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THE OBJECTIVE IN WAR

National Object and Military Aim

A lecture delivered
at the Naval War College
on 24 September 1952, by
Captain B. H. Liddell Hart

In considering this subject, we must be clear about the distinction between the *political objective* and *military objective.*

The two are different but not separate. For nations do not wage war for war's sake, but in pursuance of policy. The military objective is only the means to a political end.

Hence, the military objective should be governed by the political objective, and serve it faithfully—subject to the basic condition that policy does not demand what is militarily—that is, practically—impossible.

Thus, any study of the problem ought to begin and end with the question of policy.

The term "objective," although common usage, is not really a good one. It has a physical and geographical sense—and thus tends to confuse thought.

It would be better to speak of "the object," when dealing with the purpose of policy, and of "the military aim," when dealing with the way that forces are directed in the service of policy.

The object in war is a better state of peace—even if only from your own point of view. Hence, it is essential to conduct war with constant regard to the peace you desire.

That applies both to aggressor nations who seek expansion and to peaceful nations who only fight for self-preservation—although their views of what is meant by a better state of peace are very different.

History shows that gaining military victory is not in itself equivalent to gaining the object of policy.

Victory, in the true sense, implies that a nation's prospect after the war is better than if it had not gone to war.

But, as most of the thinking about war has been done by men of the military profession, there has been a very natural tendency to lose sight of the basic national object, and identify it with the military aim.

In consequence, whenever war has broken out, policy has too often been governed by the military aim — and this has been regarded as an end in itself, instead of as merely a means to the end.

The ill-effects have gone further. For, by losing sight of the proper relationship between the object and the military aim—between policy and strategy—the military aim became distorted, and over-simplified.

For a true understanding of the problem, essentially complex, it is necessary to know the background of military thought on this subject during the past two centuries, and to realize how conceptions have evolved.

For more than a century the prime canon of military doctrine has been that "the destruction of the enemy's main forces on the battlefield" constituted the only true aim in war. That was univer-

sally accepted, engraved in all military manuals, and taught in all staff colleges.

If any statesman ventured to doubt whether it fitted the national object in all circumstances, he was regarded as blasphemously violating holy writ—as can be seen in studying the official records and the memoirs of the military heads of the warring nations—particularly in and after World War I.

So absolute a rule would have astonished the great commanders and teachers of war-theory in ages prior to the 19th century. For they had recognized the practical necessity and wisdom of adapting aims to limitations of strength and policy.

Clausewitz's Influence

The rule acquired its dogmatic rigidity largely through the posthumous influence of Clausewitz and his books upon the minds of Prussian soldiers, particularly Moltke—and thence more widely through the impact that their victories in 1866 and 1870 made upon the armies of the world, which copied so many features of the Prussian system. Thus, it is of vital importance to examine his theories.

As so often happens, Clausewitz's disciples carried his teaching to an extreme which their master had not intended.

Misinterpretation has been the common fate of most prophets and thinkers in every sphere. Devout, but uncomprehending, disciples have been more damaging to the original conception than even its prejudiced and purblind opponents.

It must be admitted, however, that Clausewitz invited misinterpretation more than most. A student of Kant, at second-hand,

he had acquired a philosophical mode of expression without developing a truly philosopohical mind.

His theory of war was expounded in a way too abstract and involved for ordinary soldier-minds, essentially concrete, to follow the course of his argument—which often turned back from the direction in which it was apparently leading. Impressed, yet befogged, they grasped at his vivid leading phrases—seeing only their surface meaning, and missing the deeper current of his thought.

Clausewitz's greatest contribution to the theory of war was in emphasizing the psychological factors. Raising his voice against the geometrical school of strategy, then fashionable, he showed that the human spirit was infinitely more important than operational lines and angles. He discussed the effect of danger and fatigue, the value of boldness and determinaton, with deep understanding.

It was his errors, however, which had the greater effect on the subsequent course of history.

He was too continental in outlook to understand the meaning of sea-power. And, on the very threshold of the mechanical age, Clausewitz was led to declare his "conviction that superiority in numbers becomes every day more decisive."

Such a "commandment" gave reinforcement to the instinctive conservatism of soldiers in resisting the possibilities of the new form of superiority which mechanical invention increasingly offered.

It also gave a powerful impulse to the universal extension and permanent establishment of the method of conscription—as a simple way of providing the greatest possible numbers.

This, by its disregard for psychological suitability, meant that

armies became much more liable to panic, and sudden collapse. The earlier method, however unsystematic, had at least tended to ensure that the forces were composed of good "fighting animals."

Clausewitz contributed no new or strikingly progressive ideas to tactics or strategy. He was a *codifying* thinker, rather than a *creative* or *dynamic* one.

He had no such revolutionary effect on warfare as the theory of the "divisional system" produced in the 18th century or the theory of "armoured mobility" in the 20th.

But, in seeking to formulate the experience of the Napoleonic wars, the emphasis he put on certain retrograde features helped to cause what might be termed a "revolution in reverse" back toward tribal warfare.

Clausewitz's Theory of the Military Aim

In defining the military aim, Clausewitz was carried away by his passion for pure logic:

> "The aim of all action in war is to disarm the enemy, and we shall now show that this, in theory at least, is indispensable.
>
> If our opponent is to be made to comply with our will, we must place him in a situation which is more oppressive to him than the sacrifice we demand; but the disadvantages of this position must naturally not be of a transitory nature, at least in appearance, otherwise the enemy, instead of yielding, will hold out in the hope of a change for the better.

> Every change in this position which is produced by a continuation of the war must, therefore, be a change for the worse.
>
> The worst condition in which a belligerent can be placed is that of being completely disarmed.
>
> If, therefore, the enemy is to be reduced to submission.....he must either be positively disarmed or placed in such a position that he is threatened with it. From this it follows that the complete disarming or overthrow of the enemy.....must always be the aim of warfare."

The influence of Kant can be perceived in Clausewitz's dualism of thought—he believed in a perfect (military) world of ideals while recognizing a temporal world in which these could only be imperfectly fulfilled.

For he was capable of distinguishing between what was militarily ideal and what he described as "a modification in the reality." Thus he wrote:

> "Reasoning in the abstract, the mind cannot stop short of an extreme . . . . But everything takes a different shape when we pass from abstractions to reality."
>
> "This object of war in the abstract . . . . the disarming of the enemy, is rarely attained in practice and is not a condition necessary to peace"

Clausewitz's tendency to the extreme is shown, again, in his discussion of battle as a means to the end of war. He opened with

the startling assertion—"There is only one single means—it is the fight." He justified this by a long argument to show that in every form of military activity "the idea of fighting must necessarily be at the foundation."

Having elaborately proved what most people would be ready to accept without argument, Clausewitz said:

> ". . . . the object of a combat is not always the destruction of the enemy's forces . . . . its object can often be attained as well without the combat taking place at all."

Moreover, Clausewitz recognized that:

> ". . . . the waste of our own military forces must, *ceteris paribus*, always be greater the more our aim is directed upon the destruction of the enemy's power. "The danger lies in this—that the greater efficacy which we seek recoils on ourselves, and therefore has worse consequences in case we fail of success."

Out of his own mouth, Clausewitz here gave a prophetic verdict upon the consequences of following his own gospel in World Wars I and II.

Not one reader in a hundred was likely to follow the subtlety of his logic or to preserve a true balance amid such philosophical jugglery. But everyone could catch such ringing phrases as—

> "We have only one means in war—the battle." "The bloody solution of the crisis, the effort for the destruction of the enemy's forces, is the first-born son of war."

> "Only great and general battles can produce great results."
>
> "Let us not hear of generals who conquer without bloodshed."

By the reiteration of such phrases Clausewitz blurred the outlines of his philosophy, already indistinct, and made it into a mere marching refrain—a Prussian *Marseillaise* which inflamed the blood and intoxicated the mind. In transfusion it became a doctrine fit to form corporals, not generals.

For, by making battle appear the only "real warlike activity," his gospel deprived strategy of its laurels, and reduced the art of war to the mechanics of mass-slaughter. Moreover, it incited generals to seek battle at the *first* opportunity, instead of creating an advantageous opportunity.

Clausewitz contributed to the subsequent decay of generalship when in an oft-quoted passage he wrote—

> "Philanthropists may easily imagine that there is a skillful method of disarming and overcoming the enemy without great bloodshed, and that this is the proper tendency of the Art of War . . . . That is an error which must be extirpated."

It is obvious that when he wrote this he did not pause to reflect that what he decried had been regarded as the proper aim of generalship by all the masters of the art of war—including Napoleon himself.

Clausewitz's phrase would henceforth be used by countless blunderers to excuse, and even to justify, their futile squandering of life in bull-headed assaults.

The danger was increased because of the way he constantly dwelt on the decisive importance of a *numerical* superiority. With deeper penetration, he pointed out in one passage that *surprise* lies "at the foundation of all undertakings, for without it the preponderance at the decisive point is not properly conceivable."

But his disciples, struck by his more frequent emphasis on "numbers," came to regard mere mass as the simple recipe for victory.

Clausewitz's Theory of the Object

Even worse was the effect of his theoretical exposition, and exaltation, of the idea of "absolute" warfare— in proclaiming that the road to success was through the unlimited application of force. Thereby, a doctrine which began by defining war as only "a continuation of state policy by other means" led to the contradictory end of making policy the slave of strategy—and bad strategy at that.

The trend was fostered, above all, by his dictum that—

> "To introduce into the philosophy of war a principle of moderation would be an absurdity. War is an act of violence pushed to its utmost bounds."

That declaration has served as a foundation for the extravagant absurdity of modern total warfare.

His principle of force without limit and without calculation of costs fits, and is only fit for, a hate-maddened mob. It is the negation of statesmanship and of intelligent strategy—which seeks to serve the ends of policy.

If war be a continuation of policy, as Clausewitz had else-

where declared, it must necessarily be conducted with a view to post-war benefit. A state which expends its strength to the point of exhaustion bankrupts its own policy.

That hard truth of experience, which has been brought home to us after victory in 1918 and 1945, had been well appreciated two centuries earier—in "the age of reason."

A long series of mutually exhausting and devastating wars, above all the Thirty Years War, had brought statesmen by the 18th century to realize the necessity, when engaged in war, of curbing both their ambitions and their passions in the interest of their purpose.

This realization tended to produce a tacit limitation of warfare—an avoidance of excesses which might damage after-the-war prospects. On the other hand, it made them more ready to negotiate a peace if and when victory came to appear dubious of achievement.

Their ambitions and passions frequently carried them too far, so that the return to peace found their countries weakened rather than strengthened—but they had learnt to stop short of national exhaustion.

Clausewitz himself had qualified his principle of "utmost force" by the admission that—

> ". . . . the political object, as the original motive of the war, should be the standard for determining both the aim of the military force and also the amount of effort to be made."

Still more significant was a reflective passage in which he remarked that to pursue the logical extreme entailed that—

> ". . . . the means would lose all relation to the end, and in most cases the aim at an extreme effort would be wrecked by the opposing weight of forces within itself."

His clasic work "On War" was the product of twelve years' intensive thought; if its author had lived to spend a longer time in thinking about war, he might have reached wiser and clearer conclusions.

As his thinking progressed, he was being led towards a different view—penetrating deeper. Unhappily, the process was cut short by his death from cholera in 1830.

It was only after his death that his writings on war were published, by his widow. They were found in a number of sealed packets, bearing the significant and prophetic note—

> "Should the work be interrupted by my death, then what is found can only be called a mass of conceptions not brought into form . . . . open to endless misconceptions."

Much of the harm might have been avoided but for that fatal cholera germ. For there are significant indications that in the gradual evolution of his thought he had reached a point where he was about to drop his original concept of "absolute" war, and revise his whole theory on more common-sense lines—when death intervened.

In consequence, the way was left open to "endless misconceptions" far in excess of his anticipation—for the universal adoption of the theory of unlimited war has gone far to wreck civilization.

The teachings of Clausewitz, taken without understanding, largely influenced both the causation and the character of World War I. Thereby it led on, all too logically, to World War II.

Theory in Flux—After World War I

The course and effects of the first World War provided ample cause to doubt the validity of Clausewitz's theory, at least as interpreted by his successors. On land, innumerable battles were fought without ever producing the decisive results expected of them.

But the responsible leaders were slow to adopt their aim to circumstances or develop new means to make the aim more possible. Instead of facing the problem, they pressed theory to a suicidal extreme, draining their own strength beyond the safety limit, in pursuit of an ideal of complete victory by battle which was never fulfilled.

That one side ultimately collapsed was due more to emptiness of stomach, produced by the economic pressure of seapower, than to loss of blood—although the blood which was lost in the abortive German offensives of 1918, and the loss of spirit in consequence of their palpable failure to gain the victory, hastened the collapse.

If this provided the opposing nations with the semblance of victory, their efforts to win it cost them such a price, in moral and physical exhaustion, that they, the seeming victors, were left incapable of consolidating their position.

It became evident there was something wrong with the theory, or at least with its application—alike on the planes of tactics, strategy, and policy. The appalling losses suffered in vain pursuit of the "ideal" objective, and the post-war exhaustion of the nominal victors, showed that a thorough re-examination of the whole problem of the object and aim was needed.

Besides these negative factors, there were also several posi-

tive reasons to prompt a fresh enquiry. One was the decisive part that sea-power had played, without any decisive battle at sea, in producing the enemy's collapse by economic pressure.

That raised the question whether Britain, in particular, had not made a basic mistake in departing from her traditional strategy and devoting so much of her effort, at such terrific cost to herself, to the prolonged attempt to win a decisive victory on land.

Two other reasons arose from new factors. The development of air forces offered the possibility of striking at the enemy's economic and moral centres without having first to achieve "the destruction of the enemy's main forces on the battlefield."

Airpower might attain a direct end by indirect means—hopping over opposition instead of overthrowing it.

At the same time, the combined development of the petrol motor and the caterpillar track opened up a prospect of developing mechanized land forces of high mobility.

This, in turn, foreshadowed a newly enlarged possibility of producing the collapse of "the enemy's main forces" without a serious battle—by cutting their supply-lines, dislocating their control-system, or producing paralysis by the sheer nerve-shock of deep penetration into their rear.

Mechanized land forces of this new kind might also provide —like air power, though in a lesser degree—the possibility of striking direct at the heart and nerve-system of the opposing country.

While air-mobility could achieve such direct strokes by an overhead form of indirect approach, tank-mobility might achieve

them by indirect approach on the ground avoiding the "obstacle" of the opposing army.

To illustrate the point by a board-game analogy, with chess —air-mobility introduced a knight's move, and tank-mobility a queen's move, into warfare.

This analogy does not, of course, express their respective values. For an air force combined the vaulting power of the knight's move with the all-ways flexibility of the queen's move. On the other hand, a mechanized ground force, though it lacked vaulting power, could remain in occupation of the "square" it gained.

These new air and land developments were bound to have a profound influence on the military aim, and choice of objectives in future war.

They increased the capacity of applying military action against civil objectives, economic and moral, while making it more powerful in effect.

They also increased the "range" of military action against military objectives, making it easier to overthrow an opposing "body"—such as an army—by paralyzing some of its vital organs instead of having to destroy it physically and as a whole by hard fighting.

To nullify opposition by paralyzing the power to oppose, is far better economy of force than actual destruction of opposition, which is always a more prolonged process and more costly to the victor.

Air power promised new scope for producing such paralysis

of armed opposition—besides its capacity to evade opposition and strike at civil objectives in the enemy country.

The sum effect of the advent of this multiplied mobility, both on the ground and in the air, was to increase the power and importance of strategy relatively to tactics.

The higher commanders of the future would have the prospect of achieving decisive results much more by movement than by fighting, compared with their predecessors.

While the value of winning a decisive battle would not disappear, and the chances of doing so would actually be increased by the new powers of mobility, even such a battle would have less of the traditional battle form. It would become more like the natural completion of a strategic manoeuvre. "Battle" is really a misnomer for such a consecutive operation.

Unfortunately, those who were at the head of the armies after the World War I were slow to recognize the need of a fresh definition of the military aim in the light of changed conditions and war instruments.

Unfortunately, also, those who were at the head of the air forces were too exclusively concerned to assert their independence, and thus concentrated too narrowly on exploiting the possibilities of striking at civil objectives—without regard either to its limitations or to its detrimental results.

Filled with a natural enthusiasm for the new service to which they belonged, they were excessively confident that it could produce either the speedy moral collapse of the opposing people or the economic stranglehold of seapower in an intensified form and with much more quickly decisive effect.

Practice in World War II

When the next war came, the handful of new land forces of a mechanized kind that had been created amply fulfilled the claims that had been made for them, and for their decisive effect if employed for long-range strokes at strategic objectives.

A mere six divisions of this kind were largely instrumental in producing the collapse of Poland within a few weeks. A mere ten such divisions virtually decided the so-called "Battle of France" before the main mass of the German Army had even come into action—and made the collapse of all the Western countries an almost inevitable sequel.

This conquest of the West was completed in barely a month's campaign, with amazingly small cost to the victor. Indeed, the "bloodshed" all round was very slight, and in the decisive phase trifling, by any Clausewitzian standard.

While this sweeping victory was attained by action against objectives of a military nature, it was mainly through action of a *manoeuvre* form—strategic more than tactical.

Moreover, the effect of cutting the opposing armies' communications, and dislocating their control-system, in the deeply penetrating drive, is hard to distinguish from its accompanying effect in shaking the people's morale and disrupting civic organization. So it could be termed as, at least in part, a proof of the new effectiveness of operating against civil objectives.

Similar reflections apply to the even swifter conquest of the Balkans in April, 1941—which once again demonstrated the paralyzing effect of the new instruments and their strategic application.

"Battle" was insignificant in comparison, and "destruction" palpalby an inappropriate term for the way that the decision was achieved.

When it came to the invason of Russia a somewhat different method was tried. Many of the German generals—particularly Halder, the Chief of the General Staff—complain of Hitler's tendency to aim at economic rather than military objectives. But analysis of the operational orders and of their own evidence does not bear out the charge.

While Hitler was inclined to think that the economic aim would be more effective, it is clear that in the crucial period of the 1941 campaign he conformed to the General Staff's preference for fighting battles. The pursuit of this aim did not prove decisive, although it produced several great victories in which immense forces of the enemy were destroyed.

Whether concentration on economic objectives would have been more decisive remains an open question.

But in reflection some of the ablest of the German generals consider that the best chance of defeating Soviet Russia was lost by aiming to win battles in the "classical" way, instead of driving through as fast as possible to the moral-cum-economic objectives offered by Moscow and Leningrad—as Guderian, the leading exponent of the new school of mechanical mobile warfare, wished to do.

On this key question, Hitler had sided with the orthodox school.

In the series of swift German conquests, the air force combined with the mechanized elements of the land forces in producing the paralysis and moral disintegration of the opposing forces

and of the nations behind. Its effect was terrific, and must be reckoned fully as important as that of the *Panzer* forces.

The two are inseparable in any valuation of the elements that created the new style of lightning warfare—the *blitzkrieg*.

Even greater was the contribution that the British and American air forces made, later in the war, to the success of the Allied armies and navies. It was due to the air forces, above all, that the Allied invasion of the Continent became possible in the first place, and then an assured advance to victory. By their action against military objectives—particularly communications—they had a decisively crippling effect on the ability of the German armies to counter the Allied moves.

The Air Staffs, however, never showed the same eagerness to conduct operations of this kind as they did to pursue independent operations against "civil" objectives—the attack on the industrial centres of the opposing country.

Its purpose, as conceived, was to combine a direct economic and moral effect on the opposing nation, in the belief that it would prove more decisive, and more quickly decisive, than co-operative action against the enemy's armed forces.

Although the Air Staffs termed this "strategic bombing," the term was really a misnomer, for such an aim and action lies in the sphere of grand strategy. It would be more correctly defined as "grand strategic bombing," or, if that seems too cumbrous a term, as "industrial bombing," a term which covers moral as well as economic effect.

The actual effect which this kind of bombing achieved as a

contribution to victory is very difficult to assess, despite much detailed investigation.

The estimation of the data is confused by partisan assessments —both by those who favoured industrial bombing, and by those who opposed it on various grounds.

Apart from the fog thus created, a correct assessment is handicapped and made almost impossible by the amount of *imponderabilia* in the data—even more than in the evidence about any other form of military action.

But it seems fairly certain, even on a reasonably favourable view of its effects, that they were less decisive than the action of air forces against strategic objectives—in the military sphere. In any case, they were much less clearly decisive.

It is also clear that, stage by stage throughout the war, the results fell far short of what was being claimed for this kind of action by those who were conducting it.

Still clearer is the extremely detrimental effect of industrial bombing on the post-war situation. Beyond the immense scale of devastation, hard to repair, are the less obvious but probably more lasting social and moral effects.

This kind of action inevitably produces a deepening danger to the relatively shallow foundations of civilized life. That common danger is now immensely increased by the advent of the atomic bomb.

Here we are brought to the fundamental difference between strategy and grand strategy.

The function of grand strategy is to co-ordinate and direct all the resources of a nation towards the attainment of the political object of the war—the goal defined by national policy. Whereas strategy is only concerned with the problem of winning military victory, grand strategy must take the longer view—for its problem is the winning of the peace.

Such an order of thought is not a matter of "putting the cart before the horse," but of being clear where the horse and cart are going.

Air action against an object that is primarily "civil" is action on the plane of grand strategy. It is called into question on that very account. By the test of its own nature, it is seen to be an unsound objective.

It would be an unwise choice as a military aim even if its ability to decide a war were more conclusively proved, or at least more clearly demonstrated, than it actually has been.

Further Revision of Theory

In trying to revise any theory and readjust it for better balance, it is a help to have a background of study in the subject—as long as one is willing to modify one's conclusions.

I was, so far as I know, the first student of war after 1914-18 to make a re-examination of the prevailing doctrines, derived from Clausewitz, about the objective in war. After calling it in question in a number of articles in the military journals, I dealt with it more fully in *Paris*, or *The Future of War*, 1925.

This little book began with a criticism of the way that the

orthodox aim, "the destruction of the enemy's main forces on the battlefield," had been pursued in World War I—pointing out its indecisive and exhausting results.

It then went on to argue the advantages of the "moral objective," showing—

(i) how armoured forces might deliver a decisive blow against "the Achilles' heel of the enemy army—the communications and command centres which form its nerve system";

(ii) how air forces, besides co-operating in this strategic action, might also strike with decisive effect direct at "a nation's nerve system," its "static civil centres" of industry.

The General Staff prescribed the book for the study of the officers of the first Experimental Mechanized Force when this was formed two years later. The Air Staff, less surprisingly, made still fuller use of it—there was then a lack of text-books on air strategy, and it fitted the developing trend of their views on the subject. The Chief of the Air Staff distributed copies of it to his fellow Chiefs of Staff.

What I have said now is thus a revision, after prolonged reflection, of what I wrote a quarter of a century ago—and an avowal of error over part of the thesis. It shows how in correcting the balance one is apt to tilt it too far the other way.

T. E. Lawrence observed in a letter he wrote me in 1928:

"The logical system of Clausewitz is too complete. It leads astray his disciples—those of them,

> at least, who would rather fight with their arms than with their legs . . . . You, at present, are trying (with very little help from those whose business it is to think upon their profession) to put the balance straight after the orgy of the last war. When you succeed (about 1945) your sheep will pass your bounds of discretion, and have to be chivied back by some later strategist. Back and forward we go."

In 1925 I myself went too far in arguing the advantages of the air stroke at civil objectives—though I did qualify this by emphasizing the importance of executing it in such a way as to inflict

> "the least possible permanent injury, for the enemy of today is the customer of the morrow and the ally of the future."

My belief then was that

> "a decisive air attack would inflict less total damage and constitute less of a drain on the defeated country's recuperative power than a prolonged war of the existing type."

In further study I came to realize that an air attack on industrial centres was unlikely to have an immediately decisive effect, and more likely to produce another prolonged war of attrition in a fresh form—with perhaps less killing but more devastation than the 1914-18 form.

But when one began to point this out, one soon found that the Air Staff was far less receptive to the revised conclusion than to the original conclusions! They continued to cherish faith in a

speedy decision, and when war experience compelled them to relinquish it, they pinned their faith instead to industrial attrition—as fervently as the General Staff of the last war had done to manpower attrition.

Nevertheless, a realization of the drawbacks and evils of taking the civil fabric as the objective does not mean the restoration of "battle" in the old sense as the objective.

The drawbacks of that Clausewitzian formula were amply shown in World War I. In contrast, World War II demonstrated the advantages and new potentialities of indirect, or strategic, action against a military objective—amply confirming what had been forecast in that respect.

Even in the past such action had been effectively exploited by some of the "Great Captains," despite the limitations of their instruments. But now, with the help of new instruments, it proved still more decisive—despite the increased strength of tactical resistance.

The new mobility produced a flexibility, in varying the directive of thrust and threat, which "disarmed" such resistance.

The time has come for a fresh revision of the doctrine of the objective, or military aim, in the light of recent experience and present conditions. It is much to be desired that it should be undertaken on a Combined Service basis, to produce an agreed solution—for there is a dangerous discordance of doctrine at present.

The outlines of a revised theory fitted to present conditions

and knowledge have emerged, I hope, in the course of this discussion of the subject.

The key idea is "strategic operation" rather than "battle" —an old term that has outlived its suitability and utility. Battles may still occur, but should not be regarded as the objective itself.

To repeat an earlier conclusion that was strikingly vindicated in World War II—

> "the true aim is not so much to seek battle as to seek a strategic situation so advantageous that if it does not of itself produce the decision, its continuation by a battle is sure to achieve this."

GRAND STRATEGY

While grand strategy should control strategy, its principles often run counter to those which prevail in the field of strategy. For that very reason, however, it is desirable to include here some indication of the deeper conclusions to which a study of grand strategy leads.

If you concentrate exclusively on victory, with no thought for the after-effect, you may be too exhausted to profit by the peace, while it is almost certain that the peace will be a bad one, containing the germs of another war. This is a lesson supported by abundant experience.

The risks become greater still in any war that is waged by a coalition. For in such a case a too complete victory inevitably complicates the problem of making a just and wise peace settlement.

Where there is no longer the counter-balance of an opposing

force to control the appetites of the victors, there is no check on the conflict of views and interests between the parties to the alliance.

The divergence is then apt to become so acute as to turn the comradeship of common danger into the hostility of mutual dissatisfaction—so that the ally of one war becomes the enemy in the next.

Another conclusion which develops from the study of grand strategy (national war-policy), against the back-ground of history, is the practical necessity of adapting the general theory of strategy to the nature of a nation's fundamental policy.

There is an essential difference of aim, and must be a consequent difference of appropriate method, between an 'acquisitive' and a 'conservative' State.

In the light of this difference it becomes clear that the pure theory of strategy best fits the case of a State that is primarily concerned with conquest.

It has to be modified if it is to serve the true purpose of a nation that is content with its existing territorial bounds, and primarily concerned to preserve its security and maintain its way of life.

The acquisitive State, inherently unsatisfied, needs to gain victory in order to gain its object—and must therefore court greater risks in the attempt.

The conservative State can achive its object by merely inducing the aggressor to drop his attempt at conquest—by convincing him that 'the game is not worth the candle.' Its victory is, in a real sense, attained by foiling the other side's bid for victory.

Indeed, in attempting more it may defeat its own purpose—by exhausting itself so much that it is unable to resist other enemies or the internal effects of overstrain. Self-exhaustion in war has killed more States than any foreign assailant.

Weighing these factors of the problem, it can be seen that the problem of a conservative State is to find the type of strategy that is suited to fulfill its inherently more limited object in the most strength-conserving war—so as to insure its future as well as its present.

At first glance, it might seem that pure defence would be the most economical method; but this implies static defence—and historical experience warns us that this is a dangerously brittle method on which to rely.

Economy of force and deterrent effect are best combined in the defensive-offensive method, based on high mobility that carries the power of quick riposte.

The East Roman Empire was a case where such an actively 'conservative' strategy had been carefully thought out, as a basis of war-policy—a fact which goes far to explain its unrivalled span of existence.

Another example, more instinctive than reasoned, is provided by the strategy, based on sea-power, that England practiced in her wars from the sixteenth to the nineteenth century. The value of it was shown by the way that her strength kept pace with her growth, while all her rivals broke down in turn through self-exhaustion in war—traceable to their immoderate desire for the immediate satisfaction of outright victory.

It is folly to imagine that the aggressive types, whether in-

dividuals or nations, can be bought off—or, in modern language, 'appeased'—since the payment of danegeld stimulates a demand for more danegeld.

But they can be curbed. Their very belief in force makes them more susceptible to the deterrent effect of a formidable opposing force. This forms an adequate check except against pure fanaticism—a fanaticism that is unmixed with acquisitiveness.

While it is hard to make a real peace with the predatory types, it is easier to induce them to accept a state of truce, and far less exhausting than an attempt to crush them, whereby they are, like all types of mankind, infused with the courage of desperation.

The experience of history brings ample evidence that the downfall of civilized States tends to come not from the direct assaults of foes but from internal decay, combined with the consequences of exhaustion in war.

A state of suspense is trying— it has often led nations as well as individuals to commit suicide because they were unable to bear it. But it is better than to reach exhaustion in pursuit of the mirage of victory.

Moreover, a truce to actual hostilities enables a recovery and development of strength, while the need for vigilance helps to keep a nation 'on its toes.'

Peaceful nations are apt, however, to court unnecessary danger, because when once aroused, they are more inclined to proceed to extremes than predatory nations.

For the latter, making war as a means of gain, are usually

more ready to call it off when they find an opponent too strong to be easily overcome.

It is the reluctant fighter, impelled by motion and not by calculation, who tends to press a fight to the bitter end. Thereby he too often defeats his own end, even if he does not produce his own direct defeat.

BIOGRAPHICAL SKETCH OF LECTURER

Mr. B. H. Liddell Hart was born 31 October 1895 in Paris, France. He received his education in England at St. Paul's School and at Corpus Christi College, Cambridge. Following this has been a successful and spectacular career as Army officer, newspaper correspondent, author, and great fame as a theorist in the art of war.

During World War I, Mr. Liddell Hart served with the British Army and received a commission as Captain. He developed many new tactical maneuvers which were later adopted by the armies of many countries. These included the Battle Drill system and the "expanding torrent" attack. In 1920 he wrote the official British "Infantry Training Manual," and he also served as editor of the "Small Arms Training." Handicapped by wounds received during the war, he was placed on the Army retired list in 1924.

Mr. Liddell Hart was an early and vigorous advocate of air power, and an exponent of mechanized warfare. General Guderian, creator of the German World War II armored forces, called himself "one of Liddell Hart's disciples in tank affairs." In 1942, Marshal Rommel wrote: "The British could have avoided most of their defeats if they had better studied the modern theories expounded by Liddell Hart." General Patton told Mr. Liddell Hart, in 1944: "I have been nourished on your books for twenty years, and gained much from your ideas."

Mr. Liddell Hart has been a recognized military authority for many years. He paid a visit to the French Army in 1926 and gave advice on its reorganization. In 1929 he wrote a manual governing the use of the armoured force. In 1932, he was approached by a Russian delegation concerning his acting as military advisor to the Red Army, but he turned this offer down. Mr. Liddell Hart's position was well stated by Major General J. F. G. Fuller when he said: "It has been said of him that he is the Clausewitz of the twentieth century. Surely if a comparison is to be sought, he is far closer related to Francis Bacon, that empirical philosopher, who, because he concentrated on facts and not on fancies, was so full of ideas."

In 1937, Mr. Liddell Hart was appointed personal advisor to the British War Minister. However, he resigned his post a year later, hoping to better arouse the British public to the urgent need for build-up and reorganization in the armed forces by his writing rather than from inside the War Office.

Mr. Liddell Hart was military correspondent for the *London Daily Telegraph* from 1925 to 1935 and for the *London Times* from 1935 to 1939. He is military editor of the *Encyclopedia Britannica.* He is the author of some thirty books, including: *The Remaking of Modern Armies*, 1927; *Thoughts on War; A History of the World War* (I); *Why Don't We Learn From History;* 1944; *The Other Side of the Hill*, 1948; and *The Defense of the West*, 1950.

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OPERATIONAL COMMUNICATION PLANNING

A lecture delivered
at the Naval War College
on 28 August 1952
by
Captain P. R. Anderson, U. S. N.

Admiral Conolly, gentlemen. Our topic this morning is Operational Communication Planning. Before we launch into remarks pertinent to the steps in developing the communication plan for an operation, I should like to make a few remarks, and give you a concept of command and communications.

Communications has been called "the voice of command," "the handmaiden of the commander," "the servant of command," and other things, some of which are unmentionable here. It is, of course, some of those things. You will note a personal connotation in those names. In the days of sailing ships, cavalrymen who actually rode horses, and foot soldiers without benefit of motor trucks, the pace of battle was slow. So was the pace of communications which served them. The commander aboard ship relied on signal flags, which were interpreted for him by his Flag Lieutenant, or, in other words, his signal officer. That officer, in addition to his purely communication duties, had status as a personal aide to the commander. He might well have been called the commander's shadow, for during tactical operations, he was always to be found at the commander's side. You will recall that Nelson, mortally wounded at Trafalgar, died in the arms of Hardy his Flag Lieutenant. I mention this to illustrate the personal interest the commander has, in the past, had for his voice of command. While today, with the many complexities which tend to water down the personal interest of the commander in his communications, the successful commander will keep himself informed, communication wise. By so do-

ing, he is not only aware of his capabilities and limitations, but puts his communicators in a position to assist him properly . . . . or else!

Naval communications is the means through which the commander orders and supervises the complex activities of the naval operation. It transmits the information and instructions that make it possible to control and direct a widely dispersed force of diversified elements.

The role and nature of naval communications establish the requirements that it must be rapid, secure, and reliable. Its use demands that it be flexible enough to meet constantly changing needs and to contend with the shifts in task organization that will invariably occur.

The communication planner is concerned with the effective application of available communication facilities to his particular operational situation. He is also concerned with the effect of the communications implications of the operation on the overall operations plan and its subsequent execution. In his attack on this problem, he is guided in every judgment by the basic requirements of reliability, security, and speed to meet whatever demands present themselves. His judgment, however, must be double-edged, since he must select from available facilities those which best suit his purposes. At the same time, he must balance each of the requirements carefully, so that each is satisfied to the highest possible degree without undue sacrifice of any other.

The primary need for each of those requirements for reliability, security, and speed has become evident through scores of combat experiences. An examination of World War Two battle reports, for instance, reveals that in every successful naval engagement com-

munications had been planned with an understanding of these requirements.

There are lessons, too, in our defeats. One example will suffice to show the fatal damage that can be caused by inadequate communications—the Battle of Savo Island on the ninth of August 1942. In this surface engagement, which lasted only a few minutes, four cruisers were sunk. The Japanese completely surprised the Allied naval units. The post battle analysis shows that one of the major reasons for this surprise was the failure of communications. This failure was attributed to poor radio discipline, incomplete provision for use of visual means, and the inadequacy of circuits for reporting enemy contacts.

The last of these is a clear demonstration of faulty planning. By routing aircraft contact reports of enemy ships through the chain of command, instead of through a simple tactical circuit connecting all echlon of command, reports were delayed disastrously. In four specific instances, contact reports were passed from the plane to its base, over the RAAF circuits through two or three command centers to Brisbane. Then they were passed to Canberra where they were broadcast to Southwest Pacific naval forces, then to Pearl Harbor, and finally from Pearl Harbor to Pacific Fleet naval forces. The average time, from the first sighting of the enemy forces until the receipt of the information by the naval forces at SAVO ISLAND, was *ten hours and eight minutes.* This could have been accomplished in less than thirty minutes if the proper circuit had been planned and had been in operation.

It is clear that successful operations depend upon complete and effective communications and that communications are only as complete and effective as the individual means, procedures, and facilities employed. For this reason, the communication planner

must concern himself with every detail of the operation, since there is none that does not have some communications connotation.

The communication plan provides for the facilities through which every unit is controlled and directed. The communication planner, therefore, must be equipped with a complete knowledge of the capabilities and limitations of communications available to the operating forces. He must also know the organizational structure in which he fulfills his responsibilities.

Now let's take a look at the concept I mentioned earlier. (Slide No. 1)

BASIC COMMAND REQUIREMENT FOR COMMUNICATIONS

FOR THE EXERCISE OF COMMAND COMMUNICATIONS ARE REQUIRED:

WITH SENIOR COMMAND (AFLOAT OR ASHORE)

WITH SUBORDINATE COMMANDS

WITH SUPPORTING OR SUPPORTED COMMANDS

FOR MANEUVERING THE FORCE

FOR WARNING OR ENEMY CONTACT REPORTING

- INTRA-FORCE/AREA
- INTER-FORCE/AREA

FOR DEFENSE OF THE FORCE

- AGAINST AIR ATTACK
- AGAINST SURFACE ATTACK
- AGAINST SUBSURFACE ATTACK

FOR EMERGENCY OR RESCUE

FOR THE EXCHANGE OF INFORMATION COMMUNICATIONS ARE REQUIRED:

TO PASS MILITARY INTELLIGENCE

- INTER-FORCE/AREA
- INTRA-FORCE/AREA

TO PASS ADMINISTRATIVE INFORMATION

- FROM/TO SHORE
- INTRA-FORCE
- INTER-FORCE

You will note that the functions performed by a commander's communications are divided into two main groups: Those required for the exercise of command, on the left, and on the right, those required for the exchange of information.

The requirements for any particular organization do not necessarily include all of the items shown, nor are they limited to these items. In other words, this is only *one* concept, but it is one which will cover a large number of cases. It serves as an excellent yardstick against which to measure a communication plan for an operation.

The remainder of my remarks will now be directed toward operational communication planning, with elements considered in, I hope, their logical order.

Modern war has increased the complexity of communications. However, this basic principle remains—communications serve command. The flag hoist of Nelson's day, once the primary means of maneuvering ships, has not disapproved entirely, but the brunt of the work is taken by newer and faster devices, such as radiotelephone, teletype and facsimile. These newer methods have kept pace with the tendency to use larger organizations and to operate over larger areas.

Mahan said of radio that it " . . . . does not affect the well recognized, ancient, strategic principle of the value of interior lines, but it does seriously modify its application."

In the planning and execution of an operation, a commander has technical staff assistants for communications. Consequently, it is not necessary for him to know details of communication pro-

cedures or equipment. It *is* essential that the commander have a sound, general knowledge of the capabilities and limitations of communications. In particular, he must realize what effect the strength and weakness factors of this "handmaiden" is going to have on the operation as a whole.

Knowledge of such a simple thing as the normal time for message delivery under various conditions may have a decisive effect upon a commander's action.

Admiral Halsey, in describing his operations during the Battle for Leyte Gulf in October 1944, tells how two important messages from Admiral Kinkaid required two hours for delivery. Of course we can only speculate as to what action these commanders would have taken if they had anticipated this delay. Perhaps they would have arranged for a command circuit which would have provided satisfactory speed of delivery.

The commander must understand the effect of a large volume of traffic. Human nature being what it is, positive action on the highest command level is necessary to keep traffic loads within reasonable bounds and to give vital matters the right of way over those of lesser importance. When traffic jams the circuits, all messages tend to become PRIORITY or OPERATIONAL IMMEDIATE. Then when the commander wishes to send a message of great importance, it fails to receive the preferential handling which it deserves.

In commenting on Atlantic Fleet exercise, CONVEX THREE, the Commander in Chief, Atlantic Fleet had the following to say about the message traffic:

"The increased traffic load . . . is a result of operation in but a small area of the overall command; the Commander in Chief considers *that the system cannot stand the overall increase in wartime of which CONVEX THREE was but a small pattern.*

"A drastic reduction in this load must be devised.

"This problem is closely connected with some of the fundamental principles of command as indicated below:

1. Delegation of tasks and missions to subordinate commanders.

2. Assumption that subordinate commanders are performing such tasks and missions without detailed message reports on routine matters concerned therewith.

3. Greater care in drafting of operation orders and in the preparing and addressing of messages in order to eliminate uncertainty and further interrogation."

Traffic volume is also one of the clues which supply the enemy with valuable information. The rise in traffic volume, which preceded every major operation in World War II, was as significant as a boxer "telegraphing" his punch. A study of radio traffic yields an amazing store of intelligence, even without the necessity of breaking cryptographic systems. In this manner, the following are some of the facts made available to the enemy during recent Korean operations:

"Commander Task Element 95.11 is in the USS BAIROKO (CVE115). This ship is operating off the West Coast of Korea in the Yellow Sea. The Marine Attack Squadron known as the

"Checkerboard Squadron" is aboard the BAIROKO but will soon go to the BATAAN for duty. This squadron, with blue and white checkerboards painted on the planes, has a new Commanding Officer, LTCOL Robert E. Smith, Jr., and a new Executive Officer, MAJ Edmond P. Hartseck. They both saw their first Korean combat on 10 April. They fly F4U Corsair planes using 1000 lb. bombs, napalm and rockets." There is nothing new about this situation. On November 28, 1941, the Navy Radio Intelligence Unit at Pearl Harbor stated in its daily summary that the Japanese radio intelligence net was operating at full strength upon U. S. Naval communications and "IS GETTING RESULTS."

The communication facilities of Allies should receive careful attention, particularly if they have not been used previously by our forces. Even with Combined procedures and publications, difficulties can arise because of differences in terminology and operating techniques. For example: The British use the term "port wave" to describe what we call a "harbor frequency." UHF radio and radioteletype is not as widely used in Allied forces as in U. S. forces. Consequently, care should be used in prescribing communications which involve their use.

In the planning before Pearl Harbor, the Commander in Chief, U. S. Asiatic Fleet had made arrangements for use of radio facilities in the Netherlands East Indies. When hostilities began and the Asiatic Fleet moved south into East Indies waters, it was found that facilities were not adequate to provide a reliable fleet broadcast. Consequently, it was necessary to continue using Radio Corrigedor for that purpose long after Corrigedor was besieged by the Japanese. Obviously, this was not the best location for origin of a fleet broadcast. The most desirable location

for such a broadcast would be near the sources of traffic, such as the headquarters of an area command or a naval base.

Another command function is that of logistics. The commander should understand the effect of manpower, training, and equipment requirements for communications. As an example of how communication logistics can fall behind other planning:

Before World War II, the Kaneohe Air Station on the Island of Oahu, was acquired, built, commissioned, and actually operated prior to the receipt of any radio apparatus, except some which was diverted from its intended advance base use. Of course, deficiences of this type are frequently beyond the control of the operational planner but their effect cannot be overlooked.

If the commander understands the problem of communications as I have just indicated he should, he is well prepared to approach this subject in his estimate of the situation. Communications first appear in the estimate in paragrah 2. In this portion of the estimate are considered the communication facilities of own forces, including Allied support. Communication facilities available to the enemy should also be considered. Countermeasures and security considerations are treated in this part of the estimate.

Particular attention should be paid to any communication limitations which might be a factor in altering a decision. For example: An amphibious operation in the arctic regions might have to be delayed because of expected ionospheric disturbances. On the other hand an operation of a less complicated type might find such disturbances an advantage for covering the approach to the target area.

Considerations such as those I have mentioned may have an important effect on the commander's decision. Once a decision has been reached, and tasks assigned to support it, communication requirements may be determined. An amphibious operation imposes such severe requirements that it is usually desirable to have a rehearsal for testing the communication plan. Captain Karig, in his book "Victory in the Pacific," says of the Iwo Jima operation:

"The whole landing was held together and coordinated by the tenuous strings of radio." In order to achieve such coordination, it is desirable to test both radio equipment and communication personnel during the rehearsal. This raises the problem of security, since such a rehearsal involves risk of compromising the operation. It is obvious that the question of a rehearsal is a command decision. During the rehearsal for the Okinawa operation, voice radio transmissions from the Amphibious Force in the Philippines were heard in Pearl Harbor. An alert enemy can profit by such an incident.

Other types of operations have less stringent communication requirements. However, careful consideration must be given to any special features such as employment of merchant ships or of foreign forces. Aircraft, minesweepers, submarines, etc., all have their special communication requirements. For this reason, a communication planner must know the composition of forces in the early stages of the planning.

In addition to meeting the communication requirements, as determined initially, the communication planner must be alert to meet new requirements. These may be brought about by changes in the composition of forces, changes in logistics, new intelligence, etc. Every effort must be made to prevent these changes from weakening

communications and thus placing restrictions on the exercise of command.

Other considerations which determine the nature and scope of a communication plan are:

a. size of the organization

b. location of commands

c. internal and external command relationships

d. cover and deception considerations

e. radio frequencies available

f. radio propagation characteristics

g. use of plain language for radio transmissions

The latter involves a command decision in which security is weighed against speed.

After ground work has been laid by the preliminary consideration of the communications problems, the planner is ready for the development of his communication plan. This development should proceed concurrently with that of the operation plan itself, and not be left until the basic plan is completed.

The communication planner must have a detailed knowledge of proposed locations and movements of forces. He needs this information so that he can select suitable frequencies and provide adequate broadcast coverage.

The work of developing a communication plan is reduced considerably by the existence of the Basic Communication Plan for the U. S. Navy (USF 70B) and the Naval Communication Frequency Plan (JANAP 195(C)). The use of these publications also simplifies matters for units and personnel who are assigned to the operation or who may join it while it is in progress. An additional advantage is that continuity is provided with previous and subsequent operations. In other words, there is no radical change in the communication procedures in changing from one operation to another. The production of a new communication plan is thus reduced to the problem of tailoring a basic plan to fit the immediate situation.

One of the variables which may require modification of the basic communication plan is the status of facilities available. When special requirements call for procurement of equipment or additional installations, early action is required to avoid restrictions on the exercise of command. It is assumed that deficiencies might affect the commander's decision have already been recognized in the estimate.

Deficiencies which cannot be remedied, must be minimized. Equipment may be made available for essential circuits by reducing or eliminating less essential functions. Restriction on the use of rapid communications for administrative traffic is an example.

Even when equipment requirements can be met, there remains the problem of personnel. Just as a screen commander never has enough destroyers, so the communication officer never has enough trained personnel. Therefore, provision for trainng is a continuing task. Training must be provided in exercises and rehearsals before an operation starts and must continue enroute to the target area. Even during replenishment periods, or similar

intervals between periods of actual combat operations, there are opportunities to continue training. Obviously, communication training must be coordinated with other types of training and must not interfere with accomplishment of the assigned tasks. In addition, attention must be given to the problem of security. These considerations must be resolved by the commander to insure that the effort involved is profitable.

Communication facilities and personnel offer serious problems for large scale operations but the real "bottleneck" is the radio frequency problem. Under modern war conditions, there just aren't enough channels in the radio spectrum to satisfy all needs. It is up to the planner to make the most economical use of the frequencies which are available. The detailed measures which will accomplish this are a matter for the staff communication officer. However, the commander must require an explanation of what effect these measures will have upon the operation as a whole. If they limit his freedom of action or involve a security risk, a command decision is required.

In assigning circuits for an operation, two general types are encountered. The first, and most common, conforms to the organiational structure of the command. Traffic generally follows the chain of command. This procedure has several obvious advantages. All levels of command are able to keep informed on matters in which they will normally be interested. The command function is more easily exercised, since the flow of orders and reports is in the normal sequence for such action.

The complexity of modern warfare has led to the use of another type of communication circuit. This can be called a *functional* circuit, since it is provided for a special function. Functional cir-

cuits usually cut across organizational lines. Examples of functional circuits are those for:

gunfire control,

dissemination of intelligence,

CIC operations,

aircraft control,

weather reports, etc. etc.

Functional circuits are in great demand by those who are concerned with one of the special tasks or functions which I have just mentioned. Because of certain disadvantages, they should be used with caution. They frequently involve delegation of considerable authority to a subordinate. Unless carefully engineered, they may result in uneconomical use of precious radio frequency channels. There is also a tendency for circuit discipline and securty to suffer on functional circuits because the direct interest and supervision of the commander is lacking. Further, there is the danger that information originating in functional circuits may not get into command circuits where that information would be useful.

I have previously mentioned that the communication plan must be tailored to support the mission of the commander and the tasks he has assigned. It must go one step farther; it must be capable of following changes in the operation plan and of continuing to support the operation under the changed conditions. The flexibility necessary to accomplish this may be insured by reliance

on standard methods and procedures. An operation where new forces join after planning is started, or after the operation actually begins, would require a plan capable of being modified readily. This would be particularly true when the new forces are Allied and complete knowledge of their communications is lacking.

Regardless of how complete and effective the communication plan may be, it will not accomplish its purpose unless it is delivered to those who need to know its provisions. Arrangement of the communication plan as an annex to the operation order permits assignment of a lower classification and wider distribution than that of the basic document. The use of appendices also facilitate dissemination to those who require special information.

For example, Admiral Conolly's planners greatly simplified the problem of providing gunfire support to the troops ashore in the operations against Guam in 1944. Although included in its regular place in the annex covering the subject, a pocket-sized pamphlet which contained essential extracts was distributed to the ships and shore fire control parties. These pamphlets contained ships assigned to fire support, their radio call signs and frequencies, schedules of fires, etc. As the commander of a destroyer assigned to fire support missions during that operation, I found the pamphlet most useful.

The mechanics of delivering the plan also deserve some consideration. Here again, adherence to standard procedures simplifies the problem. If deviations from a standard plan are few, essential details of the communication plan may be transmitted by rapid means to remote elements of the force.

We have followed the communication plan, from its inception in the commander's estimate, to its distribution. While many of

the technical details of communications are understood by, or of interest to, only the specialists, the commander must understand the general principles on which the communication plan is based. He must also know how this plan will aid him in the execution of the operation for which he is responsible. His is the responsibility for accepting limitations on his exercise of command or security risk.

Communication planning cannot be reduced to the blind following of a form or check-off list. It must serve command and support the mission of the operation. Communication planning must start at the beginning of operational planning and follow through with it all the way.

It is not enough to formulate a good communication plan. Intelligent *use* of communications is required. The more users understand about the communication plan the better the end product. As the orator uses and controls his voice to best advantage, so the commander must use and control communications, the voice of command.

BIOGRAPHICAL SKETCH OF LECTURER

Captain Paul R. Anderson, USN, was graduated from the U. S. Naval Academy, Class of 1928, with a B. S. degree. Following seven years of sea duty in the Fleet in various assignments, he was graduated from the U. S. Naval Postgraduate School, having completed the course in Applied Communications (1935-1937). Following service in Fleet Carriers and Minecraft he served as Officer-in-Charge of the Visual Signal Desk, Office of the DNC from 1941-43.

Captain Anderson commanded the USS MURRAY (DD 576), U. S. Pacific Fleet from mid 1943 until late 1944. From January 1945 to February 1946 he served as Operational Communications Officer on the Staff of CINCPAC/CINCPOA.

Following three years as Budget and Personnel Officer, Office of the DNC, he commanded the USS MAURY (AGS-16) and HYDRO SURVEY GROUP ONE, conducting hydrographic survey in the Persian Gulf.

He was graduated from the U. S. Naval War College, Strategy and Tactics Class, in June 1951, and again reported to the DNC where he is now Head of the Operations Branch, Naval Communications Division, Office of the Chief of Naval Operations.

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RECOMMENDED READING

Current Books

The evaluation of books listed below include those recommended to resident students of the Naval War College. Officers in the fleet and elsewhere may find these of interest.

Many of these publications may be found in ship and station libraries. Some of the publications not available from these sources may be obtained from the Bureau of Naval Personnel Auxiliary Library Service, where a collection of books are available for loan to individual officers. Requests for the loan of these books should be made by the individual to the nearest branch or the Chief of Naval Personnel. (See Article C-9604, Bureau of Naval Personnel Manual, 1948).

Title: *Portrait of an Admiral; the Life and Papers of Sir Herbert Richmond.* 399 p.

Author: Marder, Arthur J. London, Jonathan Cape, 1952.

Evaluation: The private papers of a famous British Naval Officer, student, and writer. Richmond gives a behind-the-scenes look at the British civil and naval leaders during World War I, and analyzes their decisions and actions. Many little-known facts, often contrary to the familiar histories, and his liberally spiced opinions and philosophies make this a highly readable and educational book. To anyone who has ever had the antennae of his energies bent or broken off against the blockhouse of conservatism and inertia this volume can, in the words of C. Alphonso Smith, "give you an outlet." Recommended study for any officer who hopes some day to hoist a flag. Of particular interest to War College officers are his views on Naval officer education.

Title: *The American Record in the Far East.* 208 p.

Author: Latourette, Kenneth S. N. Y., Macmillan Co. 1952

Evaluation: This short volume is a review, in the nature of an essay, of the officially recorded events in the Far East in which

the U. S. had an interest and played a part from 1945 to 1951. The author, an historian and teacher, specializing in Far Eastern affairs for a generation, makes an objective analysis of the reasons for American interest and involvement in the area and offers an unbiased evaluation of American policy there, making no pretense at completeness of coverage or finality of judgment. Those who desire to make a quick comprehensive survey of U. S. interests and actions in the Far East in their main outlines will find this a useful, understandable, and objective guide.

Title: *American Foreign Policy and the Separation of Powers.* 235 p.

Author: Cheever, Daniel S., and Haviland, H. Field, Cambridge, Harvard University Press, 1952.

Evaluation: Written by two members of the Foreign Affairs Task Force of the Hoover Commission, this book deals mainly with the problems of evolving foreign policy under our system of government, where "the United States sometimes speaks with more than one voice in world affairs" because of legislative-executive overlap, friction and general lack of cooperation. The history of foreign policy procedures are traced beginning with the period of "Presidential Initiative 1789-1829" through "Congressional Supremacy 1829-1898" to the period of "Increasing Authority of the Chief Executive (1898 to present)." Many sensible recommendations are made for improving governmental procedures for foreign policy evolution. This book presents a good analysis of a little-known phase of our problems in foreign policy. By discussing personalities involved in formation of foreign policy throughout the country's history, and by the use of numerous specific examples, the authors have produced a lively and interesting volume. It fills a need in the foreign policy field, by discussing not only **what** the policies have been, but also **why** they have been so. Recommended as an aid in understanding some of the reasons behind the foreign policies of the U. S.

Title: *Soviet Atomic Spies.* 239 p.

Author: Newman, Bernard. London, Robert Hale, 1952.

Evaluation: Bernard Newman in his book takes the wraps off the Soviet spy system. He points out that Soviet spies are not in the

old tradition, but are fellow countrymen, suborned to foreign loyalty, who are legally and morally traitors. Their work is directed by Russian officials. A Soviet intelligence order declares that "agents must be of the intelligentsia," and this is especially true when applied to atomic espionage. Mr. Newman further points out the weaknesses in our security system and enumerates the steps that have been suggested for combatting the spy menace. The case histories of known atomic spies and the workings of the spy system are of particular interest.

Author: *This Age of Global Strife.* 442 p.

Title: Harrison, J. B. N. Y., Lippincott, 1952.

Evaluation: An historical account of major world events from the rise of Germany through World War I, World War II, the Cold War to the entry of the Chinese into Korean War. It is very well written in an informal style. Slanted more to the undergraduate than to the student of world affairs, it provides a quick refresher course in world affairs.

Title: *Boxcars in the Sky.* 282 p.

Author: Malkin, Richard. N. Y., Import Publications, 1951.

Evaluation: A book covering the subject of air cargo in all its aspects —military and commercial, in war and in peace, by a writer well versed in the subject. It contains many references of value to the military person on the capabilities of air cargo, past, present and future.

Title: *The Ocean River.* 322 p.

Author: Chapin, Henry and Smith, F. G. W. N. Y., Charles Scribner's Sons, 1952.

Evaluation: The Ocean River refers to the great ocean current system of the North Atlantic Ocean. The geographical origin of the basin of the North Atlantic and the giant streams within it, is followed by a vivid description of the development of the different ages of living creatures which have been so vitally influenced by this ocean. Many fascinating digressions into historical events occurring on the Atlantic are used to illustrate the slow awakening of man's

realization of the true nature of the oceanography and climate and their profound effects on the course of civilization and history. The book is recommended to those interested in exploring the effects of natural causes on the politics and economies of the Western World.

Title: *The White Rabbit.* 262 p.

Author: Marshall, Bruce. London, Evans Brothers, 1952.

Evaluation: Experiences of Wing Commander Yeo-Thomas, RAF, during his missions to occupied France and as a prisoner in Buchenwald during World War II, as told to Bruce Marshall. Yeo-Thomas is a British subject who spent the greater part of his life in France. During World War II, he was assigned to the Special Operations Organization and became one of the leading figures in the direction and support of the Maquis and other resistance elements in occupied France. The greater part of the book is devoted to his missions in France, his dealings with the various resistance groups, his countless narrow escapes from the Gestapo, and finally his capture, torture and imprisonment in Buchenwald. His description of the difficulties in dealing with the Communist resistance elements in France and, later, with the Communist prisoners in Buchenwald, is of considerable interest. The story carries a strong note of authenticity; it is graphically written and fascinating throughout.

Title: *Transportation: Principles and Problems.* 710 p.

Author: Bigham, Truman C., and Roberts, Merrill J. N. Y., McGraw Hill, 1952.

Evaluation: This textbook covers the subject of commercial transportation in an exhaustive fashion, treating all its facets and problems. It includes, within its scopes, rail, highway, water, pipeline and air transportation. It is excellent for the study of transporation economics at the university level and is a very fine information source for military traffic management personnel. Very valuable for reference use for students of transportation who are interested in a basic text covering all phases of the subject.

Title: *Germany in Power and Eclipse.* 661 p.

Author: Pollock, James K., and Thomas, Homer. N. Y., Van Nostrand, 1952.

Evaluation: This is a handbook of information on Germany down to the beginning of World War II. It contains extensive data on geography and people, history, and economic and political institutions. These subjects receive consideration as they relate to the whole of Germany in the first third of the book, and in the remainder the major geographic sections and the individual states are covered in the same comprehensive manner. Presenting in concise, factual fashion a great deal of basic reference material, this should be a useful reference book for many purposes. It was prepared under the auspices of the University of Michigan during World War II for the use of the State Department and the armed Forces. Since the war it has been revised and reorganized. It represents the work of established scholars, tested by an appreciable period of time and use. Probably few people will be moved to read this book from cover to cover, although it is well written in an attractive style. Its greatest value, however, should be for reference, and here it appears to have considerable importance, especially as background for Global Strategy Studies and other similar work.

PERIODICALS

Title: *Soviet Black Sea Airbases.*

Publication: AVIATION AGE, September, 1952, p. 25-27.

Annotation: Presents information on the Black Sea bases which could be used in the event of war to start and sustain a surge down to the Abadan oil region. (Maps and charts).

Title: *Seapower's Sunday Punch.*

Author: Floberg, John F., Assistant Secretary of the Navy for Air.

Publication: COLLIER'S, October 4, 1952, p. 18-21.

Annotation: Emphasizes the importance to national defense of naval air power and contains a prediction on the role of atomic power carriers. (Map showing areas supplying raw materials needed by U. S., p. 21.).

RESTRICTED
SECURITY INFORMATION

Title:	*Government and Party in the Soviet Union.*
Author:	Jollos, Waldemar.
Publication:	SWISS REVIEW OF WORLD AFFAIRS, October, 1952, p. 11-13.
Annotation:	Asserts that the real secret of the Party Congress may be found in the changes of the Party statute rather than in the selection of a successor to Stalin.

Title:	*Evolution of American Diplomacy.*
Author:	Harlow, W. McG.
Publication:	FOREIGN SERVICE JOURNAL, September, 1952, p. 19-22, 52-63.
Annotation:	Traces the history and development of the American foreign service from its pre-revolutionary beginnings to the present.

Title:	*Greenland and the World Around.*
Author:	Teal, John J., Jr.
Publication:	FOREIGN AFFAIRS, October, 1952, p. 128-141.
Annotation:	Presents background information on this strategic area, that is of particular interest in view of the recent establishment of a huge American airbase at Thule.

Title:	*The Jet Stream.*
Author:	Namias, Jerome.
Publication:	SCIENTIFIC AMERICAN, October, 1952, p. 27-31.
Annotation:	Attempts an explanation of upper air currents, 30,000 to above 50,000 feet, whose characteristics are those of "rivers of air' travelling at speeds as fast as 300 m. p. h. Of interest to aviators and weather specialists, written by the Chief of the Extended Forecast System of the U. S. Weather Bureau.

RESTRICTED
SECURITY INFORMATION

Title: *Civil Control of Military Power: Dogma vs. Reality.*
Author: Wiener, Frederick B., Colonel.
Publication: UNITED STATES ARMY COMBAT FORCES JOURNAL, October, 1952, p. 17-21, 39.
Annotation: An assertion that the dogmatic subordination of military power to civil control is, in many respects, blind and unreal.

Title: *Russia Can Be Hit from Two Seas.*
Author: U. S. NEWS & WORLD REPORT, September 26, 1952. p. 13-15.
Annotation: Explains how naval task forces can attack the heart of Soviet Russia and points out the lessons Exercise "Mainbrace" holds for the Russians.

Title: *Psychological Warfare.*
Author: Crossman, R. H. S.
Publication: JOURNAL OF THE ROYAL UNITED SERVICE INSTITUTION, August, 1952, p. 319-332.
Annotation: An informal and lucid lecture by a man who has had probably more practical experience in applied psychological warfare than anyone else.

Title: *A New Red Naval Doctrine in the Making?*
Author: Shafter, Richard A.
Publication: UNITED STATES NAVAL INSTITUTE PROCEEDINGS, October, 1952, p. 1091-1098.
Annotation: Describes the role of the Russian Navy in the past and discusses the change in strategic thinking which has resulted in changing the Red Navy from a "Fortress Fleet" to an offensive "Fleet in Being."

Title: *How Russian Submarines Could Hit U. S.*
Publication: U. S. NEWS & WORLD REPORT, October 3, 1952, p. 36-37.
Annotation: A map of the U. S. illustrates how guided missiles launched from Soviet subs, could strike vital areas.

RESTRICTED
SECURITY INFORMATION

Title: *Sweden—Closer to U. S. Now.*

Publication: U. S. NEWS & WORLD REPORT, October 3, 1952, p. 46-49.

Annotation: Notes that while Sweden maintains a neutral position, sentiment is shifting toward the Western nations and her defense program is considered a Western asset.

Title: *Murder or High Strategy?*

Author: Standley, William H., Admiral, U. S. N. (Ret.) with Ageton, Arthur A., Rear Admiral, U. S. N. (Ret.)

Publication: UNITED STATES NAVAL INSTITUTE PROCEEDINGS, October, 1952, p. 1053-1065.

Annotation: The U. S. Ambassador to Moscow from April 1942-October 1943 discusses his experience in dealing with the question of the Katyn Forest massacre and other Polish issues.

Title: *Type* 150.

Author: Brent, Andrew.

Publication: FLYING, November 1952, p. 14-15, 44.

Annotation: Reports on Russia's newest tactical bomber designed by Dr. B. Baade, a German scientist, who with his staff was taken to Russia after the war.

Title: *The Anzus Pact and Pacific Security.*

Author: Killen, E. D. L.

Publication: FAR EASTERN SURVEY, October 8, 1952, p. 137-141.

Annotation: Examines the background of the Pacific security treaty which led to the formation of the Pacific Defense Council and notes that, although limited in scope, the organization offers a potential framework for solution of Pacific security problems.

RESTRICTED
SECURITY INFORMATION

Title: *Red Pipe Line Into Our Defense Plants.*

Author: Velie, Lester.

Publication: THE SATURDAY EVENING POST, October 18, 1952, p. 19-21, 106-110.

Annotation: Points out how Communists obtain vital information from defense workers by controlling labor unions.

Title: *The Resurgence of Military Elements in Japan.*

Author: Guillain, Robert.

Publication: PACIFIC AFFAIRS, September, 1952, p. 211-225.

Annotation: Examines two Japanese military organizations which are significant examples of the groups led by former military figures and which have recently come into prominence.

Title: *The Issues in Korea.*

Author: Hartmann, Frederick H.

Publication: THE YALE REVIEW, Autumn, 1952, p. 54-66.

Annotation: Examines the three major alternatives that were open to the U. S., once we committed ourselves to fighting in Korea, and finds that the course chosen was the best.

Title: *If War Comes to Mediterranean.*

Publication: U. S. NEWS & WORLD REPORT, October 17, 1952, p. 48-53.

Annotation: Admiral Ferreri, Italy's Chief of Naval Operations, discusses the role of the Mediterranean in future war. (Map p. 51).

Title: *Who Dictates Destruction?*

Author: St. Clair, Harold J., Lieutenant Colonel.

Publication: MILITARY REVIEW, October, 1952, p. 27-32.

Annotation: Proposes the development of a policy for the planning, preparation and execution of the destruction of strategic and tactical installations in case of future war.

RESTRICTED
SECURITY INFORMATION

Title: *Yankee Boss of the Mediterranean.*

Author: O'Donnell, James P.

Publication: SATURDAY EVENING POST, October 18, 1952, p. 32-33, 183-186.

Annotation: Describes the work of Admiral Carney in organizing NATO's six-nation force that comprises Allied Forces, Southern Europe.

Title: *Propaganda and Power.*

Author: Carr, Edward Hallett.

Publication: THE YALE REVIEW, Autumn, 1952, p. 1-9.

Annotation: Discusses the use of propaganda in international relations and concludes that the best hope for the efficacy of our propaganda is in a policy which lies somewhere between the idealism of Wilson and the realism of Morgenthau and Kennan.

Title: *Allied Unity of Command in the Second World War.*

Publication: POLITICAL SCIENCE QUARTERLY, September, 1952, p. 399-425.

Annotation: A study in regional military organization, based largely upon Department of the Army records and upon studies prepared for the series, The U. S. Army in World War II.

Title: *American National Interests and the Responsibilities of United Nations Membership.*

Author: Goodrich, Leland M.

Publication: INTERNATIONAL ORGANIZATION, August, 1952, p. 369-380.

Annotation: Discusses the problem of harmonizing the conduct of United Nations affairs with concepts of national interest.