, sudden changes in the enemy's military situation -- including a redeployment of units for possible commitment to combat -- have not brought forth imaginative and responsive changes in methodology by order of battle analysts. It is in fact the usual case that the criteria for "acceptance" of changes in unit strengths and locations are not modified -- even when it is clear that major troop movements are in fact in progress.

Sudden changes in unit locations, particularly large and secret redeployments, admittedly pose tremendous problems for order of battle analysts. It is rare indeed that the initial evidence will be so good, or accurate or complete that it will be possible to determine with any confidence how many troops are involved, what types or how many units are deploying, still less their unit designations or where they come from. Time is required to sort out the data, to attempt to obtain coverage of the home stations of the more likely units to see if they have in fact departed, and it will probably be weeks or months (even with good collection) before some of the needed information can be obtained. It may even be years -- or never. To this day, we have only partially reconstructed the order of battle of the Soviet units which intervened to suppress the Hungarian revolt in November 1956, and it is likely that we will never know the total strength and units involved.

Confronted with initial reports -- which may include some highly reliable observations and other good evidence as well as hearsay and unconfirmed reports -- that large numbers of troops of unknown designation are moving from unspecified locations toward undetermined destinations, the reaction of the normal OB analyst not surprisingly is to wait. What units can be moved on his situation map? He has no identifications, no firm evidence precisely what area the troops have come from; he may not be sure whether one or ten divisions could be involved although he usually suspects the lower figure and that many of his sources are greatly exaggerating the facts. The whole situation is anathema to him; it would be in violation of all his criteria to move any unit until he knows which units to move.

It may be all right for current or indications analysts to talk vaguely about large but unidentified troop movements, but the OB analyst must be specific and precise. He must "accept" or decide not to accept the movement of specific units (and this might well include new units of whose existence he has yet to learn). Confronted with this dilemma, he moves nothing -- not yet.

The Indications Approach to Order of Battle

On the other hand is the indications analyst, sometimes but not always supported by other current analysts, who cares less for the order of battle details than that the community and the policy maker recognize, and recognize now, that the enemy is deploying major forces and that there is grave danger that this buildup is preparatory to their commitment. He implores his colleagues and superiors to see what is happening -- and he is driven half frantic when they turn to the order of battle "experts" whose reply is that they "cannot accept" that yet. And the indications or current analyst may even be told that he cannot report a possible increasing threat -- how can the threat be increasing when the OB map does not show any buildup of forces in that area? Perhaps it does not even show any units there.

This is not a hypothetical fiction or an indications analyst's nightmare. This is what can happen unless an impartial arbiter in position of authority intervenes to hear both sides. It is unquestionably true that the rigid criteria of order of battle acceptance have held back warning for weeks, and that this can be the most serious single impediment to the issuance of military warning. A few examples will illustrate the point more convincingly.

Not long after US and UN forces intervened in the Korean conflict in

June 1950, reports began to be received of northward troop movements in Communist China. Many of these reports indicated only that large numbers of troops were leaving the southernmost provinces of China (there had been a substantial buildup in this area to complete the conquest of the mainland the preceding year). By late July, it was clear that substantial elements of the Fourth Field Army had left South China. Meanwhile, there were numerous although somewhat conflicting reports concerning troop movements farther north -- while there were many reports which indicated that troops were moving to Manchuria, it could not be confirmed how many of the troops were proceeding that far and how many might have deployed to intermediate locations -- including Fukien Province for a possible assault on Taiwan. Even as reports continued to mount during August of heavy northward troop movement (some reports from Hankow claimed that troop trains were moving northward day and night), there was little evidence on the whereabouts of specific units or sufficient data to make a reliable estimate of the number of troops involved. Indications and order of battle analysts locked horns over the issue -- with warning analysts pleading that the community recognize the likelihood of a major buildup in Manchuria, while OB claimed that there was "insufficient evidence" to move any units to Manchuria. Not until the end of August were watch reports (reviewed by OB) permitted to go forth stating that any elements of the Fourth Field Army had moved to Manchuria (attempts to say that "major elements" could be there were vetoed). Not until about 1 October did order of battle "accept" that elements of some six armies of the Fourth Field Army were in Manchuria -- and make its first

increase in estimated strength in that area. The criteria for OB "acceptance" actually held back warning of the buildup in Manchuria for at least six weeks, and this discrepancy as to what could be reported or "accepted" as evidence continued to a lesser degree up to and after the major Chinese Communist offensive in late November. Who can say whether or not an earlier acceptance of the buildup would have increased the likelihood that US and UN forces would have been better prepared for the Chinese onslaught?

A simpler and less damaging example of the difference between the order of battle and indications approach to troop movements may be derived from the Hungarian revolt in 1956. The Soviet response to this unexpected explosion was to pour troops into Hungary over virtually every road and rail connection from adjacent areas of the USSR. There was no reliable information on the total forces involved in the buildup; it was only clear that there were a lot. Concurrent with this heavy troop movement from the Carpathian Military District, an extraordinary travel ban was imposed in Romania, prohibiting all attache travel to rail centers north of Bucharest -- while several informants reported to the US Embassy that Soviet troop trains were moving northwestward through Romania during the same period. By the criteria of indications analysts -- for warning purposes -- this was sufficient evidence to justify a statement that Soviet troops from the Odessa Military District (from unknown units and in unknown strength) were probably deploying to Hungary. To order of battle analysts, such a conclusion could not be justified. They stated flatly that they could not accept information of this kind. About six months later, a unit number associated with a Soviet division from the Odessa Military District

was identified in Hungary, and the division was immediately accepted in the order of battle.

By the time that Soviet forces were deploying for the invasion of Czechoslovakia in the summer of 1968, our collection and analysis had seemingly improved, or perhaps because we had more time we were able to do better. At any rate, the usual conflict between indications and order of battle analysts was subdued, and there were fewer (one cannot say no) complaints from warning analysts that too few units were being accepted by order of battle or accepted too late. A controversy did arise, however, over the Soviet troop movements into Poland which began in the last few days of July -- which illustrates that this question of troop movements when unit identifications are not available remains a potentially serious problem for warning. The initial sources of information on these Soviet troop movements into Poland (later determined to total five divisions from the Baltic Military District and probably two divisions from areas farther south) were primarily tourists and other legal travelers in Poland. Within 48 to 72 hours after the initial movements into Poland began, the US Embassy in Warsaw had received a half dozen voluntary reports from travelers of sightings of heavy troop movements at several road crossing points from the USSR. Within a few days, Western attaches had located two holding or assembly areas for these forces -- one to the north of Warsaw and one to the south -- to which they were denied access. Indications analysts, and to a lesser degree other current analysts, were prepared to "accept" or at least to report that substantial Soviet forces were entering Poland which were

apparently backup forces (not part of the concurrent buildup directly along the Czechoslovak border). Even indications analysts, however (usually considered alarmist or prone to exaggerate by their more conservative colleagues), would hardly have been willing to accept in early August what later proved to be true -- that some 11 or 12 Soviet divisions all told were then in Poland, as compared with the normal two. Order of battle analysts, using their criteria, were not willing to accept any units which they could not identify, or whose movement from home stations had not been confirmed, which resulted in some delay in acceptance of additional Soviet divisions in Poland.

Concealment and Detection of Various Types of Movements

A few comments may be useful here concerning our capabilities to detect changes in the status of various types of units and varying types of movement.

The foregoing discussion has discussed ground force units exclusively, for two reasons. In most military buildups, the great bulk of the deployments will be ground force units and their status and capabilities will usually be the major concern. And secondly, ground force movements are usually the most easy to conceal and hence the most difficult to detect on a timely basis, so that the major order of battle problems for indications and warning are usually, although not always, with respect to the movements of ground force units.

It should be fairly obvious why this is so. Ground force units, although they may be the largest in numbers of men and total piece of equipment, can be broken up for deployment and moved by a variety of means in small contingents.

The men and much of the equipment often can be rather easily concealed or camouflaged. There is a great deal of territory in which units can be deployed, and it is very difficult to cover it all. Even very fine and frequent aerial reconnaissance (except in exceedingly open or desert terrain) may fail to discover many troops or pieces of equipment -- and less adequate collection means may mean that major formations and movements are wholly undetected.

Aircraft and naval units, on the other hand, are much more difficult to hide, even though there may be many fewer of them, and their movements usually are more likely to be detected. Aircraft can only operate from airfields, or from improvised air strips of some type, in open terrain. While the aircraft themselves may be partially or even wholly concealed in hangars or caves, major aircraft deployments require the use of major and fixed ground facilities. It is very difficult indeed, if some collection assets are available, totally to conceal the redeployment of hundreds of fighter or bomber aircraft. Moreover, it is much easier to count them and hence to come up with an accurate order of battle than it is for ground force units.

Naval units have the advantage, at least sometimes, of vast oceans in which to move. But, except for submarines or in cases of extremely poor weather, naval units cannot be concealed from observation on the open seas. Once found by sea or air reconnaissance, naval movements are extremely vulnerable. And, like aircraft, they are very easy to count and identify when they have been found.

This is not to suggest that there have not been major -- and extremely successful -- instances of secret deployments of major air and naval forces, as

Pearl Harbor should remind us. The problems of order of battle analysis, and the arguments between OB and warning analysts, apply to all types of forces in some degree. It is just that, in most cases, they are more likely to be acute for the ground forces, where the order of battle lag is usually the longest.

The method by which troops and equipment are transported may be a significant factor in the timeliness of our detection. Generally, in relatively denied areas, the most difficult deployments to detect are those made by rail, since military equipment and freight are often not readily distinguishable and relatively few people will be aware of major changes in rail schedules or movements. Deployments by road are easily observed, are likely to disrupt traffic and usually will be common knowledge among the local citizenry; the chances of some reporting of such movements are usually better than by rail. When aircraft or ships are used to deploy troops, we are the most likely to detect the movement of the transports -- but, unless coverage is very good, we may not be able to tell whether troops, civilians or cargo are being moved. We may be alerted to an abnormality -- as in the case of the Soviet ship movements to Cuba in 1962 -- without being able to determine initially what is being moved.

Needed: A Voice for Warning in the OB Buildup

The differences in approach, in criteria, in analytical techniques between indications and order of battle analysts are serious, and they are potentially as damaging for warning in the future as they have been in the past. Indeed, a dependence on the strict criteria of order of battle in a genuine crisis in which the enemy was employing his most sophisticated security and deception techniques could

be absolutely catastrophic. At the same time, few would presume to suggest that the normal analytic techniques of order of battle (which have generally worked well, if slowly, in peacetime) should be tossed overboard for more imaginative, less precise and more "indications-oriented" techniques.

What is the answer to this serious dilemma? The answer is that both sides should be given their say, but that order of battle analysts should not be permitted in the crisis situation to have the last word on what can be "accepted" or what can even be reported to higher authority. There are things more important in an impending showdown with the enemy than the purity of order of battle techniques. It is more important that superior authorities know that some enemy troop buildup is under way, even if we cannot be too precise about it, than that they be led to believe that there is no such buildup.

The arbitration of such disputes belongs at the supervisory level. The system must not work -- as it has sometimes worked in the past -- so that the order of battle analyst is permitted to review and to veto what indications and current analysts, in their best judgment, believe to be of warning significance. For the most part, order of battle analysts are accustomed to a degree of autonomy and independence on what they will decide or "accept" which is probably unparalleled at the analytical level of intelligence. Military analysts on other subjects, and political and current analysts in general, do not begin to have the authority to make judgments which the order of battle offices take for granted as their prerogative. Nearly everyone -- regardless of their experience in political analysis -- feels free to question the judgments of political experts, or to debate the meaning of propaganda statements.

Much military information is freely discussed and analyzed and varying opinions or judgments as to its significance may be offered, often by those who make no claim to particular expertise on the subject. But for some reason order of battle analysis (together with a few other relatively technical or specialized subjects) has usually been considered almost solely the responsibility of order of battle experts -- and as a general rule they, and they alone, have been permitted to make the assessments as to whether or not a given military unit does or does not exist or has or has not deployed. And often the basis or reasons on which such judgments are made, or not made, goes unquestioned by higher authority. Intelligence chiefs and policy officials may well not even hear contrary argument or opinion on troop deployments or other order of battle material unless the indications or other current analysts are given an equal opportunity to present their views.

To paraphrase a famous quotation, "War is too important to be left to order of battle analysts." With all due respect to their experience and expertise, it is really expecting too much that they will change their techniques, methodology and criteria for acceptance or reporting of units when some extraordinary situation arises -- and when it is imperative that judgments be made soon lest the warning be too late.

What the intelligence community needs in these circumstances is to recognize -- and give equal time to -- both order of battle and warning analysts. It needs on the one hand the analysis and judgments of order of battle experts -- who will generally be adhering to their traditional, and conservative, techniques.

It will be important that the supervisory level understand (and this may mean to inquire actively into) these techniques and criteria, so that it will be appreciated how much firm or unequivocal evidence is actually required by order of battle before a unit is accepted. The supervisor should have some appreciation of the normal time lags in identification and acceptance of units so he may recognize how long it might be before confirmatory order of battle evidence may be received. Subject to such supervision, the "confirmed" or "accepted" order of battle would continue to be reported much as it would in normal circumstances.

In addition, however, there should be another level or type of reporting which would concern itself with the indications of what may be or could be under way. Since the order of battle analysts often will be reluctant to make any judgments on information they cannot "accept," it may be imperative for warning that another group of analysts, not bound by order of battle criteria, be given equal opportunity to report the indications and to make at least tentative assessments of their significance and implications. It is essential that this reporting of what is possible not be subject to the veto of an order of battle analyst because it does not meet his traditional criteria for acceptance.

Conventional order of battle methods must not be permitted to hold back warning. To insure that the indications of a military buildup are being adequately reported, and not just that which has been "accepted," is a constant and most important responsibility of the supervisor. He must not attempt to resolve the argument by turning it back to the order of battle analysts for decision on the grounds that they are the "experts." To do so may be fatal to the warning judgment. Over

a period of years, this issue has probably been the single greatest bone of contention between the indications system and the rest of the community. To deny the warning analyst an equal hearing on the all-important issue of the military build-up is to make a mockery of the whole indications system -- and to defeat the purpose for which it was established. The so-called "independent" indications effort will have no status whatever if it is not accorded a voice on this crucial issue.

It would be misleading to close this chapter without noting that progress has been made on this problem. Over a period of years many people have come to recognize that normal order of battle methods may be inadequate and too slow in crisis situations. Post-mortems have often confirmed the contentions of indications analysts that their methods, in these circumstance, are more accurate and responsive to the problem than waiting for all the order of battle "proof" to come in. The proliferation of indications shops and general dispersion of the military analytical effort in the community, although probably excessively duplicative in some respects, also has done much to insure that order of battle analysts do not have a monopoly on reporting military movements, and their techniques have come under increasing scrutiny by other analysts. Nonetheless, this is a problem to which the community at all levels needs to be constantly alert. Particularly when an abnormal situation is developing, and it becomes evident that unusual troop movement is or could be in progress, the intelligence system may need to take specific steps to insure that indications of order of battle changes, as well as confirmed deployments of known units, are being adequately analyzed and reported.

A HANDBOOK OF WARNING INTELLIGENCE

PART IV: SPECIFIC PROBLEMS OF MILITARY ANALYSIS

CHAPTER 15: ANALYSIS OF MOBILIZATION

CHAPTER 15: ANALYSIS OF MOBILIZATION

Traditionally in expectation of war, or sometimes not until after it has broken out, nations great and small have mobilized. Probably all developed nations, and most under-developed ones as well, have some type of national or general mobilization plans. Historically, the declaration of general or national mobilization often was the decisive indication of the imminence or inevitability of war -- a sign that the die was finally cast. So it was on the eve of World War I:

> "In Berlin on August 1 [1914], the crowds milling in the streets and massed in thousands in front of the palace were tense and heavy with anxiety....The hour of the ultimatum [to Russia] passed. A journalist in the crowd felt the air 'electric with rumor. People told each other Russia had asked for an extension of time. The Bourse writhed in panic. The afternoon passed in almost insufferable anxiety'....At five o'clock a policeman appeared at the palace gate and announced mobilization to the crowd, which obediently struck up the national hymn, 'Now thank we all our God.' Cars raced down Unter den Linden with officers standing up in them, waving handkerchiefs and shouting, 'Mobilization!'....
>
> "Once the mobilization button was pushed, the whole vast machinery for calling up, equipping, and transporting two million men began turning automatically. Reservists went to their designated depots, were issued uniforms, equipment, and arms, formed into companies and companies into battalions, were joined by cavalry, cyclists, artillery, medical units, cook wagons, blacksmith wagons, even postal wagons, moved according to prepared railway timetables to concentration points near the frontier where they would be formed into divisions, divisions into corps, and corps into armies ready to advance and fight. One army corps alone--out of the total of 40 in the German forces--required 170 railway cars for officers, 965 for infantry, 2,960 for cavalry, 1,915 for artillery and supply wagons, 6,010 in all, grouped in 140 trains and an equal number again for

their supplies. From the moment the order was given, everything was to move at fixed times according to a schedule precise down to the number of train axles that would pass over a given bridge within a given time."[1]

Because of the criticality of the initiation of general mobilization, its almost certain impact on or warning to the enemy, and because of the enormous commitment of national resources involved in a general mobilization, nations have sometimes deferred national mobilization until after war has broken out. Thus, both Britain and France declared full or general mobilization only after Hitler's invasion of Poland on 1 September 1939, although both powers almost certainly regarded war as imminent and inevitable following the announcement on 23 August of the conclusion of the German-Soviet non-aggression pact, and both nations of course had taken a number of important preparatory steps and partial mobilization measures prior to 1 September. Nonetheless, so long as the faintest hope remained that Hitler might refrain from attacking Poland and probably also to insure popular support, the leadership of both countries deferred the crucial step so long as it could be avoided.

Needless to say, the national mobilization measures which preceded or accompanied the outbreak of both world wars were scarcely secret -- nor was any particular effort made to keep the effort secret even on the part of the aggressor, Germany. The coming of both wars was clearly apparent, and accompanied even by such conventional diplomatic moves as the issuance of ultimatums, and there was no need whatever to attempt to conceal national mobilization -- which in any case would have been impossible.

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[1] Barbara Tuchman, The Guns of August (New York, MacMillan Company, 1962), pp. 74-75.

The intervening years have in no way diminished the importance of mobilization as an indication of hostilities. While public announcements of mobilization may no longer be expected from nations seeking to conceal their intentions, a full national mobilization probably remains the single most valid indication of war. Nor is it true that our potential enemies today pay less attention to mobilization because of the possibility that the war could last only a few hours or days in a great nuclear exchange. Some people on our side may contend that modern war will make mobilization obsolete, but the Communists have yet to learn this. On the contrary, they appear to have placed even greater emphasis on detailed mobilization plans and their meticulous implementation than was true in the past. Units have explicit mobilization plans, most reservists know precisely where to report and all aspects of the mobilization plan receive the most careful attention and review. One obvious reason for this -- apart from the fact that war will not inevitably be nuclear -- is that the possibility of nuclear war greatly reduces the time in which mobilization may have to be implemented. National survival may virtually require that the whole process go into effect the moment that war appears imminent -- or when the military units themselves are being brought to the highest stages of combat readiness. To delay could upset the entire plan for both defense and offense. Thus, if anything, a major mobilization today appears more rather than less likely. But chances also are that our enemies would seek to implement it very rapidly (we know that they are placing tremendous emphasis on speed of response to alerts and rapid transition to full readiness), so that our warning time might be very short.

Further, from a series of post-war crises we have learned that partial mobilizations are valid indications of preparations for limited hostilities or at least for the possibility of such hostilities. We have also learned that even forces which we have considered at very high levels of preparedness may require some mobilization at least of their support elements. One of the intelligence benefits of the Soviet invasion of Czechoslovakia (of which there were many) was the discovery of how much mobilization was needed or at least undertaken in support of this relatively low-risk operation. The result has probably been a growing appreciation of the importance of mobilization as an indication and also a better understanding of what we should be looking for.

Types and Categories of Mobilization

There are varying types or degrees of mobilization, which may include economic as well as purely military measures, and it may be well to define in general terms the various steps which may be involved.

A partial or selective mobilization normally will involve a recall of reservists to fill out certain understrength units or the activation of reserve units (such as National Guard units in the United States). Sometimes, although not always, this limited recall will be accompanied by a deferment of releases of men due to be discharged, and/or the callup of larger than normal numbers of recruits for training. The latter step usually is taken only if the potential need for additional manpower is deemed to be of some duration. If a relatively short-term crisis or requirement is foreseen, a recall of trained personnel or retention of trained men

obviously is the only satisfactory expedient. Thus, the type of selective or partial mobilization chosen may provide some insight into how the nation in question views the crisis or problem. In any case, however, a partial mobilization usually is taken for one of three reasons: (a) as a contingency preparation when the enemy appears to be embarked on action which could result in conflict (e.g., the US recall of reservists in the Berlin crisis in the summer of 1961); (b) when a nation is preparing for a limited aggressive action of short-term duration (e.g., the Soviet invasion of Czechoslovakia); or (c) when a continuing requirement for additional manpower for the armed forces is anticipated for some time to come (e.g., the raising of US draft quotas for the Vietnam war, or the considerable expansion of Soviet forces beginning prior to the start of the Korean war and continuing into the fifties). Thus, a partial mobilization (usually, if not always) does involve an expectation or possibility of conflict -- but not total conflict or a major commitment of the nation's resources.

Full mobilization, on the other hand, is rarely if ever undertaken except in expectation of major conflict of either short or long duration. A full mobilization of the armed forces will involve the filling out of all existing units, the activation of all reserve or cadre units, and the mobilization of all necessary support units and logistic backup required to bring the armed forces to full combat readiness. Needless to say, this a serious and expensive step for any nation, not be undertaken lightly, and historically it has nearly always meant that a major conflict was imminent or under way.

General mobilization probably would be considered the equivalent of full mobilization. It involves the activation of the nation's wartime plan for its armed

forces -- the recall to duty of all active reservists and the mobilization of all units in the approved wartime force structure. The day when full or general mobilization is put into effect is M-Day.

Total mobilization, while not always differentiated from full or general mobilization, is a useful descriptive term to define that mobilization above and beyond what the nation had initially planned for. It will involve the expansion of the armed forces beyond M-Day plans, the formation of totally new units, and the full requisitioning of the resources of the nation to sustain its armed forces. There is implicit in the term a sense that the nation is literally fighting for its survival. The USSR and Nazi Germany were totally mobilized in World War II. The US was not. A classic definition of total mobilization was the edict of Haile Selassie to his nation on the invasion of Ethiopia by Italy in 1935:

> "Everyone will now be mobilized and all boys old enough to carry a spear will be sent to Addis Ababa. Married men will take their wives to carry food and cook. Those without wives will take any woman without a husband. Women with small babies need not go. The blind, those who cannot walk or for any reason cannot carry a spear are exempted. Anyone found at home after receipt of this order will be hanged."

Industrial or economic mobilization obviously involves the productive resources of the nation as distinguished from its armed forces. General mobilization probably, and total mobilization unquestionably, will also involve economic mobilization. In its extreme form it will involve the diversion of all economic resources, other than those needed for the bare sustenance of the civilian population, to support of the war effort. Both great industrial and primitive agricultural nations can be economically

mobilized -- both Germany in World War II and North Vietnam in recent years meet the definition. Since there is a later chapter on economic indicators, we will confine the discussion in this chapter to military mobilization.

Pitfalls of Mobilization Analysis

The intelligence system is more likely to obtain data on and to report promptly the movement of a single submarine or the redeployment of a squadron of aircraft than it is the callup to the armed forces of a half a million men. This extraordinary phenomenon -- of which many people need to be convinced -- is testimony to the enormous differences between democracies and dictatorships. Information which could never be concealed in this country, even in wartime, is routinely held secret in Communist nations and protected by highly effective security measures. Information known at least in part to thousands or even millions of people in the USSR or Communist China may be unknown to us. And among those secrets is likely to be the conscription quotas and strengths of the armed forces, including considerable variations in their strength and partial mobilizations in times of crisis. Compounding our problem may be excessive requirement for "proof" of such changes which is almost unobtainable rather than a more flexible approach which would permit us simply to acknowledge that major increases seem to be in progress, the extent of which we cannot judge with certainty.

In a speech to the Supreme Soviet on 14 January 1960, Nikita Khrushchev announced a series of strength figures for the Soviet armed forces from 1927 to 1960 -- the first time certainly since World War II and possibly ever that the Soviets had released such data. Among the figures announced by Khrushchev for the total strength

of the Soviet regular armed forces (exclusive of internal security troops) were:

1945:	11,364,000	(presumably the World War II peak)
1948:	2,874,000	(result of post-war demobilization)
1955:	5,763,000	(increase attributed to US-NATO threat)
1960:	3,623,000	(result of claimed reductions of 2,140,000)

Now the Soviet Union traditionally, and Khrushchev specifically, have not been noted for the reliability and completeness of their public statements, and it would be naive to assume that one should accept these figures precisely at their face value. It is a characteristic of published Soviet statistics that they are very sparse and, while usually accurate insofar as they go, are so incomplete that they can be very misleading (like the Soviet published military budget). Further, in the case of this particular speech, political objectives undoubtedly were the motivating reason for these pronouncements which also included a proposal (dutifully ratified by the Supreme Soviet) to reduce the Soviet armed forces by another 1,200,000 men. In addition, available data lead us to believe that the peak of Soviet armed forces strength in the 1950's was not reached in 1955, as implied by Khrushchev, but a couple of years earlier in 1952-53 or specifically because of the Korean war.

Allowing for such discrepancies (which distorted the reasons for and probably the timing of the Soviet military buildup in the early 1950's), Khrushchev's figures probably reflected accurately the basic trends in and general magnitude of Soviet armed forces strength -- or so we recognize now.

Most interesting was his claim that the strength of the armed forces had more than doubled in the period from 1948 to 1955 (an alleged increase of 2,889,000 over

the 1948 figure of 2,874,000). For indications analysts this was of particular interest since they had repeatedly urged an increase in the US estimates of Soviet strength during this period on the basis of evidence which seemed incontrovertible. Among that evidence had been the buildup of a number of cadre units (including two mechanized armies in East Germany) in 1949, a substantial increase in call-ups to the armed forces (including a two-class callup in 1951), and the active if unannounced participation of Soviet air and air defense forces in the Korean war.[1]

And what were the current estimates? An increase in Soviet air and naval forces was reflected in going estimates between 1950 and 1955 -- the estimated strength of the air forces rose from 650,000 to 835,000 and that of the navy from 600,000 to 695,000 (US Army estimators usually charged that the Soviet naval air forces were counted twice in both the air and naval figures). But the US estimates of Soviet ground forces -- the bulwark of the Soviet armed forces and the pet of the conservative marshals, nearly all of whom had been ground force commanders in World War II -- remained unchanged at 2,500,000 throughout the period. No increase whatever was reflected in current estimates of the ground forces from 1948 to 1955 -- a fact which disproves, at least for once, the contention that intelligence produced by the separate military services is always self-serving.

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[1] In an historic statement, which passed virtually unnoticed, a Soviet broadcast to China on 21 August 1970 finally acknowledged the USSR's participation in the Korean war: "The Soviet Union sent military advisers to Korea. They directly took part in combat.... The Soviet Union dispatched air force units to China. Soviet pilots downed scores of US planes and protected northeast China...."

Why, when there were literally years to accumulate the supporting evidence, did the estimators fail to raise their estimates of Soviet ground force strength? Those who have attempted to reconstruct what went wrong have never quite been able to say. Insofar as it can be reconstructed from memory (little is preserved to explain the rationale of such estimates), the following factors appear to have been the causes of the excessive conservatism:

- It was judged, when it was apparent in 1950-51 that the strength of the Soviet forces was increasing, that earlier estimates had been too high and that therefore the increase should be "absorbed."

- Order of battle data (except for Soviet units in Eastern Europe) was too tenuous to establish with any certainty the existing number of ground force divisions, let alone what the strength of given units might be (from cadre to full TO&E).

- Because of this inadequacy of OB data, there was no demonstrable place in the Soviet ground forces to put the increase -- or, in OB terms, there was nowhere an increase could be "accepted."

- The estimators themselves were essentially cautious and conservative and probably, perhaps almost unconsciously, deemed it better to let well enough along than to "rock the boat" and attempt to explain the problem to their superiors.

- And, finally, there was probably no pressing demand from the command or policy level to come up with new estimates so long as there was no material increase in Soviet ground forces in the forward areas where they might pose an immediate threat to US or NATO forces.

In retrospect, after Khrushchev's speech, an Army Intelligence "reanalysis" came up with a figure for the ground forces from 1951 to 1953 of 3,400,000 -- an increase of 900,000 which was quite likely still too conservative, and still short of Khrushchev's claim. On the other hand, a separate analysis of Soviet armed forces strength done independently by another agency in 1969 concluded that total Soviet military strength, minus the security forces, had totalled over 6,300,000 in 1952 -- of which about 5,000,000 were either in ground force line units or in other elements of the armed forces (AAA units and command and support) normally counted in ground forces figures. The latter analysis -- while tacitly accepting much of what Khrushchev had said -- actually concluded that his figure had been too low for the peak of Soviet strength reached in 1952-53 during the Korean war.

In summary, the spread of figures for the strength of the regular armed forces of our major adversary (and major intelligence target) for 1952-53 was:

Current accepted figure at the time:	3,900,000
Army reanalysis (1960)	4,825,000
Khrushchev's figure (for 1955)	5,763,000
Separate analysis (1969)	6,305,000

Lest the reader be misled into assuming that such problems are unique to the USSR, let us examine a more recent and actually more critical example from Vietnam.

In 1964 -- even prior to the Tonkin Gulf incident of 2 August 1964 and well before the start of US bombing of North Vietnam in early February 1965 and the introduction of the first US combat troops in March-April 1965 -- North Vietnam had begun the augmentation of its armed forces and the preparations for

the introduction of regular North Vietnamese military units into South Vietnam, as opposed to small groups of infiltrators which had previously been dispatched to the South. In the spring of 1964, the training of the first units (regiments) for dispatch to South Vietnam was started and the process of upgrading NVA brigades to divisions was begun. By the fall of 1964, a recall of reservists -- particularly NCOs -- to the armed forces was in progress, primarily to provide the trained cadre for new units and an expansion of the armed forces. But all this was under way in virtual secrecy from us, in an area where our military information had long been sparse, collection slow and difficult, and our order of battle data delayed and inadequate. In early 1965, however, information began to come in -- much of it in the form of announcements by the Hanoi press and radio and not until later from prisoners in South Vietnam -- which suggested that a substantial augmentation of the North Vietnamese armed forces was under way.

Between January and April 1965, Hanoi: issued a decree calling for all-out efforts to build up powerful armed forces, including the regular army, and to "get ready to fight"; referred in the press to "tens of thousands of newly enlisted army men" who had volunteered to prolong their service terms; announced new mobilization measures which were not fully explained but which included revision of the military service law "to strengthen building of the armed forces" and the extension of terms of service; halted virtually all releases from the armed forces; announced a campaign under which youths by the thousands were said to have volunteered to join the army and go anywhere needed to fight; announced the adoption of other decisions concerning mobilization of the country, details

unspecified but intended to cope with the "new situation" in which the whole country was in a state of direct hostilities with the US and to "strengthen the building of armed forces...to cope with all war expansion schemes of the US."

In the ensuing late spring and early summer months, there were accumulating indications that a serious mobilization effort was in progress in North Vietnam. Evidence from classified sources augmented the material from the North Vietnamese press exhorting the people to greater efforts and calling for the youth to volunteer for the army. On 20 July, a US press dispatch from Saigon quoted Professor P. J. Honey, a British authority on Vietnam, as stating that there was a "massive military callup in North Vietnam." Basing his analysis almost solely on statements in the Hanoi press (since he had access to little if any classified material), Professor Honey concluded that North Vietnam was preparing to commit a large number of troops very suddenly in the South Vietnamese highlands. While official figures on North Vietnamese military strength reflected almost no increase, an indications roundup of the classified and unclassified evidence on North Vietnamese mobilization concluded in early August that: "The question is not 'Is North Vietnam augmenting its armed forces?' but is it doing so on a scale so as to permit an early and major introduction of additional forces into South Vietnam?"

Throughout the following months the argument continued, with indications analysts piling up scraps of information from the North Vietnamese press, prisoner interrogations and other sources to support their contention that a substantial

augmentation of the North Vietnamese Army was under way, the objective of which was to put thousands of combat infantry troops into South Vietnam -- the battleground on which North Vietnam expected to win the war. Meanwhile, by early 1966, the processes of order of battle analysis had "accepted" the presence of several North Vietnamese regiments in South Vietnam, thus permitting some increase in estimated NVA strength, and OB had "confirmed" the upgrading of one NVA brigade to division. (It had actually been upgraded in 1964, and by early 1966 there was some evidence from prisoners and/or captured documents that three other NVA brigades had been upgraded to divisions. So great was the time lag in obtaining OB "confirmation" that some units actually were being downgraded by OB to brigades in 1965, based on information up to two years old, when in fact they had already been reconverted to divisions. And it would be some time before we would understand the process of regeneration of North Vietnamese units in the north as regiments were dispatched south, the formation of training divisions, and other measures for the continuing recruitment, training and infiltration of units to the South.)

The discrepancy between the order of battle and indications approach to this mobilization will be clearer from the following: In March 1966, the official estimate of North Vietnamese Army strength was 274,000, an increase of 31,000 since July 1965, which in turn was a slight increase from early 1965. Independent, and admittedly not very scientific, indications analyses had concluded, on the other hand, that an increase of some 200,000 to 250,000 men in the NVA during the past year was not unreasonable and might even be conservative; total NVA strength,

based on information other than rigid order of battle criteria, was assessed at about 450,000. Interestingly enough, little more than a year later, a figure of about 450,000 was officially accepted, based on evidence which was then more than a year old. And a study done years later, based on much more evidence on the scale and timing of North Vietnamese conscription, came to almost the identical conclusions as the indications study of March 1966.

These histories of two major mobilization problems of recent years from widely separated areas have been explained in some detail so that the reader can better perceive the difference between the conventional military approach and the indications analysis. If the requirement for order of battle "confirmation" is too slow and hence may be dangerously misleading when units are deploying, still less can conventional order of battle methodology be expected to cope with mobilization. "Proof" of the formation of new units, particularly in a rapidly developing situation when deployments may also be under way, is extremely difficult to come by -- it may not be just weeks, but often months or even years before the order of battle developments in a major buildup can be reconstructed. It may be just as difficult and time-consuming to determine that an understrength unit is being upgraded or that auxiliary support units are being mobilized or command echelons beefed up. When mobilization is in progress, we are almost certain to be running behind the facts -- except in those cases where we are privy to the mobilization plan and we know for sure that it is being implemented, circumstances which rarely if ever obtain in closed societies.

In both the examples cited above, the situation actually could have been much more serious, and we are fortunate that the gross misestimates did not cause

more problems. The Soviet Union quite probably never intended to commit its ground forces during the Korean war, but we cannot be positive of this had the war gone worse for the Chinese Communist forces in Korea. In the case of North Vietnam's mobilization, it was the slow pace of the war itself, the time lag between recruitment of men and the piecemeal commitment of units to the South, the long overland trek and the extended logistic routes which permitted us to learn gradually how much effort and manpower North Vietnam was expending so that the full impact of the mobilization effort was never suddenly brought to bear against US forces -- as it might have been in a conventional military situation.

The Concealment and Detection of Mobilization

In neither of the preceding examples did the nation in question make any particular effort to conceal its mobilization. The North Vietnamese in fact were announcing theirs, primarily to their own populace and only incidentally for our benefit. The Soviet effort, although not publicized as such in the USSR, was supported by a substantial amount of information, in particular the two-class call-up.

In other instances of recent years as well, Communist nations have announced, or all but announced, partial mobilization measures. Communist China's entry into the Korean war was preceded by public calls for "volunteers." (Whole units, rather than individual "volunteers" of course were actually sent, but the announcements probably also were intended to encourage enlistments.) At the height of the Berlin crisis in the summer of 1961, the USSR announced that it was holding in service "necessary numbers" of men due for release from the armed forces, allegedly until a

German peace treaty was concluded. This announcement undoubtedly was intended in large measure for political impact and was part of the USSR's psychological warfare campaign over Berlin. Nonetheless, the retention of the men was a real preparedness measure, and we know from classified documents that the USSR also instituted a partial callup of reserves and a reinforcement of units in the military districts bordering Eastern Europe.

In the Czechoslovak crisis in the summer of 1968, the Soviet Union announced the callup of reservists and requisitioning of transport equipment under the guise that it was conducting a Rear Services "exercise." To lend verisimilitude to this claim, the Soviet press carried daily comments on the progress of the "exercise," but the concurrent major buildup of forces along the borders of Czechoslovakia made it doubtful that any exercises were in progress and supported the likelihood of a bona fide partial mobilization, although admittedly of undetermined magnitude.

These instances raise some interesting questions -- particularly for warning -- about how far we may reasonably expect any nation to attempt to conceal its mobilization efforts and what types of measures it may take to attempt to disguise or explain away mobilization. And our answers, or at least tentative answers, to these questions will help us to understand what we may reasonably expect to know -- and not to know -- when a nation is mobilizing.

It would seem doubtful that any nation, no matter how rigid its control of press and populace, could or would even try to carry out a full mobilization for war

in total secrecy. Such a move would of course be impossible in a democracy, but dictatorships also need the support of the populace for war and some explanations of massive and sudden recalls of men to the armed forces would probably be forthcoming. Such massive military preparations also would be discernible both to natives and to foreigners, and rumors probably would spread like wildfire through the secret grapevines which exist to provide the "truth" to the populace of countries denied the benefits of a free press. We should thus expect to learn something, and perhaps a great deal, but how much we could never be sure in advance. A very rapid mobilization in preparation for imminent military action, particularly if covered by announcements of some type of major tests or exercises, could be quite deceptive, and we might well find out too late how extensive and real the effort was.

Partial mobilization measures, particularly when carried out in the border areas of large nations some distance from their capital cities, can very well be concealed. We should be under no illusions as to our limited capabilities to detect even quite extensive military preparedness measures, including mobilization, in areas denied to our observation. The capabilities of great Communist nations, and some of the smaller ones as well, have been amply demonstrated in this respect. Had the USSR not chosen to announce its partial mobilization in the summer of 1961, we would have known little if anything of it. Similarly, the announcement in July 1968 of the callups for the impending Rear Services "exercise" rather than any independent evidence was our tipoff that a partial mobilization was in progress. Although we are not sure why the USSR chose to make the announcement, a likely reason is that it knew it could not conceal the forward troop movement into Eastern Europe and wished to

announce an "exercise" in advance as cover for this. There was virtually no leak through Soviet sources of the progress or extent of this mobilization at the time, and it was only in retrospect that its full extent was appreciated.

There is no doubt that the USSR, Communist China and North Korea -- to name the most conspicuous candidates -- are fully capable of carrying out partial mobilizations in almost total secrecy, if they choose to do so. Such evidence as we might receive, even under favorable circumstances, could well be mistaken for exercises. Troop deployments, particularly major ones, might be detected, but initial mobilization measures quite likely would not. Our capabilities in the Eastern European countries -- by virtue of their smaller size and our more adequate collection and greater freedom of travel -- are considerably better, but there is always the danger that drastic security measures would greatly impair our capabilities at the crucial time.

This gloomy view is reinforced by the fact that we know that most Communist states envisage the possibility of a partial mobilization in secret, and perhaps even the initiation of total mobilization without publicity. They have recognized the value of such secret preparations both for the achievement of strategic surprise and for the tactical advantages which accrue in the initial phase of the war to the nation which has accomplished in advance the mobilization of the units to be committed in the first operations of the conflict. Since doctrine calls for this, or at least for this contingency, we may be relatively sure that careful plans exist for the implementation of such secret mobilization measures and that security and deception measures have been or would be devised to mislead us.

It is because such capabilities and plans exist that it is all the more important that intelligence analysts recognize and be alert for the clues which might lead us to understand that mobilization had begun. The folly of expecting conventional order of battle methodology to provide an answer to the extent of mobilization, or even to be able to "confirm" that mobilization has begun at all, should be apparent. We must be prepared to accept more imaginative, if less exact, methods.

Our ability to recognize that mobilization has begun, if the enemy wishes to conceal it, will likely be dependent in large measure on related developments. Most important could simply be the existence of an international crisis which would make partial mobilization a likely move. If this situation is correctly perceived, various military anomalies -- such as cessation of normal training, indications of alerts, sudden shortages of transport for normal civilian purposes or sudden appearances of additional transport and combat equipment in installations of military units -- may provide clues that a genuine mobilization is under way. The recognition of the possibility will likely also call for increased or extraordinary collection measures which may provide more evidence.

In addition, it will be extremely important to understand correctly what the enemy is saying. The fact that both North Vietnam in 1965 and the USSR in July 1968 virtually announced their mobilization in transparently obvious statements did not mean that all or even a majority of analysts perceived it. The community, and especially military analysts not particularly experienced in the analysis of propaganda,

need to acquire a better understanding of what such statements may mean. Many seem to go to one extreme or another -- they accept all statements at face value or they reject them totally as "propaganda." More careful study and analysis of enemy statements is needed, and the assistance of experts on these matters should be sought. Too often the enemy is really telling us what he plans to do or is doing and we are reluctant to perceive or to accept it.

Students of warning as well as basic military analysts should take time to read and study the basic legislation, which is often unclassified, which governs the terms of service for men in the armed forces and often the conditions under which they can be recalled or held in service beyond their terms. It is a fundamental error to consider that such legislation is so much window dressing or that Communist nations never observe their laws. In fact, these laws are applicable and nations such as the USSR often take particular pains to observe, at least on the surface, the terms of their legislation. The public Soviet decree that men were being retained in service in 1961 may have been predicated in large part on the fact that the law prohibits such extension beyond two months without appropriate action of the Supreme Soviet. It was reported after the invasion of Czechoslovakia that some Soviet reservists went on a hunger strike in early August when their three months' legal recall to active duty had expired (these were the first group of reservists called up for the initial deployments of Soviet troops in early May). As a result, they were reportedly released and a whole new group of reservists called up only four days before the invasion, at least in one unit. An understanding of basic but rarely needed facts of law, doctrine,

policy and practice may well assist the analyst in time of crisis to perceive that a mobilization has begun.

For the most important thing for warning is to recognize that a mobilization -- full or partial -- is in progress. If we are to be alert to the possibility of impending hostile action -- and so warn our superiors -- we must be willing to accept the fact of such mobilization even when we cannot demonstrate its extent or be able to "prove" that a given unit or a number of units have in fact been mobilized. To recognize the fact of mobilization, we must often rely on indirect evidence -- including public statements of the enemy which are often most revealing, and deductions based on partial information that some reservists or groups of reservists are being mobilized. In some cases, we may never be able to confirm the extent of the mobilization, or there may be widely varying estimates even though some compromise may finally be reached on an "official" figure. But this is less important, far less important, than that the appropriate authorities be warned that some mobilization, extent not yet clear, is in fact under way.

A HANDBOOK OF WARNING INTELLIGENCE

PART IV: SPECIFIC PROBLEMS OF MILITARY ANALYSIS

CHAPTER 16: LOGISTICS IS THE QUEEN OF BATTLES

CHAPTER 16: LOGISTICS IS THE QUEEN OF BATTLES

It would be impossible in a single chapter to give adequate attention to the importance of logistics for the conduct of war -- and hence the importance of logistic indications and the detection of logistic preparations for warning. The measure of the significance of logistics is conveyed in the title of this chapter. Simply stated, logistic preparations are of decisive importance, and the level of logistic activity can be the single most important indication of the likelihood, or unlikelihood, of hostilities. It may be, and often is, the determining indication that a real military buildup for combat is in progress, as opposed to exercises or a show of force. The logistic buildup always will be greater for combat than for exercises.

The extent and variety of logistic preparations for modern war are reflected in the number of logistic and transportation items carried on indicator lists, which usually equal or exceed the number for any other topic. An indications specialist, asked where he would most wish to have an espionage agent in the military establishment of a potential enemy state, replied, "In the office of the Chief of Rear Services" -- the name by which the military logistic and support services are known throughout the Communist world. For if we could be sure of knowing the extent, level and variety of logistic preparations at any time we would not only have a very accurate grasp of the enemy's capabilities, we would probably also have very precise insight into his intent.

In this chapter we will be considering only those aspects of support, supply and movement which are an integral part of the military establishment or which are

in direct support of military operations -- as opposed to more general and largely civilian economic indicators (which are discussed in Chapter 22).

Nations are not Logistically Ready for War

So much has been said in recent years about the threat to us of our potential enemies, the extent to which they allocate their resources to military preparations, and how many missiles, tanks and aircraft they are producing that it is easy to gain a mistaken impression that these nations also are in a high state of readiness logistically for hostilities, and would need to undertake little additional preparation for war. At one time, at least, and even to some extent today, such views have been rather widely held, particularly with regard to the Soviet Union.

As with many other things, some experience with live crises and improved collection have given us a better appreciation of reality. It is true, of course, that the USSR does produce large quantities of weapons and equipment and it does have substantial stocks of many items in reserve depots -- some in forward areas and others farther to the rear -- which would be drawn upon in the event of hostilities. In the forward area (i.e. Eastern Europe) there have been rather widely varying estimates of the quantities of supplies on hand; some have been judged adequate for combat for a month or more, others for less, and some items appear to be in quite short supply, including some which might be most crucially needed in the event of actual hostilities.

In any case, whatever our estimates are, the USSR itself has clearly felt its logistic preparations to be inadequate for the possibility of hostilities. Not only did the Czechoslovak crisis reveal a requirement to mobilize Soviet combat units, still more striking was the requirement to mobilize Rear Services support units. In order to support the forward movement of combat units, it was necessary to requisition transport

vehicles and their drivers from their normal civilian activities -- and this at the height of the harvest season when they were most needed. These reserve transport units were then employed in shuttling supplies from the USSR to forward bases both prior to and after the invasion of Czechoslovakia and were only demobilized in the autumn when the situation had stabilized sufficiently to permit a withdrawal from Czechoslovakia of a substantial portion of the original invasion force. There are some indications that, even with this effort, supply shortages were encountered -- although there was no active resistance.

In addition, the USSR took some extraordinary supply measures in Eastern Europe itself. For the first time within memory, there were reliable eyewitness observations of the emptying of ammunition dumps -- one divisional ammunition facility in East Germany was stripped even of the guards on the watch towers, an event believed to be unprecedented since World War II. These incidents had occurred before 1 August, or three weeks prior to the invasion.

These points are made here to emphasize that these activities bore no similarity to an exercise (although in a pro forma deception effort the Soviets called much of their logistic activity an exercise) and were clearly distinguishable from the type of activity normally conducted in Eastern Europe. To those analysts who were convinced of the likelihood of a Soviet invasion, the logistic preparation above all was perhaps the most decisive evidence. Even more persuasive than the deployment of twenty plus divisions of Soviet troops to positions around Czechoslovakia (which conceivably, albeit with some difficulty, could have been explained away as mere

"pressure" on Czechoslovakia) was the reality of the logistic buildup. There was no conceivable need for it except for an actual invasion.

This is but one of innumerable examples which could be found to demonstrate the validity of logistic preparations as a barometer of the enemy's preparations for hostilities. Numerous instances could be cited from the Vietnam war -- ranging from such relatively long-term preparations as the construction of new roads in the Lao Panhandle to handle the truck movements to the South, to such short-term tactical preparations as the commandeering of the local populace to porter supplies in preparation for an attack on a fortified village. In large part the history of the war has been a chronicle of ingenious and unrelenting North Vietnamese efforts to sustain their logistic movements and of our attempts to disrupt them. With few exceptions, major new logistic projects or exceptionally heavy movements of supplies have proved to be valid and reliable indications of enemy preparations for forthcoming operations.

In short, the type of logistic preparations undertaken by any nation in expectation of early hostilities is different in both quantity and quality from what goes on in time of peace. And we can -- if we have enough evidence and understand our adversary's methods of operation -- usually see the difference.

Key Warning Factors in Logistic Preparations for Combat Operations

From the multitude of potential logistic indications of impending hostilities -- some of which may be quite specific for particular nations -- we may generalize on several of the more important aspects of logistic preparations, some or many of which will nearly always be undertaken prior to military action. Clearly, the extent and variety of such preparations will be dependent on the type and scope of expected

hostilities, their likely duration, and the degree of counteraction which is anticipated. A nation undertaking a relatively small operation involving little risk against an ill-prepared adversary obviously will need to undertake fewer and less extensive preparations than a nation preparing large numbers of forces for major operations against a formidable opponent. The scale of the logistic preparation alone, provided it can be determined, thus may provide very good clues as to how extensive the impending operation is likely to be.

a. Logistic preparations an integral part of mobilization plan: When the impending military operation requires any degree of mobilization -- as it usually will -- the mobilization also will involve some type of logistic preparations, since the two are inseparably connected. Reserves called up must have weapons and ammunition, expanded units must obtain or remove equipment from depots, additional transport (rail cars, trucks, aircraft and sometimes ships) is needed to move both troops and their supplies and equipment, more POL is needed both to move the units and to support them in the impending action, and so forth. Even the mobilization of a single reserve or understrength unit in a modern army will require a whole series of logistic support measures if the unit is to move anywhere or have any combat capability when it gets there. The more troops involved, the more extensive the logistic and transport support which will be needed -- and the more disruptive or apparent the fulfilling of this requirement is apt to be. Logistic planning for the mobilization and deployment of modern forces is enormously complex and, indeed, the greater part of the mobilization plan is actually composed of the details by which the supply, support and transport of forces is to be accomplished rather than the mere callup of the reservists

themselves to their units. The more carefully the mobilization plan is prepared and the more rapidly it is to be implemented, the greater will be the meticulous attention to every detail of logistic support, since any shortage or bottleneck can disrupt the whole system.

b. Impact on civilian life and economy: The mobilization of additional logistic support on any scale is likely to have an early and sometimes serious impact on the life of the ordinary civilian. Certain factors of course will mitigate these effects: well-placed and large reserves of military supplies and equipment may permit a unit to mobilize locally with no seeming impact on the community; some types of foods can be preserved for long periods; POL depots reserved exclusively for a military emergency will reduce the need to requisition it from the civilian economy; and very affluent nations (such as the US) may have such a general abundance that a relatively small mobilization will have little or no immediate impact on civilians.

Nonetheless, all nations have some bottlenecks and shortages, and in a mobilization of any scope the effect of these will be felt, and often immediately, on the life of civilians. Warning analysts should be cognizant of what these potentially critical shortages are and collectors should be prepared in advance to concentrate on some of these -- since a coincidence of several of them may be either long-term or short-term evidence of mobilization or of unusual military requirements. Some of the types of shortages indicative of military requisitioning which have shown up most frequently in the Communist world have been: food (particularly meats and other choice items which are nearly always diverted to the military in time of need); POL

(despite reserve depots for the military, crises involving military deployments are usually accompanied by reports of POL shortages for civilian use); and transportation and medical supplies (both of such critical importance that they are further discussed below).

c. Impact on transportation: One of the most immediate and most disruptive effects of logistic mobilization measures is likely to be on the transportation system -- and happily for us it is also one of the most likely to be detectable. No nation has a transportation system adequate to take care of any substantial increase in military requirements without either requisitioning from or otherwise having some effect on normal civilian transport. The mobilization plans of all nations call for the commandeering in one way or another of civilian transport facilities. These measures may range all the way from simply giving priority to military shipments (by rail, truck, water or air) over civilian shipments up to extensive requisitioning of trucks from the civilian economy and/or the takeover by the military of the entire transportation system.

The most extensive mobilization plans in the world for the takeover of civilian transport by the military are probably those of the USSR and its Eastern European allies (which have closely integrated plans). Some of these nations also suffer from acute transportation problems and difficulties, including shortages of rail cars and trucks. The result is that any significant or sudden increase in military requirements will usually have an immediate impact on the transportation system. Reports of shortages of rail cars for normal use have sometimes been a key indicator that abnormal military

movements were impending -- e.g., for the buildup of forces around Czechoslovakia in the last week of July 1968. Moreover, we have learned that many (probably most) ground force units lack their organic truck transport in peacetime and must obtain it from the civilian economy when they mobilize (this was also done for the invasion of Czechoslovakia). The mobilization plans of most Soviet and Eastern European units for a long time to come will probably require a requisitioning of trucks from elements of the civilian economy which also have a critical need for it -- particularly agricultural enterprises.

For a major mobilization in expectation of large-scale hostilities, these nations plan a virtual total takeover of the transportation systems -- ground, air and water. Since these systems already are wholly state-owned and controlled, they are fully integrated into the mobilization plan. Key transportation officials, as well as many civil airline pilots, are reserve officers. All Soviet merchant ships have reserve officers aboard, and have rehearsed their mobilization plans. The truck transport units which will be requisitioned from the economy have been identified in recent years as reserve military units; their equipment is better than average and they periodically practice their mobilization plans. Extensive plans undoubtedly exist to place Soviet military railroad officials in the rail systems of Eastern Europe in event of mobilization, if not for the Soviet Army to take over the system. In short, the entire wartime transportation system is geared to go into effect on very short notice, although how effective all this would actually be in a sudden crisis is somewhat less certain.

However effective or ineffective the implementation of these plans, we could hardly fail to detect some aspects of it, particularly in a drastic and sudden military

takeover accompanied by heavy military use of rail and road transport into Eastern Europe. A Soviet military writer some years ago was so concerned over the detectability of sudden increases in military movements into Eastern Europe that he proposed that reinforcements be moved in gradually and the normal pattern of freight movements continued as far as possible. This is certainly a possibility which should be watched and could well be part of a long-term secret plan for surprise attack, if in fact the USSR should ever come to consider such strategy as desirable (and non-suicidal).

In other key areas as well, major disruptions of transportation as a result of military movements have been key indications of preparations for hostilities. The heavy Chinese Communist troop movements to Manchuria in the summer and fall of 1950 caused extensive disruption of normal freight movements -- and there were a number of reports of this. Less extensive troop and supply movements in China also have occasioned sporadic reports that civil transport has been curtailed, and this seems to be one of our few relatively reliable and potentially detectable indications of troop movement in mainland China.

d. Heavy movements of rear service elements and supplies: However many supplies may have been stocked in forward depots or in reserve to the rear, no commander probably ever thought he had enough. The additional buildup of supplies for the forces to be committed in initial operations (whether they be ground assault forces, air, naval, air defense or even missile forces) is a virtual certainty for any nation which has time to make such preparations. Unless forces are taken by total surprise, some logistic buildup prior to operations is to be expected -- and

usually it will be very heavy. In fact, the logistic buildup often will be as heavy and demanding of resources as the troop buildup, if not more so -- and, moreover, will require a longer time. The problem of the "logistic tail" is well known, and many a commander has been ready to go before his supply buildup has been completed, or has been forced to halt his offensive for lack of such key items as POL.

A delay in attack after the combat forces are seemingly ready and in place therefore may not mean any hesitancy or indecision on the part of the enemy so long as the supply buildup is continuing. It should not be regarded as a negative indication, as it so often has been. Rather, a most close watch should be maintained on the logistic buildup in the hope of determining when in fact the enemy will be ready to jump off. (This may not be easy to determine, but it will probably be somewhat better than total guesswork.)

In World War II, the Japanese watched the buildup of Soviet forces in the Far East for about six months. They had estimated that the facilities of the Trans-Siberian Railroad would have to be concentrated on military shipments for at least 100 days before a Soviet attack on the Japanese forces in Manchuria. By late July 1945, their intelligence was reporting that continued heavy movements now consisted almost entirely of supply and rear service troops, which they correctly interpreted to mean that the buildup of combat forces was complete. They concluded that the Soviets could initiate the attack at any time after 1 August and received no further warning of the attack which occurred on 8 August.

In the Soviet buildup for the attack on Czechoslovakia in the summer of 1968, most of the combat forces which participated in the invasion appeared to have completed their deployments by 1 August (this excluded the backup forces which

entered Poland from the Baltic Military District whose movement was still in progress well into August). The intelligence judgment was that Soviet forces were in a high state of readiness (if not their peak readiness) for invasion on about 1 August. In fact, however, the logistic buildup in Europe was still continuing and the Soviets themselves did not announce the completion of their professed Rear Services "exercise" until 10 August. It is likely that Soviet forces really were not ready, or at least not as ready as their commanders would have wished, at the time that the community judged them to be. Had there been a real threat of serious opposition, the logistic buildup probably would have been of even greater importance and presumably might have required a longer time. In any case, the relaxation of concern over a possible invasion of Czechoslovakia when nothing occurred in the first few days of August was not warranted by the military evidence. The threat not only remained but was increasing.

The problem of assessing logistic readiness, and hence actual readiness for attack, has been a difficult intelligence problem in Vietnam and Laos, where the problems of estimating supply movements at all have been compounded by the effects of air strikes, road interdictions, poor weather and jungle terrain. In these circumstances, however, as in more conventional warfare, the continuing effort to build up supplies and the evident great importance attached to keeping the roads open have been indications of impending operations even when their scope or timing might be elusive.

e. Drawdown on existing depots: Another aspect of the abnormal

requirement of military units for supplies is likely to be the drawdown on supplies in depots, both in forward and rear areas. In the forward area, it will be for allocation to the troops for combat (as we have noted, the unprecedented emptying of ammunition dumps in Eastern Europe prior to the Soviet invasion of Czechoslovakia was a strong indication that the basic load of ammunition either had been or would be issued to the troops). In rear areas, a sudden emptying of reserve depots, particularly if several are involved, is a likely indication that equipment is being issued to reserve or understrength units.

f. Medical preparations: One of the most obvious requirements of forces going into combat as compared with their needs in peacetime is in medical support. Indeed, of all fields of logistic support, this may be the one in which there is the greatest difference between war and peace. Not only will combat units require vastly greater quantities of drugs and medicines, but also different types of drugs. The requirements for doctors and medical technicians will multiply, as will the need for field hospitals, evacuation facilities, etc. Even in nations which do not traditionally place a high value on saving the lives of wounded enlisted men (among which have been several important Communist nations), the need for increased drugs and medical support facilities of all types will skyrocket in the event of hostilities.

As in other logistic preparations, these changes will affect not only the military forces themselves, but also are likely to have a serious impact on the civilian populace. Shortage of drugs and hospital supplies, sudden callups of physicians to the armed forces, and greatly stepped-up blood collection programs are some of the obvious effects.

In addition, belligerents may have to make very heavy purchases of drugs abroad (as did North Vietnam, assisted by Communist China, in the early stages of US involvement in the Vietnam war). Occasionally, heavy acquisition of drugs for particular ailments (e.g., anti-malarial) may provide a tipoff that military forces are being readied for movement into particular areas.

Some warning analysts feel that medical preparations are an aspect of war planning which have been given too little attention, and that this is a field in which our data base and collection planning could well be improved against the day when one of our major enemies might make drastic changes in its medical practices in preparation for major hostilities. It is a field in which some preparedness measures would appear to be unique to hostilities and thus of very high specific value for warning.

g. Logistic preparations for survivability: Another important logistic preparation likely to distinguish war from peace is the stockpiling of equipment and other measures to insure the survivability of the logistic system itself. Such measures, particularly if undertaken in any great number or in marked contrast to normal practice, carry high validity as indications that the enemy is preparing for some action for which he expects retaliation. (Unless, on the other hand, we ourselves or some other nation are clearly getting ready to initiate the action.) Rail and road facilities are, of course, highly vulnerable to interdiction, and aggressors normally will take some measures to protect them and to provide for their repair before they embark on hostilities. In addition to obvious measures such as increased AAA protection at bridges and rail yards, extraordinary logistic preparedness measures will be suggested

by the stockpiling along the way of railroad ties and rails, emergency bridging equipment, bulldozers, road-building machinery and other material for the rapid repair of damaged transportation routes. Rarely, if ever, do nations undertake emergency steps of this nature when they are expecting a prolonged period of peace. Another measure to insure the survivability of critical transportation routes is the construction of numerous road bypasses, extra bridges, etc. at bottlenecks -- a procedure at which the North Vietnamese have been adept.

h. Logistic preparations for specific operations: In addition to the value of logistic preparations as indications in general, certain types of activity may provide very specific indications of the nature of impending attacks. An extraordinary standdown of transport aircraft or their assembly at bases near airborne forces is a good indication that airborne operations are impending. A large buildup of amphibious equipment and landing craft probably signifies impending water-borne attacks, and the detection of large quantities of mobile bridging equipment probably indicates major river-crossing operations. These highly specific logistic operations are of great value for warning, provided they are detected, since they give us not only generalized warning but often specific warning of how and where attacks may be launched. Thus, once again, we can demonstrate the value for warning of the identification of the enemy's logistic preparations.

Interpreting Longer Term Logistic Preparations

In the foregoing discussion, we have dealt with relatively short-term logistic preparations -- those associated with a buildup of combat forces for a specific operation. The intelligence analyst will also find, however, that he must come to some

interpretation concerning a number of longer term logistic activities whose significance and relevance to warning are less clear-cut.

All nations are engaged in improving their transportation facilities, and most military forces also seek to build up their basic facilities (sometimes known as "infrastructure") and to augment and modernize their stocks of equipment. Unless halted by politicians or budgetary restraints, it is generally considered that military commanders will constantly be acquiring more materiel and stockpiling more, and thus continually building up their capabilities. We frequently receive reports of new POL depots in Eastern Europe or of road and rail construction which would increase military capabilities in event of war, and the Communist nations of the Far East also are engaged in such programs.

What do these measures mean for warning? In many cases, the only answer which we can make is that these improvements do enhance enemy capabilities and also, in some cases, appear to be long-term contingency preparations. Beyond this, there is usually not much which we can say for warning purposes. Some of these developments are strictly military (depots, for instance), while others also serve a legitimate economic function and might have been undertaken in any case. We need to watch these preparations, to make sure that we have not missed something or that they do not appear greatly excessive for any immediate need, but beyond that we are not usually very concerned about them.

There are times, however, when some of these basically long-term logistic preparations, such as new road construction, may have indications significance. Obviously, North Vietnamese road construction in the Laotian Panhandle has had

the most direct bearing on Hanoi's military capabilities and intentions in South Vietnam. There have been few items of greater indications significance for the US in recent years than this extensive road construction effort.

Less certain has been the meaning of the Chinese Communist road construction program in northwest Laos. Is this a long-term project designed only to improve transportation in this remote area, or is it preparatory to the support of military operations in Laos or Thailand?

Or, in another critical area, what is the import of the buildup of Soviet logistic facilities, airfields and so forth near the Chinese border, which has accompanied the buildup of combat forces under way in that area since 1965? Do these developments indicate Soviet preparations for hostilities at some time in the relatively near future, or is it all only a long-term program to be prepared for any contingency?

There are no clear-cut guidelines as to when we can conclude that preparations of this nature are for support of early hostilities and when they are not. Our conclusions must be tentative and subject to change as more information becomes available. There are certain general guidelines which may assist the analyst, however, some of which are:

- Urgency. If the construction effort is relatively slow, and particularly has extended over a period of years when it might have been accomplished more rapidly, it is hard to believe that it is related to some specific plan for military operations which the nation plans to implement when the construction is finished. On the other hand, if the effort does appear urgent and particularly if it has diverted resources from other important projects, there is a good possibility that it is for some relatively short-term purpose.

Other uses. If it is urgent and there is no valid economic or other civil purpose for the project, then the chances will be further increased that its purpose is military, and potentially ominous.

- Is it excessive? This will be a most important factor in assessing its military importance. Marked buildups of logistic support facilities greatly in excess of the seeming requirements of forces already in the area will tend to raise a flag; they suggest that the stage is being prepared for the arrival of more forces -- and perhaps very rapidly after the logistic support buildup has been completed. On the other hand, a logistic support program which about keeps pace with the normal requirements of forces in the area -- even though the latter are expanding -- must be regarded as "normal" -- i.e., we would expect large standing forces to have such logistic support.

- How permanent is it? A military buildup which is accompanied by large-scale permanent-type construction (standard barracks, depots, major airfields, facilities for recreation or dependents, etc.) is usually a long-term repositioning of forces rather than a preparation for early hostilities. One does not construct permanent barracks and depots for troops which are only staging through to attack someone. These troops and their supplies will be housed in tents or other temporary facilities -- or put up with civilians.

- What else is going on? In the end, our assessment is likely to be dependent above all on our overall judgment of the likelihood of hostile action in the area. If the general atmosphere is peaceful and the nation in question seems clearly preoccupied with domestic matters and seemingly has no immediate desires to grab any

territory, we almost certainly will also judge the logistic preparation to be of no immediate warning significance. And the chances are high that we will be right. Few would be likely to conclude only from a few logistic preparations, no matter how seemingly useful for war, that war was imminent.

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As this chapter should have made clear, there will be few if any topics so important to the warning analyst -- and the accurate warning judgment -- as a correct appreciation of logistic developments. One final note of guidance therefore will be offered.

Don't forget or overlook the logistic items in the mass of other indications. In a major buildup, a great deal will be going on -- large-scale ground force movements, lots of fighter aircraft redeployments, dozens of political items and rumors, accurate and planted reports of enemy intentions. All these are heady stuff and make fine current items, and the order of battle buildup looks great on the map. But, sometimes in all this, those little logistic fragments get lost which might have confirmed that the military buildup is genuine -- that is, involves bona fide preparations for combat and is not an exercise or an idle threat for our benefit. In all the excitement, don't lose these gems of intelligence so rare and invaluable to the assessment of the enemy's real intentions.

A HANDBOOK OF WARNING INTELLIGENCE

PART IV: SPECIFIC PROBLEMS OF MILITARY ANALYSIS

CHAPTER 17: OTHER FACTORS IN COMBAT PREPARATIONS

CHAPTER 17: OTHER FACTORS IN COMBAT PREPARATIONS

The three preceding chapters have addressed the major types of activity -- troop movements, mobilization, and logistics -- which precede or accompany the commitment of forces to combat. The student of warning who understands how his adversary goes about these preparations, and who is able to perceive what is abnormal or highly unusual from what is normal or routine, will be a long way on the road to recognizing the true buildup for combat.

Preparations for hostilities, however, will likely be marked by a number of other anomalies or highly unusual activities which will further help to distinguish the situation from that which is normal. Indicator lists are concerned with dozens of such items, and the reader is referred to these for more specific identification of developments which have been judged to be of particular significance for warning. In this chapter and the next, we will consider in general terms some of the things which we should watch for, or which have been noted in past crises, which characterize true preparations for hostilities.

Preoccupation of the High Command

War is the business of generals and admirals and, when preparations are in progress for war, they will be very deeply involved indeed in the planning -- even to the consideration of the most minute details of the impending operation. Their staffs will be putting in long hours of planning and paper work, and more officers will likely be needed to cope with it. For reasons of security and secrecy, as few officers as possible may be informed of the full plans, but it is inevitable that the

preparations will affect the activities of many, if not all, components of the military establishment in one way or another. This will be true, although in varying degrees, whether a deliberate surprise attack is being planned for some months ahead (as in Japan's preparations before Pearl Harbor) or whether the military leadership is preparing to respond to a relatively sudden and unexpected crisis (such as the US when the strategic missiles were discovered in Cuba).

One of the great myths perpetrated by some analysts (sometimes in the name of warning) is that our enemies have all their contingency plans ready and that great hostilities could start at the drop of the hat without any further planning or consideration of the details by their General Staffs. We know that we could not do that, and that every crisis (even minor ones) engenders an extraordinary level of activity and a deluge of paper work and staff conferences and enormous volumes of communications. But somehow the idea nonetheless prevails that our enemies are better organized or prepared and that they can plunge into war without all this activity, that they have a plan ready for every conceivable contingency, and that all they will have to do is push the right buttons, or send a few brief messages to subordinate commands to open up the right contingency plan, and everything will roll with no further hitch.

This is ridiculous. No nation can be ready for every contingency, and even if it does have a specific plan for the particular crisis at hand, the High Command or General Staff assuredly will want to review it and to be sure that all the subordinate commands are fully prepared to play their roles and there are no bottlenecks, etc. More likely, they will have to modify the plan or prepare a whole new one, since the situation almost inevitably will be a little different, or someone questions

part of it, and so forth. In any case, the result is a virtual certainty: the military establishment at its highest levels will be extraordinarily involved and preoccupied with planning and staff work, intensive activity will be under way, the command and control system will be tested to its fullest, and the ramifications of all this are likely to be reflected in high volumes of communications and a general atmosphere of crisis in the military establishment. Provided we have some collection assets which will give us some insight into what the military leadership is doing or the amount of activity at command levels, we are almost certain to get some sense of this -- although it will likely be fragmentary. But in no case will the activity of the military leadership be "normal."

We have learned from experience that even major exercises are likely to require the attention and presence of top military leaders. Where the preparations are "real," the requirement for their participation will be infinitely greater. A knowledge of their whereabouts and some information on their activities may be invaluable. From a variety of sources, both military and political, we hopefully will gain some sense, however inadequate, that the military establishment is immersed in great and extraordinary activity, or is devoting an inordinate amount of attention to a particular area or subject.

Alerts and Combat Readiness

The declaration of the real (not practice) alert and the raising of forces to very high (or the highest) levels of combat readiness is a major indication of preparedness for combat or possible combat. Like mobilization or major redeployments of units, the true combat alert will be reserved only for the extraordinary situation in

which hostilities are either planned or there is reason to fear that deteriorating international conditions entail a risk of hostilities in the near future.

Forces of major nations usually have prescribed degrees or conditions of readiness ranging upward from their normal day-to-day condition to the highest degree of readiness which is full readiness for imminent hostilities. In the US forces, these stages are known as DEFCONS (Defense Conditions) which range from 5 (lowest) to 1 (highest). The highest DEFCON ever declared by the JCS for US forces as a whole is DEFCON 3. Under very rare and exceptional circumstances (e.g., the Cuban missile crisis), some components of US forces have been on DEFCON 2. The raising of DEFCON status thus is a serious matter and involves specific prescribed steps which materially increase the readiness of men and materiel for combat. Imposition of the highest DEFCON status would indicate a national emergency. A somewhat modified system exists in NATO.

Our major adversaries -- particularly the Soviet Union and its Warsaw Pact allies -- have a similar system by which forces are brought from their normal day-to-day readiness condition to full readiness for combat. As in Western forces, these steps entail a series of specific measures by the various components of the armed forces which, when fully accomplished (i.e., when full readiness is implemented) will have brought both combat and supporting units to readiness for immediate commitment to combat. These readiness conditions are to be distinguished from routine alerts or exercises, which are frequently carried out to test the ability of units to respond quickly. As in the US forces, the raising of readiness conditions is a serious step, undertaken rarely. Indeed, there is reason to believe that the imposition of full readiness conditions throughout the armed forces, with all the steps that

would presumably be entailed, is a step (like our DEFCON 1) which would be undertaken only in expectation of hostilities. Although aspects of the combat alert plan are undoubtedly tested frequently, the widespread implementation of full readiness is reserved for the genuine combat situation, or expectation of such a situation. Readiness conditions -- both the terminology and the responses required -- are believed very similar if not identical throughout the Warsaw Pact forces. Although probably less sophisticated, similar systems are believed to be used in other Communist states.

The declaration of full combat readiness is thus a matter of highest concern to warning intelligence. There is nothing too trivial for us to know about so important a subject: the precise terminology, the mechanics by which such a condition would be ordered, or the exact measures which follow from such an order. Because of the rarity with which even increased (as opposed to full) readiness conditions are imposed, most analysts will have had little experience with such circumstances, and there is likely to be considerable uncertainty about what we can or cannot detect or about what precisely will occur. The warning student, however, should make a study of all available evidence on this subject, for in the hour of crisis the ability to recognize that full combat readiness was being implemented could be of decisive importance.

Exercises Versus Combat Deployments

Both compilers and users of indicator lists are frequently puzzled by the fact that an abnormally high level of exercise activity and a virtual standdown of normal exercise activity both appear as indicators. This is not a real contradiction provided

that the circumstances in which each of these may be valid indicators are understood.

An exceptionally high level of training, and particularly very realistic or specialized training for a specific type of operation or against a specific target, of course may be a valid indication of preparations for combat operations. Obviously, troops need training, and very intensive training, if they are to accomplish their missions effectively, and the scope and type of training in the armed forces of any nation is a very useful guide indeed to the type of operations it expects to conduct. If our collection is adequate, we may also be able to tell from specific training exercises exactly what combat operations are being planned. The North Vietnamese Army traditionally has held detailed rehearsals with sand tables before launching attacks on specific targets in South Vietnam and Laos. For larger, more conventional operations, extensive command post and staff exercises, supplemented by drills of the troops in their specific roles, are the normal procedure. No commander would choose to launch combat operations until he had satisfied himself that both his officers and troops were reasonably well trained in what they were to do, and the more specific the training for the particular type of warfare or target, the better.

Thus, as a general guide -- and sometimes quite specific guide -- to the plans of the potential enemy, the type of training is obviously an indication not to be ignored. Such training activity, however, is often a relatively long-term indication, which may precede the actual initiation of hostilities by weeks, months or even years. It may, in fact, not indicate an expectation of hostilities so much as a desire to be prepared for them if they should occur.

Over the shorter term, perhaps a period of some weeks although it may be much less, extraordinary changes in the pattern of training activity -- and particularly cessations or near standdowns of normal training -- have usually proved to be a much more specific or valid indication of hostilities. The genuine alert of forces in a crisis or for possible hostilities is nearly always marked by abrupt curtailment of routine training, usually accompanied by a recall of forces in the field to their home stations in order to place them in readiness. In a real combat alert, missile troops will not be sent to remote ranges for training nor antiaircraft units to firing areas; they will be needed either at their home stations or wartime deployment areas. Similarly, much if not all routine ground, air and naval activity will be terminated, although defensive measures such as air and naval patrols will probably be stepped up. Such variations in training patterns are likely to be evident and they are a distinguishing characteristic of genuine crises -- a true sign that combat readiness of potential enemy forces is indeed being raised. The intelligence community, based on growing experience, will often be able to recognize such situations, but we need constantly to be alert to what is not happening (but ought to be happening) as well as to what is. This is particularly true when there are no overt tensions which might alert us -- when the enemy is preparing in secret.

Statements that "Things look pretty quiet," or "There doesn't seem to be much going on," can be dangerously misleading. Intended as reassurance to the listener, they may in fact mean that normal activity has been curtailed because of an alert.

Once it is under way, an exercise is something of a negative indication in

the short term. When troops and logistic resources have been committed to an exercise, they are not as ready to respond to a combat situation as they were before they deployed for the exercise. The problem for intelligence is to be sure that the buildup phase for an "exercise" is really for an exercise and not a cover for a deployment of forces for an attack. In many exercises, this will be little if any problem since the exercises probably will not be conducted in the area in which the troops would have to be deployed for an actual attack, but farther back from the line of confrontation or even some distance to the rear. (Soviet naval exercises designed to test the seizure of the Danish Straits are held well back in the Baltic, not up off the coast of Denmark, and so forth.) There may be circumstances, however, in which the most careful collection and meticulous analysis will be required to insure that we can distinguish between preparations for combat and preparations for exercises.

Obviously, the most important time to be able to make such a distinction is on the eve of attack. Western intelligence now generally expects -- and Soviet doctrine and practice in at least one major instance have borne out -- that the USSR would deploy its forces for an attack under cover of preparations for an "exercise." The USSR and its Warsaw Pact allies similarly look with suspicion on major NATO exercises as a potential cover for aggression. The Soviets recognize that major redeployments of forces probably could not be concealed and that the best hope for misleading the adversary would be to lull him into believing that it was just another exercise. To help to lull him, the plans will probably also call for an announcement or series of announcements about the forthcoming exercise, perhaps followed by further statements on how it is "progressing."

We will be addressing the problem of this and other types of deception in a later chapter devoted exclusively to that subject. There are few deception measures which are so simple to carry out or seemingly so transparently evident as a series of false statements on the nature or purpose of military activity. Despite this, such falsehoods have sometimes proved extremely effective, and we have no assurance that the intelligence community as a whole will necessarily recognize them for what they are. During the summer of 1968, the USSR announced a whole series of "exercises" which Soviet and Warsaw Pact forces were said to be undertaking either in or adjacent to Czechoslovakia. In fact, these forces conducted no real exercises all summer long, and the alerting and deployments of forces for the Czechoslovak crisis totally disrupted the summer training program. These "exercises" were announced solely to provide a pretext for the introduction of Soviet forces into Czechoslovakia in June and, still more importantly, as a cover for the major mobilization and deployment of Soviet forces after mid-July. The USSR even announced an elaborate scenario for its so-called "Rear Services exercise" under cover of which combat units and their logistic support were deployed into Poland. Yet, despite the circumstances and the obvious fact that all this activity was clearly related to Soviet efforts to bring the Czechoslovak situation under control, much current intelligence reporting accepted Soviet statements on these "exercises" as if they were valid descriptions of what was occurring. Even after the invasion, a number of post-mortem studies persisted in referring to the "exercises" without qualification, and even repeated (as if valid) the scenarios which had been carried in the Soviet press.

Our ability to tell when genuine exercises are in progress or when the training program has been disrupted or curtailed is, of course, in large part dependent on the quantity and quality of our collection. There are areas in which our coverage is so limited or so delayed that we really may not be able to tell. Our limited knowledge of Chinese Communist exercise patterns and programs would presumably make it much more difficult to distinguish an exercise from combat preparations in that area than in Eastern Europe. There would be good grounds for great uncertainty in North Korea. There could be many other areas or circumstances in which even the most perceptive and sophisticated analysis might not permit us to make a firm judgment.

But in the case of Czechoslovakia, there was ample evidence at hand to make a judgment that the Soviets were not engaged in genuine "exercises" and that Soviet tactics all summer long were designed to bring Czechoslovakia into line by one means or another. Thus the situation called for exceptional care and sophistication in reporting to insure that the real Soviet purpose and objective was not obscured by rote-like repetition of Soviet statements. Such a perception and an accurate reporting of the real nature of things could, of course, be infinitely more important to US security in another instance.

Offensive Versus Defensive Preparations

In an impending crisis, when war may be about to break out or when there is a fear of escalation of hostilities already in progress, the intelligence community is often required to come to some judgment as to whether enemy preparations are to be considered offensive or defensive in nature -- in short, does fear of attack by

us or some other adversary account for his military activity, or is he engaged in preparations for offensive action? We will be considering this problem in later chapters and in other contexts. Some comment is also pertinent here, however, because there is often a tendency to write off many enemy preparations as "defensive" when in fact they should be considered as part of an offensive buildup.

This analytical problem is encountered both with respect to buildups of forces which could be used for offensive action (particularly ground force combat units) and to activity which is clearly of a defensive nature (such as increased antiaircraft defenses and fighter patrol activity). There are instances in which the seemingly offensive buildup of ground combat force, and even a considerable one, may be entirely for defensive purposes because of a valid fear of attack. And there are instances in which the seemingly defensive action, the buildup of forces which could never be used in an attack, is in fact part of the offensive preparations and undertaken solely in expectation of retaliation for the impending offense. How can we tell the difference? When should accelerated military activity, of either type, be considered a manifestation of offensive preparations, and when not?

The answer of course is that there is no categoric answer to this question and that each case must be separately considered (this is one reason why warning judgments are so difficult). The following, however, are some general guidelines to be considered:

- Any large-scale buildup of combat strength, particularly major deployments of ground force units, which is in excess of a reasonable defensive

requirement for the area, should be considered a probable preparation for offensive action. Experience, in fact, teaches us that it will often be the best single indicator of aggressive intentions.

- Other extensive military preparations (such as a major mobilization effort and a large-scale buildup of logistic support) will reinforce the likelihood that the troop deployment is probably for offensive purposes.

- Preparations which are seemingly "defensive" (particularly air and civil defense measures) can be accurately evaluated only in the light of the buildup of capabilities for offensive action. Where the offensive capability is being rapidly or steadily augmented, the probability is that the concurrent acceleration of "defensive" measures is in fact in preparation for an expected retaliation for the planned offensive.

- In the absence of a buildup of offensive capabilities, the defensive preparations are probably indeed just that.

- The speed and urgency of both offensive and defensive preparations must also be considered. When an offensive action is imminent, the aggressor is likely to be most urgently concerned with the security of his homeland and its populace, and the defensive measures against possible retaliation may be truly extraordinary and greatly accelerated (such as those in mainland China shortly prior to the Chinese intervention in Korea, after a summer in which Peking had shown no great concern with civil defense).

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PART IV: SPECIFIC PROBLEMS OF MILITARY ANALYSIS

CHAPTER 18: COPING WITH EXTRAORDINARY MILITARY DEVELOPMENTS

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As the discussion thus far hopefully has made clear, the military situation which prevails in the course of preparations for hostilities is extraordinary. It is not a question of degree alone -- not just more high command activity, more communications, more alerts, more troop movements, more ammunition shipments, etc. It will also involve activity which is unprecedented, which would never occur except in preparation for or expectation of hostilities. Obviously, the greater the scope of the potential hostilities, the greater the risk to the aggressor of retaliation, and the graver the possibility of escalation (particularly to possible nuclear warfare) -- then the greater the deviation from normalcy is likely to be and the greater is the probability that certain measures unique to major hostilities will be undertaken. Clearly, the USSR did not need, for the invasion of Czechoslovakia, to implement many measures which would be necessary or likely in case of an impending nuclear war with the US. (The intelligence problems which might be associated with the possible coming of World War III are discussed in a later chapter.)

The fact that, in every instance, real preparations for hostilities involve activity which is unique to combat does not mean, of course, that we will necessarily detect such preparations. Nor does it necessarily mean that we will recognize such indications for what they are if we do obtain the information. Experience tells us that our capabilities for misjudgment or self-deception in such cases are considerable. (As someone said, no amount of specific evidence would probably have led us to a correct judgment of Chinese intentions in October-November 1950, so great was our misunderstanding.)

Highly Specific Indications

Compilers of indicator lists have devoted much effort to attempting to isolate and to define accurately those preparations which would be unique to hostilities, or at any rate highly unusual in time of peace. Heading any list of such indicators, of course, would be the obtaining by any means (intercepted communications, a high-placed agent, captured documents, or otherwise) of the order to attack. Second only to this is probably the plan of attack (without the order to implement it). It may be noted in passing that in the history of warfare such intelligence coups have been accomplished more than once, but not always recognized as such. The Dutch, for example, were correctly apprised of Hitler's plans to attack them in 1940, but failed to accept the information as valid.

Just below such indicators in specificity and value are those which can only be interpreted as preparations for offensive action, which would never be required for defensive or precautionary purposes, or which are rarely if ever undertaken in peacetime. In some cases, such information may be even more valuable or convincing than the plan or order for attack -- since the latter will often be suspect, and with cause, as a plant or deception effort.

Among the types of military indicators of such high specific value are:

- The redesignation of administrative military commands as operational commands, or the change from peacetime to wartime organization -- such as a redesignation of Soviet military districts or groups of forces as "fronts."

- Widespread activation of wartime headquarters or alternate command posts.

- Release to control of commanders of types of weapons normally held under very strict controls -- particularly chemical or nuclear weapons.

- Minelaying in maritime approaches.

- Assignment of a number of interpreters or POW interrogation teams to front-line units.

- Evidence of positive military deception -- as opposed to increased security measures.

- Imposition of extraordinary military security measures, particularly new measures not normally noted at all -- such as evacuations of military dependents, removal of border populations.

- Greatly intensified reconnaissance by any means, but particularly against likely targets of an initial surprise strike.

- Sudden adoption of extraordinary camouflage or other concealment measures.

When the intelligence system is so fortunate as to obtain indications of such high specificity, it will be most important that they be recognized as such and accorded the weight they deserve, rather than lost in a mass of other incoming data. In some cases, they will be so obvious or definitive that they cannot be ignored, but in others there may be danger that they will not be given due weight for one reason or another. Some illustrations of highly specific indications from crises of recent years, and how they were assessed at the time, may better demonstrate the point:

- The photography showing the first Soviet strategic missile site in Cuba --

a development which was obviously definitive and could not be ignored and which immediately overrode all information and supposition to the contrary.

- North Korea's evacuation of civilians from the 38th Parallel in March 1950 -- an event accorded insufficient weight as evidence that Pyongyang's major buildup of military forces was intended for offensive action.

- Communist China's order of thousands of maps of Korea for its forces in Manchuria in early November 1950 -- a development also generally given insufficient weight in assessments of Chinese intentions to intervene.

- The emptying of Soviet ammunition dumps in East Germany and Hungary in late July 1968 -- a development (discussed in Chapter 16) which was scarcely noticed in the mass of other evidence on the Soviet buildup but which, if given more stress, might have helped to convince some who viewed the Soviet buildup as only "more pressure" on Czechoslovakia.

Many other, and probably even more striking, examples could no doubt be drawn from World War II and other conflicts --studies of the Pearl Harbor disaster have unearthed a number of valuable specific indications of Japanese intentions which were either mislaid or misevaluated.

The point is that there may be relatively small developments (in terms of the total scope of activity which is under way) which nonetheless are of great importance as indications because they cannot reasonably be explained away or interpreted as defensive or precautionary measures. If one is attempting to compute probabilities by any arithmetic means, such developments will rate very high on the scale. But, in any case, care must be taken to give these items the weight and value they

deserve -- as the post facto studies of the intelligence performance are sure to do.

Other Extraordinary Developments

In addition to those military developments anticipated on indicator lists which one can expect to occur in the true combat buildup, there will nearly always be some totally unexpected surprises, the things that nobody anticipated. These too are the mark of the exceptional situation. Unfortunately, however, the significance of some of these will not be readily apparent. In some cases, the analyst may be able to obtain assistance from experts on obscure topics or technical questions. In other cases, no one may be found who can interpret the anomaly. It may never be resolved, or the analyst will understand it only after the crisis is past when he will review the evidence for his post-mortem study and suddenly exclaim, "So that's what that meant!" Too late -- another lost indication.

The warning or current analyst responsible for analysis in an impending crisis may need to keep up a constant stream of questions to those who might be able to interpret obscure military or technical data for him. No potential source of help should be overlooked, and the channels should be kept open for analysts on all potentially relevant topics to talk with one another. This will be particularly true where much technical material is involved, or information from rarely used sources. Topics never viewed as important by most people before will suddenly be relevant to the flap, and analysts who have never had to work on current subjects will find their services much in demand, if their talents can be brought to bear on the situation. The indications analyst should throw nothing away just because he does not understand it. It may be his missing clue which he will want next week.

The Magnitude of the Buildup

No matter how many unusual or highly specific indications may be noted, assessments in the end will often depend heavily on the sheer magnitude of the military buildup of the potential aggressor. And rightly so. The massive buildup of military power, out of all proportion to anything required in normal times or for defensive purposes, has proven time and again to be the most valid indication of military intent. Many have learned to their regret that they had made a grave error to write off an overwhelming buildup of military force as "just a buildup of capabilities" from which no conclusions can be drawn (see Chapter 5).

Unfortunately, however, these lessons do not necessarily carry over to the next crisis, and the issue must be fought again the next time -- and not usually won by the warning analysts either, whose experience does not prevail in these matters. The latest important manifestation of this phenomenon was the invasion of Czechoslovakia, in which many of the same fundamental analytical errors (both military and political) were demonstrated as in the Chinese intervention in Korea. If the most serious misjudgment was essentially a political one (a matter we shall address in the next main section), the military misjudgment was close behind. Essentially, this misjudgment was to regard the massive buildup of Soviet and Warsaw Pact forces as equally compatible with an intention to invade and with a mere show of force or attempt to "threaten" the Czechoslovaks. And this despite the fact that the USSR never announced its military buildup, never directly threatened the Czechoslovaks with invasion nor publicly suggested how great its capability was to overwhelm them. Nor was the military buildup all that obvious, either; it was

only because our collection capabilities in this area are relatively good and because no extraordinary additional security measures were imposed that we appreciated its scale at all -- and then we missed a few divisions. Thus in fact the Soviet buildup was not "saber-rattling" but a bona fide and an astounding buildup of combat force.

This was the largest buildup of Soviet combat power since World War II, exceeding considerably the force which had been brought to bear to suppress the Hungarian revolt in 1956. Experienced military analysts on the Soviet Union had never seen anything like it and were literally stunned by the scale of the effort. "I just can't believe it," and "I never expected to see anything like this except for World War III," were typical analysts' comments to one another. Although the order of battle figures fell somewhat short of what was committed in the invasion, there was nonetheless abundant evidence that forces capable of overwhelming Czechoslovakia had surrounded the country and were clearly deployed along the main lines of advance for an invasion and not engaged in exercises. Sheer logic, not to mention the lessons of history, should teach us that a force of this magnitude was never required just to put more "pressure" on Dubcek. This was a force which met Soviet doctrinal concepts for offensive operations even when resistance might be expected, and there was minimal sign indeed that the Czechoslovaks were likely to put up much resistance.

How much evidence do we need to make a judgment that a military buildup of such proportions reflects a probable intention to attack? Some analysts feel that if this judgment could not be made by a majority on the basis of the evidence which

was at hand on Czechoslovakia, the majority can probably never be expected to make such a judgment. Yet it will be the judgment of history, and the experience of warning analysts, that buildups of this magnitude carry a high probability of offensive action. Which leads us to -

Redundancy

It is a feature of both the buildup of combat forces and of logistic preparations for war that the aggressor will seek a great superiority of power and ability to sustain combat in comparison with that of his adversary -- that is, if the military planner gets his way. All commanders want an abundance of everything before they attack. They are practically never satisfied that they have enough. Occasionally, military forces will have to operate on a shoestring, but rarely at the choice of their commanders.

Thus a redundancy of supplies and a great superiority in equipment, as well as massive troop deployments, may be the mark of the true buildup of military forces for attack. The enemy, if he has the capability and the time to do so, will sometimes appear to be inordinately long in his buildup and to be undertaking all kinds of preparations which may seem to us to be unnecessary or at least much more than is necessary.

The intelligence analyst in these circumstances should take care to avoid the pitfall into which more than one of them has fallen, which is to conclude that all this buildup does not mean anything because the enemy already has more than enough on hand to attack. This argument has been seriously advanced, and even propounded as a negative indication ("he would not do all this unless he was bluffing"), on several occasions in the past twenty years or so. The ensuing action was likely to be an

overwhelming military action (e.g., the invasion of Czechoslovakia). This kind of inverse reasoning is the death of warning and the mark of an analyst who will find any excuse to explain away what the enemy is up to.

Massive buildups of combat power and logistic support are never negative indications. They may occasionally (repeat, occasionally) not be followed by military action, but the odds are high that such action will follow. Excessive military preparations are not bluff nor meaningless just because you think that the adversary has enough on hand already. As a general rule, the greater the ratio of buildup in relation to that of the opponent, the greater the likelihood of attack. It is fatal to ignore evidence of this kind.

Approved For Release 2002/08/21 : CIA-RDP80B00829A000800040001-6

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