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INFORMATION SERVICE FOR OFFICERS

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FOREWORD

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THEATRE LOGISTIC PLANNING

A lecture delivered by
Capt. Henry E. Eccles, USN
at the Naval War College
March 28, 1950

I—INTRODUCTION

An understanding of theater logistic planning is based on the understanding of:

The nature and structure of Logistics; the art of command; and the nature of war.

These subjects are all so intertwined that there is no advantage in trying to decide which comes first, the hen or the egg.

Furthermore, we are not so much concerned with the manifold details of planning and planning forms as we are with the major elements, problems and relationships that confront the theater commander in planning his logistics. So I shall dismiss details and forms with the statement that planning forms are in a process of development in all our major military colleges and many important details of theater logistics are ably discussed in Chapter VII of “Joint Overseas Operations”. Rather than go into detail in these matters let me take my cue from the 3rd Chapter of the Second Epistle to the Corinthians where St. Paul says—“Not of the letter but of the spirit. For the letter killeth but the spirit giveth life.” Let us therefore try to develop the basic spirit or philosophy of theater logistics.

Captain Eccles is Head of the Logistics Department at the Naval War College.
II—DEFINITIONS.

First, a definition of Logistics:

"Strategy and Tactics provide the scheme for the conduct of military operations. Logistics provide the means therefor."

This broad and simple definition has the great advantage of expressing a relationship between the three major elements of war. Every problem in war contains these three elements in varying degrees. Perhaps it will help us to consider them as three intersecting rings. (Illustration No. 1).

Logistics itself can be said to have three basic elements:

The Determination of Requirements; Procurement and Distribution, and the aspects of Organization, Planning, Execution and Supervision. These elements and aspects all enter into every problem in logistics and they blend and overlap in manner and degree which varies greatly according to circumstances.

In general, logistic problems fall into the six broad categories of Personnel, Supply, Maintenance, Medical, Transportation and Base Development, or simplifying it greatly, Men, Material and Services.

III—THE UNIFIED COMMAND

Theater Logistic Planning derives directly from the concepts of Unified Command as established by the Joint Chiefs of Staff. If we study their directives we see that in effect the Joint Chiefs have said,
ILLUSTRATION NO. 1
“In the future, theaters of war will be organized as Unified Commands. In so far as practicable each service will handle its own logistics under broad coordinating policies established by the Unified Commander. But when the Unified Commander sees the need for the consolidation of logistic activity he will tell us and we will order it. Furthermore, the Unified Commander by reason of his authority of review of requirements and recommendations of priorities and programs, has the power to exercise direct logistical control almost as he sees fit just so long as he keeps out of operating detail.”

If we examine the proposed draft of “Joint Action Armed Forces,” Chapter III Section VII “Logistics (Wartime),” we see that the conferees who may have been at odds in many other instances, agree on the nature and degree of control the theater commander may exercise in war. Theater Commanders will have the authority to exercise a very high degree of control in that they are specifically responsible for policy and coordination in distribution, supply build-up, maintenance, salvage, base development, transportation, port operation, medical and dental service and military government. Thus we have real unification in the theater of war.

IV—THE NATURE OF WAR

A few words on the nature of war as it affects theater logistic planning. It is a truism to say that the only constant in war is variation. War is the constant interplay of variables. In general it is fought in accordance with campaign plans designed to accomplish specific objectives, the selection of which is the task of strategy. The campaign plan for the Central Pacific was originally drafted in late 1943 and given the code name Granite. In its or-
of the actual operations we did undertake.

Campaigns are usually made up of a series of operations which themselves may be either simple or complex, brief or protracted, depending on the characteristics of the theater of war, the capabilities of the opposing forces and other variables. All wars seem to have one common characteristic, i.e., they consist of long periods of comparative inactivity interspersed with short periods of violent conflict. However, this period of comparative quiet is actually the period of logistic build-up. The process may be likened to the charging and discharge of an electrical condenser.

This is very well illustrated by a graph of cargo and personnel shipped by the Army to overseas Atlantic areas in the last war. (Illustration No. 2) Note particularly the expanding scale of activity and the build-up before each operation.

Looking at this from a purely theoretical point of view we may analyze the chart somewhat as follows: (Illustration No. 3) A steady expansion of theater forces engaged in routine operations such as patrols, reconnaissance and defensive actions, a progressive build-up of supplies and equipment for a campaign, and special build-up and measures for specific operations.

Actually, the build-up prior to each operation only partially supported the operation it was intended for. In the Pacific we found often that we were financing one operation with the material and men originally assembled for the previous one, but which

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THOUSANDS OF PASSENGERS

Passengers and Cargo Shipped Monthly by the Army from U.S. Ports for Overseas Atlantic Areas 1942 - 1945

Source: War Department, Washington, D.C., 30 Nov. 1945 Report of the Chief of Transportation Army Service Forces Pages 41 and 50

Published by U.S. Naval War College Digital Commons, 1950
SCHEMATIC DIAGRAM OF
AMOUNT OF LOGISTIC SUPPORT
IN A
THEATER OF WAR

ILLUSTRATION NO. 3
V—THE BASIC THEATER LOGISTIC PLAN

The charts have shown a steadily expanding logistic effort. How do we coordinate this expansion and at the same time provide for the efficient support of our day-to-day operations? Here we come to the philosophic basis of theater logistic planning and again I present a purely theoretical concept: A Basic Theater Logistic Plan—a plan which in actual practice may very well be Paragraph 4 or the Logistic Annex of a conventional campaign plan. This basic plan is the heart and soul of the day-to-day operations in a theater of war and it provides the material build-up for the initiation of offensive operations.

Let us start in the center of the chart (Illustration No. 4) and work out. Every basic theater logistic plan is built on four fundamental considerations. First, the characteristics of the theater, its geography, topography and hydrography, its relative distances and its distance from the continental U. S. Next we have the forces involved, then the nature of the operations contemplated and finally, the requirements for mutual or inter-theater support.

In the second circle we have six functional elements; Supply, Maintenance, Medical, Personnel, Transportation and Base Development. You may choose any functional elements you wish—those shown here are merely representative groupings of the major elements which seem to be common to all theatres.

The theatre commander examines each functional element in the light of the inter-play of variables in the four fundamental considerations and reaches certain types of decisions, which are indi-
THEATER LOGISTIC PLANNING
SCHEMATIC FLOW CHART (FROM CENTER OUT)

ILLUSTRATION NO. 4
cated in the outer ring. The theater commander will decide to exercise direct control of certain elements. In other cases he will delegate control to component commanders. In some instances he will consolidate all of certain activities, in other cases he will merely outline general policies. And finally in my opinion he will be wise to ignore certain matters, particularly problems which may work themselves out if left alone.

The summation of these decisions becomes the basic theater logistic plan. If wisely developed this not only establishes the procedures and policies governing the normal logistics of the theater but it becomes sound standing operating procedure for the development of the logistics of specific operations.

On 31 October 1945 CINCPAC's standing operating procedures governing logistic support of theater forces filled 98 pages. These were condensations and revisions of many times that volume of directives which were in effect on V-J Day. By proper planning I think they could have been boiled down to 20 to 30 pages.

VI—DETAILS OF THE BASIC PLAN

With this general background let us discuss some of the aspects of this plan. First, consider the relation between supply and transportation. In any war of the future, American forces must combine great firepower with great mobility. It may well be that an increase in the efficiency and reliability of our transportation and distribution system will permit us to lower our usual levels of supply without danger to our combat forces. This would, of course, increase mobility. In any event we must realize that any unnecessarily high level of supply reduces mobility.

It is very probable that the theater commander will keep a very close watch on his supplies of ammunition. This is a very
specialized field and with the increasing use of new types of guided missiles and rockets, new problems in storage and distribution will undoubtedly arise.

The very fact that an area petroleum officer is a member of every theater commander's staff indicates that the theater commander actually controls the distribution of petroleum throughout his command. In this connection it is well to remember that when we operate major Naval task forces overseas, the oil requirements are so great that any advanced base storage we can build ashore is merely a surge tank in the supply pipeline of fast tankers.

When we remember that one B-36 bombardment group will burn up a million gallons of aviation gasoline on a single mission, and that our fleet in its operations at Okinawa used twelve million barrels of oil, the importance of close control of petroleum products at the theater level should become very clear. This is especially so since this tremendous bulk must be kept in motion; it may be slowed, or speeded up, but there is no way that any considerable part may be set down to await prospective use. There just never is that much storage capacity. Furthermore any undue retention of fast tankers to build up ready supplies will result in shortages months later.

VII—TRANSPORTATION

In addition to its effect on levels of supply, the subject of transportation raises some very interesting points. From time to time the suggestion is made that ocean transportation will be controlled wholly from Washington. While undoubtedly Washington must of necessity exercise a very important degree of control in world shipping, still we must remember that the theater commanders have the major combat operational responsibility and therefore
must have commensurate logistical operational authority. Actually
a compromise will probably be made but it should be based on recog-
nition of many considerations.

The subject of transportation falls into two main categories:
operation and traffic management, and an understanding of the na-
ture of these is important to all who deal with logistics. Operation
concerns itself primarily with the most efficient management of the
carrier, be it an airplane, a truck or a ship. Traffic management is
concerned with the most efficient distribution of the material which
is being transported.

It is very important that these two aspects of transporta-
tion be considered as separate and that their relative importance be
clearly understood. The proper goal of carrier operation is to serve
the demands of traffic management.

In considering operation we must bear in mind that oceanic
shipping is world-wide and so cuts across all theaters of war and
that in wartime it involves commercially-manned as well as Navy-
manned ships, that it is internationally owned and operated and
that it involves so-called strategic shipping and cargoes for the sup-
port of allies and neutrals as well as the strictly military or op-
erational cargoes. However, a theater combat commander views his
transportation problem as a whole whereas the transportation op-
eration agencies may tend to view their problems from the some-
what narrower aspect of a shipping company, an airline or a truck-
ing company or railroad.

When a theatre commander has this broad point of view he
may change the emphasis of his concern from one means of trans-
portation to another as varying needs of the combat situation de-
mand, and make the necessary adjustments.
If all transportation were to be controlled from Washington, that responsiveness to immediate or vital local needs would tend to become sluggish. On the other hand the theater commander must understand the far-reaching effects of “retentions” on the whole shipping picture.

We may conclude therefore that the theater commander must exercise a high degree of control of all transportation, that the actual carrier operation be delegated, and that the theater commander reserve to himself movement control and traffic management. The control of material flow is best exercised by allocations of cargo space to component commanders. It goes without saying that the commander himself must understand the nature of the problem. In addition he requires the staff assistance of experts in this important and highly specialized field.

In a very real sense we may think of transportation as the mortar, or bond, that ties all parts of the theater logistic system together. All over the theater, men and material are constantly in motion. A bottleneck anywhere inevitably slows down traffic all along the line, and a sudden closing of any valve may well rupture the pipeline. An enormous amount of energy is lost in the inertia of starting and stopping the flow, and it should be the theater commander’s objective to keep the flow of traffic as smooth and continuous as his military operations will permit.

The general term maintenance covers a multitude of problems. In a theater in which major naval forces are operating, it includes ship maintenance, repair and salvage. Normally of course such matters are of primary concern to the Navy Component Commander (Fleet Commander) who handles them through the type and task force commanders. However, in such cases we frequently find that the theater commander is a Naval officer and in
that case, so far, he has always worn two hats, theater and fleet, in which case the theater commander is very much concerned with such problems and his plans so indicate.

VIII—PLANNING FOR A SPECIFIC OPERATION

Rather than dwell too long on the basic theater logistic plan, let us pass to logistic planning for a specific operation. It is in connection with these specific operations that we encounter two terms that are frequently misused: "feasibility" and "calculated risk". In some instances it is considered that the logistics section of a staff decides the logistic feasibility of a contemplated course of action. This, of course, is not the case. The logistics section assists the commander in determining feasibility by making a logistic estimate or staff study. This estimate is a calculation of the logistic requirements necessary to support the operation, and a study of how logistic resources may best be employed to fulfill these requirements. The summary includes statements of prospective deficiencies, with estimates as to how these deficiencies may limit the freedom of action of the commander and recommendations as to what can or should be done to overcome or compensate for the prospective deficiencies. The commander then decides the logistic feasibility of his course of action and he decides the risk involved, balancing this calculated risk against the gains to be achieved. I know of no finer discussion of the calculated risk than that contained on page 34 of Fleet Admiral King's, "US Navy at War 1941-1945." Calculating risk is an exacting exercise of professional judgment and the term should not be used loosely as a blanket to cover the corpse of sloppy thinking.

Planning for an operation has the same general characteristics as basic planning in that it derives from, and must be con-
current with, strategic planning, and it is governed by the same basic considerations, and results in similar types of decisions. But in operational planning, most logistic tasks are delegated to task force commanders with the component and type commanders acting in support. However, the need for keeping the enemy off balance requires that offensive operations be launched as rapidly as logistic considerations permit. Since task force planning staffs cannot be rapidly assembled and then quickly start to plan effectively, it is necessary for the theater commander to prepare many of the plans that in theory should be made by the task force commander. There simply is no other staff which can do this work in time to meet target dates.

The most practicable means of “beating” the vital factor of lead time is by submitting long range forecasts. In World War II CINCPAO issued staff studies and general planning directives months in advance of his operational directives and this enabled his component and type commanders to calculate and submit material and personnel forecasts. This combination of staff study and planning directive also permitted concurrent strategic and logistic planning at the operational level. Furthermore, even if the targets and dates were shifted, the logistic support built up by the forecasts usually fitted the new operation very well.

We should never forget the fact that operational logistics actually acquire great and real physical momentum. Thousands of tons of solid material are actually moving. While under favorable conditions we can change the direction of the mass or somewhat modify its composition, there are other conditions where all the orders in the world have no effect. Recognition of lead time, forecasting, decentralization of execution, etc., all contribute to the flexibility we desire. Nevertheless we must understand that a reasonably good plan that is understood and is feasible of accom-
plishment is far superior to the "perfect plan" which is difficult to understand and issued too late. So there always comes a time when we must say "This is it—Let well enough alone—No more changes!"

I recommend to all of you the study of the plans for the Olympic Operation, the invasion of Kyushu. For while there was in that operation a dangerous lack of clarity in command relations, the plans reflected very valuable experience in logistic planning.

IX—GENERAL PRINCIPLES

Let me offer some thoughts as to certain principles which apply to logistic planning at theater level. But first a word of caution as to the use of the word "principles". Since we are only just beginning to develop logistic theory and principle we should not use the word in its strictest sense but rather in a very broad sense as a statement of something that we believe to be generally true.

First: The combat commander must have control of his own logistic support.

The corollary to this is that he must be competent to and prepared to exercise this control in harmony with the overall war effort—that is to say, in accordance with the principles of mutual support and unity of effort. A further corollary is that he must have a staff which is educated and organized to assist him to exercise this authority. To illustrate the growth of such a staff let us note the growth of the logistic section of Cincpoa's staff from September 1943 to July 1945. (Illustration No. 5)

Second: As long as the supply of an item or a "service" exceeds the requirement for that item or service, strict control is not
ILLUSTRATION NO. 5

C IN C. POA STAFF
LOGISTIC SECTION

- INCLUDING 9 OFFICERS OF FLAG RANK.

NUMBER
OF
OFFICERS

150
100
50
0

SEPT JAN APR JUL SEPT -1943 1944

DEC JAN MAY JUL 1945

ILLUSTRATION NO. 5
necessary. When, however, a shortage exists, then theater control is called for.

I suggest three corollaries to this:

(a) The fewer the matters in which the theater commander finds it necessary to exercise his power of control the better the logistic system and situation in that theater.

(b) A major task of the theatre logistics officer is to look ahead and anticipate shortages and the consequent need for controls, before they occur.

(c) Any system of control of short items must be based on allocations in order to be effective. Priorities, except as part of allocations, are ineffective and self-defeating.

Third: The more detail that is put into any plan or order, the shorter the period of time during which that plan can usefully serve and the fewer the number of organizations that can be effectively controlled.

Fourth: The higher the authority promulgating an order, the greater the time and effort required to make a necessary change, and the more serious the consequences of a mistake or error in judgment.

Fifth: Power and authority attract power and authority—They are magnetic.

When the Unification Act of 1947 was first framed this tendency was clearly recognized. The Staff of the Joint Chiefs was limited to one hundred and the Secretary of Defense was prohibited from having a military staff. The Joint Chiefs are now
permitted a staff of two hundred and ten and the civilian employees of the Secretary of Defense have increased greatly. Furthermore, it would appear that many officers who are carried on the personnel allowance lists of the military departments are actually spending much of their time performing duty with other offices within the Department of Defense.

I mention these matters because I fear the magnetic effect of power in that it will create a tendency in the Department of Defense to encroach upon the prerogatives and functions of theater commanders, and create principalities within the kingdom of the commander.

X—EVALUATION OF LOGISTIC PLANS

Many of you will leave here to assume major planning responsibilities. I, therefore, suggest certain criteria which may be useful in evaluating the logistic plans you may encounter.

But first a caution: We should always remember that any particular logistic plan can be analyzed only on the basis of a full knowledge of the strategic concepts and plans it is designed to support and of the background of the command organization in the command itself. It is vital that all strategic and logistic planning be in fact concurrent, and all strategic plans be kept within the limitations of our logistic capabilities.

When you are sure of these fundamentals you may then ask:

Are the theater command and the theater staff structures both designed for war?

Is the theater staff truly a joint staff?

Are the plans up to date?
Do the plans provide for the expansion and provision of logistic resources and services prior to the expansion of combat elements?

Are the plans within the limitations of our mobilization capabilities?

Do the plans provide a maximum degree of central policy control with decentralized execution and operation?

Are the responsibilities of the component and type commanders clearly defined?

Do the plans place reliance on standing operating procedures?

Are there provisions for reporting and redistributing excess stocks?

Do they provide for ready cross-servicing and use of common facilities?

Are there provisions for inter-theater mutual support?

If these questions can be answered yes, the chances are that the plans and organizations will function well in war. In all cases, however, beware of a superficial analysis.

XI—CONCLUSION

In conclusion, let me leave you with these thoughts. Theater strategic and logistic planning are inseparable. In addition to growing concurrently with the strategic plans, the logistic plans are intimately related to the command organization. A sound theater staff organization is essential to the formulation of good logistic plans and to their smooth execution.
Theater logistic planning consists of two main parts: First, the Basic Theater Logistic Plan (Paragraph 4 or the logistic annex of a conventional Campaign Plan), and second, developing from this, the Logistic Plan for a Specific Operation (Para 4 or the Logistics Annex of the Operation Plan).

While good planning forms, factors and usage data are essential tools, they themselves do not constitute nor produce good plans. Good plans are the product of the skilled professional judgment of the planner.

And finally—Don't expect the plan you draw up in peacetime to be the plan you necessarily use in war. Any peacetime plan, when you do not have or exercise the initiative, is merely the foundation and mental preparation for what you must do in war. And that mental preparation is more important than the plan itself. For only when the planning process, its major considerations, and the various relations of cause and effect are clearly understood, can our commanders make the rapid readjustments that are required when the early course of the war follows the enemy's plan rather than our plan.
The task of the Naval War College mission is to further an understanding of the fundamentals of warfare, with emphasis on their application to future naval warfare. Accordingly, it is my purpose this morning to examine some of the fundamental truths of war and to indicate how these so-called principles of war are applicable to strategy and tactics.

Although exact definitions of the fields of war—strategy, tactics, and logistics—are difficult to arrive at, and may create futile discussion as to semantic distinctions, some definitions are desirable as a basis for study and discussion.

The dictionary of U. S. Military Terms for joint usage, issued by the Joint Chiefs of Staff, defines strategy and tactics as follows:

Strategy is defined as: “The art and science of developing and using the political, economic, psychological, and armed forces of a nation, during peace and during war, to afford the maximum support to national policies, in order to increase the probabilities and favorable consequences of victory and to lessen the chances of defeat.”

It may be noted that this definition of strategy is broad in scope. It includes not only the military aspects, but also the political, economic, and psychological aspects of a nation’s conduct, during
both peace and war. It has as its purpose not only the winning of war, but also of winning the peace by increasing the favorable consequences of victory. In this sense the term is often referred to as "national strategy", or "grand strategy". When the term strategy is restricted to the employment of armed forces it is sometimes spoken of as "military strategy", and it is in this sense that I shall use the term strategy in this discussion.

Tactics is defined as: One, "The employment of units in combat", and two, "The ordered arrangement and maneuver of units in relation to each other and/or to the enemy."

Recent developments in the scientific field, such as radar, long range rockets, and guided missiles make it difficult to determine just when forces may be said to be in contact with the enemy, or even in combat, and, it becomes difficult to differentiate between strategy and tactics. And, although it may be impossible to say at just what point the field of strategy, of tactics, or of logistics leaves off and another of these fields begins, there are certain fundamental principles which govern in all three of these fields of warfare. These are the principles of war—principles which may be applied to arrive at strategic, tactical or logistical concepts of war.

It has been said that the only thing constant in war is change itself. Throughout history, new inventions have dictated changes in strategy, tactics, and logistics. As for naval tactics, we can observe, for example, how the cannon changed the tactics of ramming and boarding to one of maneuver and fire concentration out to the maximum gun range, or how Naval Air has changed the Battle Line concept of capping the "T" of the enemy line to the Carrier Task Force concept of striking a crippling blow against the enemy fleet at the extreme range of the attack plane.
Let us consider for a moment the ten chief tactical principles formulated by Lord Nelson and employed by him with such success. They are:

1. The principle objective is the complete annihilation of the enemy’s fleet; partial victory is not enough.
2. Concentration of own masses against enemy fractions.
3. A close and decisive action is necessary.
4. Units must support each other and keep close to the enemy.
5. It is necessary for subordinates to know the plans of the commander-in-chief, whose principal business is to bring the enemy to action on the most advantageous terms.
6. The division of large fleets into squadrons whose commanders have full discretion.
7. Consideration of the moral qualities of an adversary is an essential factor.
8. The order of sailing is the order of battle, and the less maneuvering the better.
10. Victory must be followed up.

The basis of these tactical doctrines is the principles of war—the principle of the objective, of mass, of the offensive, of maneuver, of simplicity. However new weapons have dictated changes in these tactical concepts. No longer is close action necessary to destroy the enemy, and no longer is the “order of sailing the order of battle”. Thus, it may be seen that, while tactics are fluid and ever changing, certain fundamental truths or principles of war are constant. It is the application of these principles which is variable, and not the principles themselves.
Often strategic and tactical changes have been slow in following the development of new weapons. To those nations who have first shown an appreciation of the strategic and tactical significance of new weapons, there has accrued a distinct, and sometimes, a decisive, advantage. For example, it was many years before the armies of the world appreciated the tactical significance of the maneuverability of fire power in the tank, motorized artillery and infantry, as embodied in the German Panzer Division. Yet, the decisive role that the Panzer Division played against the static defenses of the Maginot line is without question.

Today, with unparalleled advances in new weapons, it is essential that we develop new strategic and tactical concepts in order to realize the maximum effectiveness from the tools available. Similarly, intelligence as to the developments and techniques of our possible enemies takes on an added significance.

We must answer such questions as these. How, and under what circumstances, should we employ the atom bomb? Is it to be used primarily in a strategic or a tactical sense? How may the enemy use the bomb? What active and what passive defense measures should we employ against the A bomb threat? From a Naval tactical viewpoint, what changes must we make in our dispositions for cruising, for battle, for amphibious assault? And the same type of study must be given to the implications of the many other new developments—the jet plane, the rocket, the guided missile, and the true submersible.

In early 1939 the old battleships New York and Texas were given what is now called radar equipment for full scale test afloat. It was then a secret weapon in the development test stage. The implications of this new weapon were enormous. It was reported on along these lines: It is the greatest invention since the
The advent of radio; it will revolutionize naval gunnery and tactics. It was recommended that an immediate procurement program should be initiated to equip at the earliest possible time all battleships, carriers, and cruisers. As we review that report today, it was prophetic. And, yet, someone along the line was slow in appreciating the urgency and soundness of those recommendations and decided to contract for only six (6) equipments to be installed in cruisers for further test and evaluation. Thus, a year or so, was largely lost, in a period of an impending crisis, during which we could have equipped a major portion of our fleet with radar, developed our technique, and trained our personnel in its employment and maintenance. I cite this example for two reasons; first to emphasize the enormous importance of adjusting quickly our tactical concepts to new weapons; and secondly, to indicate that there are times when a new weapon should be expeditiously employed when it is a serviceable one—without waiting for the technical people and the scientists to produce what they consider to be a perfect, or near perfect, instrument. There are other times, however, when new weapons should not be employed until they are available in quantity. This will be indicated in later discussion.

It is possible to find many instances of the technical bureaus' keeping a weapon in the test stages long after it was serviceable, searching for this or that answer—which might well have come sooner if it had been put into service and given operational field tests. We might now do more toward getting the bugs out of some of our guided missiles, for example, and, certainly we could do more toward developing strategic and tactical concepts as how best to employ them if they were put into production now and gotten out to the operating forces. Time may be running out. And it takes time to develop techniques and train in the employment, servicing, and maintenance of new weapons.
Korea should prove an excellent testing ground for new weapons and new strategic and tactical concepts based on such weapons. To so make it, a deliberate and studied program should be initiated. The opportunity we have there is analogous to that which Germany utilized so effectively in Spain prior to World War II.

Our tactical concepts today are largely those of World War II and need close examination and study to adapt them to the new weapons being developed. It is a real challenge to condition our minds, not to World War II but to World War III concepts. It is not enough in solving military problems to dive into USF2 or USF4 or FM101-10 and come up with an answer. Use them, yes; but, by all means, try to devise something better than cruising disposition 4C or battle disposition 4M—something which considers the new weapons we have, and those which the enemy is likely to have.

Now what to use as a basis for these new concepts? The Principles of War. They are based on all of military history and have stood the test of some revolutionary weapon developments and radical concepts of how to employ weapons.

Before presenting them, a few words of caution concerning their application are in order. They should not be considered as if they were religious tenets, but rather as guides in planning and executing military operations. The correct application of any one, or several of them, will not assure success, particularly when, at the same time, another of the principles is violated. In fact, the correct application of all of the principles may not assure success providing the morale forces are lacking. The human elements—morale, discipline, leadership—are so vital to success that they deserve our first and uninterrupted attention. You will recall that according to Napoleon “Moral force is to the physical as three to one.”
is always present the danger of becoming so engrossed in the theory, art, or science of war (whatever you choose to call it) that the human factors are lost sight of, the initiative restricted, or the imagination dampened. There is also the danger of making the assumption that these principles are all inclusive and offer a magic formula to resolve any military problem. A military commander must resolve for himself what the principles of war imply, and how they should be applied.

Clausewitz, a century ago, included the “gaining of public opinion”, as one of the three fundamental objectives in war. It is probably just as important today—if not more so—than it was 100 years ago, but to my knowledge it is not included in any present day listings of the principles of war. Nevertheless, one should exercise in the application of the fundamentals of war in studying military history and in the solution of military problems, until their use becomes second nature. In the heat of battle, application of these principles should be sub-conscious, not self-conscious.

Currently the Army Command and Staff School lists nine principles of war of the United States Army. The principles are:

1. The *Objective*.
2. The *Offensive*.
4. *Maneuver*.
5. *Surprise*.
8. *Unity of Command*.
9. *Simplicity*. 
Although you will not find the principles of war listed in any of the USF publications, as such, you will find the fundamental truths embodied in these principles in the doctrine and instructions contained in the Fleet Publications.

The War Manual of the Royal Navy lists a total of ten principles of war, which are, for the most part, identical to those taught in the U. S. Army. They do not, however, include Simplicity; instead they list Maintenance of Morale and Administration.

Using the Command and Staff School list I shall make a few comments on each of the principles, with particular emphasis on their application to naval strategy and tactics.

OBJECTIVE

If any of the principles may be said to be more important than the others, that one is the principle of the objective. It is certainly fundamental, for it defines the mission or the aim.

From the national strategic level it defines our national objective or aim. In war it implies the imposition of our nation’s will upon that of the enemy. From the level of high military strategy it implies the imposition of our will by destruction of his will to resist, and normally, but not necessarily, entails the destruction of a large portion of his armed forces.

At every level of command the proper selection of the objective is of the greatest importance. Properly, it should be one which supports the objective or mission of the next higher level.

An excellent example of maintenance of the objective, (and I might say here that the British call this principle “Selection and
Maintenance of the Aim" rather than simply the Objective) is Admiral Spruance's action in defending the landing operations in the Marianas against naval air and naval surface attack instead of rushing out to meet the oncoming Japanese Fleet. The primary mission was an offensive one—the seizure of the Marianas. That mission could be best accomplished by isolating the objective area and defending against any incursion by the enemy. Admiral Spruance, keeping in mind the primary mission, took a course of action which would most nearly assure that mission being accomplished.

Generally, in a naval engagement the tactical objective may be considered to be that part of the enemy's sea-air forces which has been selected for destruction or neutralization. By tactical maneuvers one’s major forces should be brought to bear on that part of the enemy’s which it is important to overwhelm, the Battle of Midway is a splendid example of a proper selection of the physical objective. Although the Japanese troop ships were tempting targets, the carriers were the main threat and were therefore chosen as the primary objective.

OFFENSIVE

This principle stems from an aggressive state of mind or a will to destroy the enemy. It is characterized by a desire on the part of the Commander and his subordinates to get at the enemy and to destroy him. Nelson embodied that spirit in his tactics of closing the enemy and annihilating him. It entails an assumption of the initiative and of denying the initiative to the enemy.

The principle of the offensive does not imply that the defensive should be ignored. Clausewitz contends that the defense is "the stronger form of warfare" and that therefore a weaker foe
has a fair chance of assisting a more powerful one. Passive defense measures, such as assuming tactical dispositions best suited to defend against threatening attack, are essential to avoid destruction. But the defensive measures should be employed so as to permit the seizing of any opportunity to take the initiative and to counter-attack with all the violence at one’s command. The defensive must always be assumed in the spirit of the offensive. It may, for example, be assumed merely as a time device to gain time to mass the necessary forces at the proper place and at the proper moment to commence the attack.

The offensive does not imply headlong attack. It seeks to bring a vigorous and timely concentration of forces against a weaker concentration. A splendid example of the application of the principle of the offensive was had in the action of the Allies in landing in North Africa in 1942, on which occasion the initiative passed to us and our allies and remained with us for the remainder of the war.

If the assumption of the offensive is going to comprise the chances of carrying out a mission, it may be necessary to assume the tactical defensive. For example, the mission of an Escort Commander of getting a convoy through might well require him to maintain a strong defensive formation and position and thus restrict his initiative in closing and attacking a threatening force.

Care must be exercised in assuming the offensive that one’s own force is not over-extended or dissipated to the point that an enemy counter-attack will be successful. The principle of the offensive implies a well-timed, well-coordinated attack at a decisive point. But it implies more than that. It implies an attack within the capabilities of the forces making the attack, in order that it may be sustained and followed up. Sustaining the offensive
is of such importance that some military students include in the principles of war the principle of pursuit. The success with which the German air force pursued the break-through in the low countries and in France in the last war and with which Montgomery’s “Desert Rats” pursued Rommel certainly indicate that pursuit is a vitally important aspect of the Offensive if not deserving of a classification as a separate Principle of War.

MASS

This principle goes by many names—superiority, concentration, force, and power. It does not necessarily imply an over-all superiority in numbers. It does imply a superiority of fighting power at a decisive point.

To enumerate all the factors of fighting power would be an insurmountable task, but some of the main factors, as far as naval power is concerned, are fire power and fire concentration including air power, ability to withstand punishment, maneuverability, and, of course, the human factors, such as morale and leadership. And, although a superiority may be enjoyed in several of the factors, it may not be enough if one or more of the others is lacking. For example, in spite of the enormous material superiority which the Japanese enjoyed at the Battle off Samar, the poor leadership of the Japanese Forces deprived them of an impressive tactical victory, if not a strategic one.

MANEUVER

Movement is the means by which plans are placed into effect. Maneuver, then, may be said to be the catalytic agent which fuses together the other principles. By mobility, forces may accomplish
mass or surprise. It gives to the Commander flexibility and freedom of action which he might not otherwise enjoy.

Movement does not necessarily imply rapidity, although speed is frequently a vital factor in war. Movement is a relative matter, particularly in a tactical sense. Certainly, the importance of thinking of movement in terms of relative movement or relative motion need not be emphasized to officers of your experience. And, the importance of rapid, secure, and reliable communications in taking full advantage of the principle of movement is obvious.

Three of Jomini's four fundamental principles of strategy are just as fundamental to naval tactics, and emphasize the enormous part that movement plays in the art of war:

"1. Maneuvering in such a manner as to engage one's major forces against parts only of those of the enemy.

"2. In battle, by tactical maneuvers, bringing one's major forces to bear on the decisive area of the battlefield or on that part of the enemy's lines which it is important to overwhelm.

"3. Arranging matters in such fashion that these masses of men be not only brought to bear at the decisive place but that they be put into action speedily and together, so that they may make a simultaneous effort."

In each of these principles, maneuver and mobility is the key to their successful application.

And it is this principle of movement or mobility which gives such strength to carrier air power. The ability to move carriers quickly from the South Pacific to meet the Japanese threat at Midway permitted our Navy to strike a blow at the Japanese Forces of
such consequences as to change the balance of naval power in the Pacific and to change the complexion of the war from the strategic defensive to the strategic offensive. And while air power is in a tactical sense highly mobile, it is not so in a strategic sense, unless the enormous air base installations and logistic requirements are available where required, or unless it is carrier borne. It is then, from this principle of movement or mobility that naval air power draws its great strength.

SURPRISE

Surprise may be said to be a two-bladed weapon. On the one edge it is capable of inflicting great initial damage on the enemy; on the other of affecting adversely enemy morale, sometimes to the point of throwing him into complete confusion and thus making possible his destruction before he is able to regain his balance.

Many things are conducive to effecting surprise—secrecy, deception, careful planning, faultless and rapid execution. Most important and often the most difficult to attain is secrecy, particularly today with the great emphasis which is being placed on Intelligence and with the many means available to collect intelligence. And yet, it appears that it is still possible to effect surprise—at least initially on a grand scale, for there is little evidence available to refute that the invasion of south Korea came as a complete tactical surprise, if not as a strategic one.

This principle may be applied in the nature of surprise as to time, place, force, technique, direction, and weapons employed.

An excellent example of naval tactical surprise as to time is in the Battle of Savo Island, where the Japanese cruiser force arrived on the scene much ahead of the time that it was expected they might, if indeed they were expected at all, with the result
that four Allied cruisers were destroyed in almost as many minutes, before any effective fire could be returned on the Japanese attack-ing force.

There are many examples where new weapons have come as complete tactical surprise—tanks, gas, magnetic mines, influence fuses, atomic bombs. Seldom, if ever, have they been decisive in determining the outcome of the war, even though it appears that the new weapons, in some instances, might have been capable of so doing had they been fully exploited by the power which first had those weapons. The difficulty arises from the failure to employ them in mass, and from the failure to withhold them until such time as they can be so employed on a continuing basis. If surprise is to be most effective, it must be employed in conjunction with the other principles of war, particularly mass. New weapons often present contradictions which affect materially how and when they should be employed. The longer they are withheld, the greater the chance that the enemy will learn of them, especially when they are placed in mass production and when large numbers of personnel are engaged in training in their employment. Furthermore, it is a gamble to divert a large portion of one's war potential to the production and to training in the employment of a new weapon not battle-tested. It would appear that in World War I, the British might have been able to change the whole course of the war had they withheld the tank until it was available to the Allies for use in large numbers; or, in World War II, that the Germans might have been able to bring England to terms had they not employed the magnetic mine until they were able to do so in such mass as to tie up all shipping seeking ingress or egress to the British Isles. Instead, both of these new and revolutionary developments in warfare were employed initially on a small scale and before they could be used in mass. Thus, the opponents succeeded in developing a
countermeasure or a defense against them, as has always been true when a new weapon is employed.

As for the atomic bomb or the H-bomb, weapons of mass destruction, they can hardly be classed now as weapons of strategic surprise by virtue of being new weapons. However, they may be used as weapons of tactical surprise, both by us and the enemy, as to time, place, and technique of their employment. It, therefore, behooves us to give serious study to the offensive and defensive tactical implications of this new weapon. Having lost its effectiveness as a new weapon of strategic surprise, might it not be employed to advantage tactically as well as strategically?

Before leaving this principle, I should like to point out that one of the inherent strengths of sea-air power is its ability to achieve surprise, both strategically and tactically. Mobility and weather are two factors which greatly contribute to this ability.

Some may contend that as a result of new developments such as long range all-weather search planes, equipped with A. E. W., it is no longer possible for Carrier Task Forces to achieve surprise. On that I should like to make these observations. The achieving of tactical surprises will be more difficult. However, if developments in carriers and carrier-based all-weather long range attack planes and A. E. W. planes are permitted to go ahead, the achieving of tactical surprise should still be possible. As for strategic surprise, the comparative strategic mobility of carrier-based air forces, as opposed to that of great land-based air forces, will still make it possible for carrier air power to achieve strategic surprise. It is significant that Germany was not able to move any appreciable amount of air power to resist the movement of the Allies onto the beaches of Normandy.
SECURITY

Security includes all measures to deny to the enemy the means of gaining intelligence or of inflicting damage on own forces. It also embraces means to obtain information about the enemy in order to institute better security measures, such as protecting own lines of communications.

It implies a defensive attitude, but there are occasions when the offensive must be assumed to gain the necessary security for own forces. For example, the offensive was assumed in our landings at Guadalcanal in order to obtain security for our lines of communication to Australia while we were still on the strategic defensive.

Among the passive measures which may be essential to security from a naval viewpoint are: radio silence, combat air patrols, electronic countermeasures, air searches, ASW patrols, radar pickets, zigzags, radio and radar intercept watches. These and many others may be employed to avoid the enemy's taking one's forces by surprise and to better enable one's own forces to be prepared to resist attack and to counterattack effectively.

Before leaving this principle of security, there is another aspect thereof which is today more significant than at any time in history since the Trojan horse; that is, security on the home front, security against the fifth column, and security against subversion and sabotage. These may be the most powerful weapons in the enemy's arsenal, unless we are forever on guard and take the offensive against them whenever and wherever the occasion demands.
ECONOMY OF FORCE

Economy of Force implies a proper proportionment of available forces both in regard to space and time. It aims at effecting mass at the decisive place at the proper time. To do so may necessitate a reduction of forces at other points to those required to maintain the bare minimum of security. It, thus, entails a compromise between concentration and dispersion. It should aim to effect the desired concentration of own forces while, at the same time, causing the enemy to disperse his forces.

Although economy of force does not imply, in a tactical sense, cutting down all along the line to bare essentials, it does imply that in the strategic sense. For, as the scope of wars seems ever to increase and the limit of the nation's natural resources to decrease, it becomes more and more urgent that we weigh continually the gain against the cost and strive to proportion properly our sources of national strength, such as manpower, critical materials and industrial capacity. Both, strategically and tactically, the selection of proper weapons to be employed is of vital importance in application of the principle.

Economy of force, like that of surprise, again brings out inherent strength in sea-air power. The strength is derived, in the application of this principle, from the ability of sea-air forces to concentrate great striking power at any one of many points about an enemy's defensive perimeter, thus making him disperse to meet this ever present threat. During the past war in the Pacific, the Fast Carrier Task Forces were employed on the strategic offensive (and it should be noted that Admiral Nimitz and the Joint Chiefs opposed any operations which would, for an extended period, tie these forces down to a defensive role). Thus employed, they were able not only to inflict great material damage on the Japanese forces, but, probably
more important, they were able to require a wide dispersion of enemy forces, especially air forces, and to make possible the isolation of any objective.

And, in spite of some contentions to the contrary that never again will major amphibious forces be employed, circumstances and economy of force may dictate that such a course of action is best.

In the last war with Allied troops concentrated in the British Isles and the necessary air and naval forces available to project them against the continent of Europe, Germany was forced to disperse her defenses from Norway to the southern coast of France. Thus, both sea-air and amphibious forces permit own forces to be concentrated, while, at the same time, requiring the enemy to disperse his forces.

UNITY OF COMMAND

Unity of Command implies cooperation. In fact, until recently, the Army Command and Staff School called this principle the Principle of Cooperation. The British still do.

With the advent of the Western Union and the Atlantic Pact, this principle takes on a significance far greater than ever before, for it aims at unified action, not only among armed forces of our nation, but among all the nations with a common aim. It has, as its root, a spirit of unselfishness, a feeling of confidence in leadership, and a desire to do, within the limits of capabilities, what is necessary to accomplish the objective without seeking for one's self, one's ship, one's service, one's nation, any glory except that which may accrue, in the course of events, from doing that which needs to be done for a common cause.
It is a principle to which we must constantly direct our attention. The cooperation which characterized the relations between the United States, Britain, and the British Commonwealth Nations during the past war was excellent. The problem of attaining a similar degree of cooperation and unity of command among the twelve (12) North Atlantic Pact Nations is one of the greatest magnitude.

There is an ever growing feeling among the Atlantic Pact Nations that Unity of Command must be effected if that Pact is going to succeed in accomplishing its objective. That feeling has been expressed in recent speeches of such leaders as Mr. Churchill and Mr. Spaak.

Cooperation, fortunately, is something which can be learned and nurtured in our daily contacts. It is a spirit which must be developed before the heat of action. And it must be developed to such a degree among our Allies that Unity of Command will be attained.

**SIMPPLICITY**

Simplicity is a principle which may be applied to many factors in war—among others, organization, planning, order writing, maneuver, weapon and equipment design. It makes for order and tends to eliminate the well known process of order—counter-order—disorder.

Many of you will recall how our fleet maneuvers, during a period between the two world wars, became more and more complicated, year by year, until we got to the point that the captain of a capital ship needed one of two signal officers, a tactical officer and a couple of plotters to assist and advise him in formation maneuvers,
and how the three or four signal halyards were kept, almost constantly chock-a-block with bunting. I recall how one of our Admirals used to deplore, with great rage, that tendency, and point out that, during his tour of duty as a destroyer skipper in the Irish Sea during World War I, the only special flags or pennants that he ever saw were Corpen, Turn and Speed. He said that we must simplify our maneuvers if we ever got into action. Our Fleet did not appreciate that fact until we did get into a shooting war, when it became necessary that we revise our tactical concepts; or at least our techniques of maneuvering. However, in the field of amphibious warfare, there still remains much to be done to simplify those inherently complicated operations.

Simplicity in order writing has many virtues. It reduces the verbiage, it reduces the load of communications, it adds to security, and probably most important of all, it may give the subordinate some freedom of action and permit him to use his initiative. One of the keys to this is to tell WHAT is to be done and avoid telling the subordinate HOW it is to be done.

In conclusion, strategy and tactics, like war itself, are ever changing and depend on weapons. As new weapons become available, new strategic and tactical concepts for their employment must be evolved, and evolved quickly. The best guides we have available in developing these new concepts, in the absence of a shooting war, during which they should and can be evolved and tested, are the Principles of War—objective, offensive, mass, maneuver, surprise, security, economy of force, unity of command, and simplicity. While it may seem at times that these principles are contradictory they are in fact complementary, the application of any one or several of them may not assure success. The necessary blending of them all is essential. But even more essential are the human factors of morale, discipline, and leadership.
RECOMMENDED READING

This section lists material published in current periodicals which will be of interest and value to officers of the Navy, Marine Corps, and Coast Guard.

"Korean Attack Opens New Chapter in History."

"How Strong Is the Red Air Force?"

"The Communists in America."

"Get Guerrilla-Wise."

"Do We Have Enough Strategic Materials for War?"

"The Soviet System of Collective Security Compared with the Western System."

"Our Last, Best Hope for Peace."

"The Riddle of the Russian Sea."

"Stalin Takes a Breather."

"Korea—Tougher to Crack Than Okinawa."
By Captain Walter Karig, USNR. Collier's. September 23.

"The Strategy of Communism in Southeast Asia."

"How Russia Built the North Korean Army."