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OPERATIONS FOR SECURING COMMAND OF SEA AREAS

Presented 9 and 10 July, 1937, by Captain R.K. Turner, U.S.N.

RESTRICTED

NAVAL WAR COLLEGE Newport, R.I. 19-10 July, 1937

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Naval warfare

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Outline of Staff Presentation Upon OPERATIONS FOR SECURING CONTAIN OF SEA AREAS." Delivered by Captain R.F. Turner, U.S.N. 9 and 10 July, 1937. I. Introduction. The immediate concern in naval warfare is always the control of the transit of the sea. The effect of sea control as a ainst: (a) a nation entirely enclosed by neutral land areas; (b) a nation which lacks a navy; (c) another naval power. Maval history chiefly records British operations, but 3. the United States, in a different cooraphic situation, should cultivate a national naval stratecy based on its own future needs. The degree of interest in the control of an area depends 4.0 upon its importance for promoting attainment of the war objectives: first in importance are a nation's coastal sea areas; second, the routes to allie; and sources of essential war supplies; third, sea areas vital to the enemy; fourth, ordinary trade routes. Cormand of an area exists when one belligerent is able to carry on freely the operations of his naval forces and the movement of his sea-borne traffic; and where his enemy is unable to do the same in that area, except with a great degree of risk. Naval forces can attain command only by operating at sea; they are valuable by reason of their influence in areas whose control will contribute to success in war. 6. The importance of bases in exercising control. Control of an area may be possible through control of 8. only a small, but vital, portion.
Therefore, the possibility of control determines the 9. selection of naval objectives and the direction of naval effort. The progress of the contest for control described. 10. Dispersion may be necessary for exercising command, 11. and in pursuance of ultimate war aims, but superior concentration essential for maintaining (securing) command Relation between dispersion, concentration, central position, interior lines, economy of force.

Primary objective of major naval operations is the nullification of the power of the enemy fleet to 12. 13. operate effectively. Command of sea and destruction of enemy fleet not ends 14. in themselves. 15. To nullify power of enemy fleet in an area, it must either be destroyed or contained out of that area. Characteristic of a fleet is its ability to find safety 16. (except from the air) in a defended port, therefore, relative naval, plus available land, air, and geographical support, as well as price of victory or defeat, all are important considerations. II. The Destruction of Enemy Maval Forces. Armies and fleets unlike in their reservoirs of strength: for the one, man power; for the other, slips.
Slow replacement of naval losses likely to make general naval actions more decisive than land actions; few wars have more than one or two such actions; as a result, only the superior seeks a general action.

Questions sometimes arise as to political consequences 3.

of possible loss of fleet.

The determination of the general strate ic attitude, whether offensive or defensive, the first major decision. The defensive useful for holding, the offensive for 4. gaining.

The usual British attitude dependent upon relative strength, and the Leographical and economic vulnerability of

Great Britain.

Difference between geographic and economic situation of the United States and Great Dritain.

Intrinsic security of the United States permits more freedom as to the offensive, with due respect to obligations assumed under l'onroe Doctrine.

8. The defense the stronger form of warfare.

Properly to support the offensive in one direction, the 9. defensive must be accepted in all others.

10. The conditions necessary for a major offensive, and its advantages.

The use of local offensives by a party on the strategic 11. defensive.

12. The criteria for decision as to the general attitude: nature and importance of the objective; relative strengths geographic situation; consequences as to costs. The importance of "the spirit of the offensive".

13.

(a) Destruction of Enemy by Decisive Battle.

To destroy the enemy, it is necessary to create conditions 14. where one can meet him, and then fix him until he has been dealt with.

15. To induce a weaker enemy to expose himself, it is necessary: (a) to put in danger something he values; or (b) to present him with opportunities to inflict loss.

Merely to threaten is insufficient: actual operations 16. required against trade, communications, positions, etc.

Opportunities may be presented by stratagem, unsound 17. dispositions, or because risk is unavoidable.

18. The use of maneuver: a redistribution for purpose of effecting an unexpected and decisive concentration.

19. Tavorable situations do not occur of themselves: they must be created.

(b) Destruction of Enemy by Attrition.

"Decisive Battle" contrasted with "attrition".

Attrition possible through: (a) minor attacks on strong 21. vessels; (b) superior concentrations against weak detachments.

Battleship effectiveness restricted by torpedoes, mines and bombs.

23. Value of minor attacks enhanced by concentration and surprise.

24. Strategic defensive the special field of minor weapons.

- 3 -Battleships still an essential strength element of fleets 25. when afforded adequate security. Small detachments, though essential to naval operations, 26. invite attrition. An overseas offensive creates many opportunities for 27. enemy attrition. Particular vulnerability of lines of cormunication. 28. Security improved by use of interlocking land bases, disposed on a broad front. 29. Support of exposed detachments sometimes leads to major naval actions. 30. Secrecy and rapidity necessary for success of attrition 31. tactics. Attrition tactics as the chief method of inflicting loss 32. may sometimes be very important, but sometimes is a two-edged sword. (c) Destruction of Maval Forces by Land Operations. Many historical instances of capture by land operations indicate probable continued value of the method.

Special conditions required: (a) enemy fleet must be denied escape or reenforcement; (b) land forces must be 34. free from interruption. III. Containing Enemy Maval Forces. Conditions which do not permit destruction of enemy may prove suitable for containing operations. To contain is "to hold within fixed limits". 2. Desirable limits are those where the enemy can do 3. little harm.
By resorting to containing operations, the immediate naval objective becomes more closely related to the major war Conditions suitable for the containing method: (a) stronger 5. is unable to attack or to afford loss; (b) weaker and unwilling to accept decisive action.

Types of containing operations: (a) blockade; (b) threat to critical areas; (c) a variation of the threat type is the method of diversion. (a) Blockade. "Close" and "distant" blockade preferable terms to "close" and open. Distant blockade requires central position with interior lines with respect to enemy exits. Close blockade usually more effective historically, but impossible for future because of defensive value of torpedoes, mines, and bombs. 10. Situations especially favoring distant blockade now have a greater relative value. Situations of Great Britain and Japan favor use of distant 11. blockade. Situation of United States does not favor blockade of or by any probable enemy. (b) Threat to Critical Positions and Areas. Usefulness of land and sea fortified areas in containing invading forces by threatening lines of communication. 13. The threat method operates in peace as well as war. Containing the British navy in European waters. Containing of major forces to the defense by use of raids 14. 15. and threats of invasion.

(c) Diversion.

Diversion sometimes of major importance, and may require

political as well as military preparation. For diversion to be successful, the diverting effort should occur in areas of vital, or at least major, importance.

Land operations may provide the basis for naval diversions,

and vice versa.

Conclusion.

Emphasis of certain general points:

(a) The transit of particular sea areas is the immediate concern of naval forces; the importance of these areas depends upon their influence in promoting attainment of the aims of the war.

(b) Control of sea areas can be secured only through active operations at sea. Selection of objectives, and the direction of naval effort, properly depend upon the location and adequacy of bases which will support sea operations necessary for control of the essential sea areas.

(c) Adequate concentration, dependent upon a central position interior lines, and a proper economy of force, are necessary for the security of command.

(d) Mullification of enemy influence at sea, usually the primary naval objective, is possible only through the active creation of conditions that will permit the destruction or containing of enemy naval forces.

(e) The important thing to establish is a national strategy

and a national tactics.

(f) While control of the sea may be a prerequisite for naval success, a naval commander is confronted with a complicated problem which includes, besides the maintenance of control, many tasks which more directly contribute to the final overthrow of the enemy.

OPERATIONS FOR SECURING COMMAND OF SEA AREAS.

PART I.

I. Introduction.

In land warfare, armies endeavor to reduce an enemy to submission by
the creation of situations which permit them to seize and control enemy
possessions: his territories, cities, resources, and transportation routes.
Fundamentally, naval warfare is different from land warfare in that its
immediate concern is the control of something that belongs to neither of the
adversaries. Each desires to maintain his own freedom to use the sea, and to
deny it to the other.

Except for fisheries, the sea has no wealth, and its control has no tangible value of its own. The sea can not contribute to the support of armed forces, nor can it be held and administered for the benefit of its conqueror in the same sense as can the land. The sea is no more than a road, though a broad road without restricting boundaries. Like the air, it is merely a medium for supporting traffic. Unlike the land areas included in a theatre of hostilities, the nature of the sea requires that belligerents give consideration not only to their own interests, but also to the interests of maritime neutrals. But whether we desire to use it to bring to our nation the means of sustenance, to deny to an enemy a like facility; to protect ourselves against military invasion, or to carry the war to the territory of our foe, the chief preoccupation of our navy is with the transit of the sea. A nation that has control of transit in all parts of the sea not only has the resources of the world at its command, but fully protects its own sea frontier, and lays open the vital positions of its adversary to surprise attack.

A maritime nation potentially enjoys complete control of the sea when at war with a nation that has no sea-coast, but is entirely enclosed by neutral land areas. From the beginning of hostilities its naval forces have merely the task of deploying so as to interrupt the overseas flow, through neutrals, of articles that may contribute to the support of the land forces of his enemy. For example, Italy requires few naval vessels in order to prevent Abyssinia from obtaining supplies from the outside world, and in a short time the latter country was thus rendered incapable of offering effective military resistance.

In a war between two maritime nations, in which one lacks naval strength altogether, the navy of the other should also soon be able to make an important contribution to the national military effort. Thus, in the Civil War, the North at once began to effect a wide naval deployment for the purpose of cutting off Southern maritime trade, and of securing the lines of sea communication, which would give the Northern armies freedom of attack upon the tremendous length of the exposed Southern strategic flank.

But in a war between two countries who both possess considerable naval strength, the attempt by either to extend its influence over the sea will be resisted, and a conflict between naval forces will develop. It is the general survey of this aspect of naval warfare with which we are concerned today; that is, gaining and maintaining command of a sea area which is disputed by the enemy. Subsequent lectures by members of the staff will cover the great field of naval operations which have no direct connection with the struggle for command, but relate to the operations required for the attainment of other categories of war objectives.

The variations in conditions under which struggles for command of the sea are carried on are so various, and depend upon so many factors, that it is difficult to arrive at general theoretical conclusions which will prove sound in all cases. The greater part of recorded naval history has to do with the operations of the British Navy against its European enemies. But if we look at the map, and consider the relative geographical positions of the maritime nations of the world, we are at once struck with the vast difference between the naval problems that confront Great Britain and the United States. On the one hand, Great Britain is so placed as to dominate most of the open sea routes of her strong Continental neighbors, and has the responsibility for the naval protection of an empire that is distributed throughout the entire globe. The people of the British Isles depend upon the sea for their existence. On the other hand, the United States is a large, self-contained nation, far distant from all other military powers, and has as its chief naval responsibility the protection of the more compact international empire of the Western hemisphere. Von der Goltz said: "Let us have a national strategy, a national tactics." An American naval officer, therefore, confronted with the problem of what to do, how to use his forces, will be able to reach a satisfactory decision only if he

bears in mind that the experiences of foreign naval commanders, and the analyses of naval warfare by foreign writers will be useful to him only so far as he can apply them to situations arising in the particular strategic sea areas in which the United States Navy will seek to operate.

We sometimes employ the term "Command of the Sea" as if we were equally interested in the control of all parts of the sea. Upon consideration, it is apparent that this is not true, and that every maritime power is more interested in some parts than in others. The part of the sea which will always be of the greatest importance to a nation is that which lies along its own coasts. If it fully controls this part, then at least it can keep its coastal shipping lanes open, and the enemy will not be able to cross its sea frontiers for the purpose of making a direct major attack upon its national existence. Second, a nation is interested in that part of the sea which lies between itself and its allies, or between itself and those neutrals upon whom it depends for absolutely essential war and food supplies. Next, a navy would wish to extend control to those parts of the sea which are vital to the adversary, not only for the transport of military goods, but also for the defense of his territory and the support of his war operations. Finally, come the sea lanes and foci of ordinary commercial trade; a belligerent will control as many of these as possible, in order to deny them to the enemy, and to permit its own merchants to continue as much of their usual peace-time trade as possible. Thus the degree of interest in the command of particular areas depends upon the influence that their transit will have in promoting the attainment of the objectives of the war as a whole.

Exactly what do we mean by "command of a sea area?" Are we to understand that, in order to hold such command, we must prevent every form of enemy activity in it?

A more usual view is that a sea area may be considered under the command of one belligerent when he is able, by the use of reasonable military precautions, to carry on freely the operations of his naval forces and the movement of his sea-berne traffic; and when his enemy is unable to carry out similar affairs in that area except with a great degree of risk. Holding command of an area by one party does not assure a large percentage of safety in them, and

the restriction of the other party to sporadic operations of limited duration.

Evidently a belligerent can not obtain command of any portion of the sea unless its naval forces extend their influence over it by actually operating in it. If one of two hostile fleets remains in port, its existence may constitute an unfulfilled threat to the other, but it will never actually enter into the contest for command. The employment of naval vessels solely as a collection of floating batteries for the protection of fixed positions on shore, the so-called "fortress fleet" plan, has been a fatal obsession of the Russians for hundred of years, and has led to numerous disasters. A navy will never discharge its full obligations except through active and persistent operations at sea. As an example, in the World War von Spee's squadron, while cruising at sea, absorbed a great amount of Allied energy, and caused more actual interruption of the Allied use of the sea than did the entire German High Seas Fleet so long as it remained in the German bight. While the High Seas Fleet later became active in the Baltic, in the large sense it remained inactive in the North Sea. Thus, it eventually exerted a powerful effect upon events in Russia, but, while a constant threat to Great Britain, contributed less toward winning the war in the West than did its minor forces, its raiders and submarines, which actually operated at sea.

We may accept as a postulate that a nation's naval forces are valuable in the contest for sea supremacy only to the extent that they are able to project their active and continuous influence over sea areas whose control will be useful for bringing military or economic pressure upon the enemy, or for preventing similar pressure upon their own country.

Maval vessels are limited in endurance, both as to time and distance.

After a short period of operation at sea, they must return to base to
replemish supplies and food. Unless other vessels are available as replenishments, their absence will open the way to enemy operation. Therefore,
the distance to their bases from the areas in which they are to operate, the
location of these bases relative to the area, to each other, and to the enemy
bases, the availability of supplies, and the length and character of the
lines of sea communication to the bases, all will have a relation to the
probable success that a force of a given character will have in projecting

its influence over those areas and so establishing a permanent, and not merely a temporary, command.

In order to control an area, it is not always necessary that command be exerted over all parts of it. If we are concerned with some particular trade route, control of the departure and the arrival areas is often more important than control of the intermediate portions, because in the open sea shipping is better able to take care of itself without help. If the shipping must pass through defiles, these may be of equal interest. Similarly, if one belligerent seeks control over a particular area, and the other belligerent seeks control over a particular area, and the other belligerent can block off even a small portion of the route to that area, then all hope of effective control is lost. For example, for centuries the British fleets have gained much additional relative strength because they could operate from bages that lay close to the sea exits from many of the naval and commercial bases of the Continental powers. Control of these narrow seas alone went a long way toward establishing command over great portions of the open oceans.

Thus we see that the strategic position and the geographic character of an area, with reference both to one's own and the enemy's naval bases, may be the final determinant of ability to command it. For this reason, the selection of the naval objective and the geographical direction of the effort to be made in attaining it, depend upon the possibility of gaining the control over the seas leading to it, during the time necessary for completing the operation.

On the outbreak of a war, command of the sea actually exists only over the waters in the immediate vicinity of fleet concentration points. As the naval forces commence their deployment into those parts of the sea which are initially the most important, each belligerent begins to extend his control over additional areas. When he comes into contact with the naval forces of his enemy, the contest for securing sea supremacy begins. From time to time in the subsequent course of events a more or less stable condition may ensue where, for considerable periods, each belligerent has a reasonably secure control over certain fairly definite areas, while in others neither has control.

If only a part of the sea is the naval struggle for command likely to continue at full strength. Each belligerent will seek to extend his rule

over those parts whose control will contribute most to the success of his military or naval aims, whichever may be the more important for the time being. Neither one will make a serious effort in those parts where failure seems certain, where success would be too costly, or where control would bring no real naval, military, or diplomatic advantage.

Actions between the hostile naval forces may be expected as soon as they are in contact. In these actions the stronger of the two detachments in contact, (considering all elements of strength) will obtain control by driving back the weaker force, sometimes with heavy losses. To secure control so as to be able to exercise it to his own advantage, and not have it constantly upset by the enemy, a belligerent must maintain a sufficiently large force in or near the area always to retain the advantage. Otherwise, he must restrict the exercise of his control to a lesser area where he can draw to himself enough additional strength to gain superiority.

While a fully effective exercise of control of the sea may require a considerable dispersion of naval strength, a belligerent to be successful in maintaining this control, must always be able to concentrate enough strength to drive enemy forces out of that particular area. It is by the location of the parts of the fleet in positions where they can effect a superior concentration that the fleets tends to become the decisive reservoir of naval fighting strength in maintaining sea command. Of concentration, Mahan said:

"The guiding principle - - is that your force must not be divided, unless large enough to manusement nowhere be inferior to the enemy. - - The essential underlying idea is that of mutual support; that the entire force, however distributed at the moment, is acting in such wise that each part is relieved by the others of a part of its own burden; that it also does the same for them; while the disposition in the allotted stations facilitates also timely concentration in mass."

To make secure the protection of a particular area, a deployed force should always be able to concentrate enough strength in time to prevent important

damage being inflicted by the enemy. This will usually require that essential units be detached only to such distances and in such directions as will permit a superior concentration prior to the arrival of the hostile force. When so deployed, the force is said to occupy a central position, and to operate on interior lines with respect to the enemy. Since a force when distributed in this manner is capable of operating at maximum effectiveness in the performance of many tasks, its deployment fulfills the so-called principle of economy of force.

An outstanding illustration of the neglect of Mahan's wise advice to concentrate the fleet during peace in the area that will most probably be the future war theater is the situation in which Russia found herself at the start of the war with Japan: the Russian fleet, much the stronger of the two, was divided between the Baltic and the Pacific, with an entire continent between its two parts. Even the Russian Pacific Squadron was divided between Port Arthur and Vladivostok, with the Japanese Fleet occupying an interior position. Japan from the beginning was superior in the decisive theater, the Yellow Sea. A similar strategic division of the U.S. Fleet existed until about 1931, a portion of it being in the Atlantic and another portion in the Pacific. Great Britain has seldom made this error. It will be remembered that it has long been a British policy to maintain a strong fleet both in the Mediterranean and in home waters, but in both areas the subdivisions have been stronger than the naval forces of any probable enemy. When the German fleet was heavily strengthened during the first few years of the present century, Great Britain did not hesitate to reduce the Mediterranean Fleet in order always to have superior strength in the more important northern theater.

We have always to remember that many important naval tasks must be performed which have no direct concern with the command of the sea. For the performance of these tasks, forces must be detached from the main concentration. As is always the case when detachments are made, danger arises that the strength remaining in the decisive theater will not be great enough to retain command.

Concentration usually induces epacentration. Shortly after the outbreak of a naval war we may expect to have presented a picture where two major fleets confront each other, with their advanced elements in contact. Each is concerned with excluding the other from the control of the sea areas most important

to itself, and each wishes to extend its own rule over the areas vital to its enemy. Since it is the enemy fleet which everywhere interferes with our progress toward success in creating a favorable military situation, we may logically arrive at the conclusion that the primary objective of major naval operations, the effect that we desire to produce most of all, is the mullification of the power of the enemy fleet to operate effectively. Once this has been accomplished, we are free to use the sea for purposes more directly concerned with the objectives of the war as a whole.

It may sometimes be believed that obtaining command of the sea through the destruction of the battle fleet, will, in itself, be the major objective of the war, because loss of its fleet may be expected to induce the enemy to sue for peace. It is conceivable that this might occur. Nevertheless, history usually indicates the contrary. Thus, while a severe defeat of the Dutch fleet in their first naval war with England led Holland to agree to all of the English demands, the two later Dutch-English naval wars were indecisive, although both fleets were badly beaten in turn. Trafalgar was fought in 1805, and the French fleets thereafter disappeared from the seas, but Napoleon was not Figally beaten until ten years later, and then only by a strong coalition of British, Russian, Prussian, and Austrian armies. In our own Civil War, the South's naval forces were insignificant in strength: the Northern navy finally proved to be the decisive influence, but the South was actually defeated only through long-continued operations by greatly superior land forces. Seldom has a nation suffered two such overwhelming naval disasters as those of the two Russian fleets under Vitheft and Rozhestvenski, but probably the defeat of Kuropatkin at Mukden, and the abortive revolution in St. Petersburg, actually were the more immediate causes of Russia's decision to accept peace. In 1907 Sir Julian Corbett wrote: "In most cases it is true that to secure command of the sea by destroying the enemy's fleets is the best way of ensuring that your own fleet will be in a position to discharge its --- functions. But the historical method reveals at once that the command of the sea is only a means to an end. It never has been, and never will be, the end itself."

If it is to be successful in gaining or maintaining command of a sea

area, a fleet must always be able to destroy enemy forces in the area, or to drive them out through a threat of destruction; or must be able to exclude them from it through containing operations.

Evidently, a fleet's ability to destroy the enemy depends upon several factors. First of all, of course, its Commander will need to be strong enough to beat the enemy in a fleet battle; or, by a mere threat, to force him to withdraw entirely. Here, in sea warfare, we find a condition that has no parallel in land warfare. If one naval belligorent is the weaker, he will not merely retreat to a strong position and then accept battle under the best possible circumstances, but, by retiring into a defended port, he will reenforce his own naval strength by the addition of land forces with which the hostile navy is unfitted to cope, except possibly through the use of aircraft. The inferior fleet will escape by disappearing from the sea, and, since naval vessels must frequently return to base for refuel and repair, the sea again as opened to a renewal of its operations/soon as the stronger fleet withdraws.

In a direct fight between an army and a navy, the army will win every time.

In its proper place, an army may therefore be the most effective reenforcement that a fleet can possibly obtain. Thus, we see that we will need to take into consideration not only relative naval strength, but also the fixed land strength, plus air support, plus geographical conditions, which may be used to aid one or the other belligerent.

II. THE DESTRUCTION OF ENEMY NAVAL FORCES.

We will also need to keep in mind the price that we must pay for a victory or a defeat.

Land and naval forces are unlike in the character of the general reservoirs of fighting strength which are formed by concentration into armies and fleets. Even in the highly mechanized armies of today, the principal element of strength is man-power itself. During the World War belligerents on both sides mobilized a total of 65,000,000 men, and armed and sent to the field a large proportion of this huge number. While the total number of naval vessels was also increased, of the large ships which form the principal strength element of fleets, there were only a few sent to sea which had not been under construction at the time the war started. The reason was that modern ships, which are intricate and expensive mechanisms, take a long time to build, and absorb much of a nation's energy; therefore, it is doubtful if war construction ever is likely to have a decisive effect upon future naval hostilities.

Since the replacement of naval losses is slow, a Commander-in-Chief must make the best of the forces he has at the beginning, and will not be inclined to take as many chances of complete loss as may sometimes be justified in the case of an army, which can be replaced more rapidly. Few wars have had more than one or two general naval actions, and these actions have been accepted only when conditions seemed to both sides to be distinctly favorable for success. Therefore, in naval warfare the stronger side may often be found engaged in trying to establish conditions that will permit it to bring the weaker fleet to action as a whole, while the weaker is engaged in evading such action in favor of operating in superior strength against exposed fractions of the stronger fleet. In other words, the superior fleet will usually be happy to have a chance to meet the enemy in a decisive battle, while the inferior fleet must look to attrition as the principal method of removing its adversary from the sea.

Occasions have arisen when the question of the loss of conservation of naval forces has appeared to have political implications of more importance than immediate tactical success. One recent example was that the German Kaiser, during the early part of the World War, refused to permit the High Seas Fleet, as a unit, to run any risk of engaging the British Fleet, because of

its potential importance as a political instrument during and after peace negotiations. The fleet was to be saved for future wars. Time showed that the wisdom of this attitude was at least questionable, since it finally led to the repulsive spectacle of the surrender of the entire German Fleet at Scapa Flow. However, this policy might have proved sound had the Allies been defeated on land, as seemed likely at the time the decision was originally made.

Another example was the attitude of Admiral Jellicoe regarding the batthe employment of the Grand Fleet. Due partly to his concern over the possible future attitude of the United States, he stated that it was a "necessity for not leaving anything to chance in a Fleet action, because (the) Fleet was the one and only factor that was vital to the existence of the Empire, as indeed to the Allied cause. (There was) no reserve outside the Battle Fleet which could in any way take its place, should disaster befall it or even should its margin of superiority over the enemy be eliminated." Many people do not give their unqualified approval to Jellicoe's sentiments, because a severe defeat of the Germans at Jutland would at once have given the Allies an opportunity to contest for the control of the Baltic Sea. Securing control of the Baltic would have opened the road to a continuous material support of Russia, and a successful Battle of Jutland might then have become for the Allies the decisive battle of the World War.

I mention these two examples by way of illustration of political motives that actually have influenced major decisions as to the attitude to be taken with respect to decisive naval action with the enemy. These political motives can not be disregarded because, after all, purely military aims must always be subordinated to the final political objective.

The determination of the general strategic attitude is the first major decision that requires consideration after the outbreak of war; viz., whether the strategic attitude is to be primarily offensive, or primarily defensive. It is easy to say that we should always take the offensive, that being the only way in which any substantial gains may be achieved. The defensive is said to be useful for guarding what we have, but it can never conquer. But we may question whether we are ever justified in jeopardizing the entire

national political position by exposing our fleet to quick destruction under definitely unfavorable circumstances.

Much of our system of naval thought is founded upon British ideas and history. Traditionally, British naval captains have been ready to accept battle even when inferior in strength. Nelson's famous saying, "If Calder with eighteen gets fairly alongside their twenty-seven or eight sail, by the time the enemy has beat our fleet soundly, they will do us no more harm this year", excites our admiration, but it was made at a time when the British Navy, as a whole, was the stronger. For the British, a universally offensive attitude has had two sound bases. First, because their enemies usually have lacked the innate naval genius possessed by British seamen. Second, because for centuries the British Fleet has usually been so superior in strength that it was always an advantage for it to exchange losses, ship for ship. Nevertheless, one can recall not even a single war where the British have failed to maintain, in or close to home waters, a naval concentration superior to any fleet that could conceivably be brought against it in that area.

Britain has by this measure always immediately accepted for her main fleet an attitude of the strategic defensive, although it must also be pointed out that, in several of her wars, her geographic situation with respect to her enemies has been such that her fleet was at the same time in the best position to act on the strategic offensive in that particular theater.

It would be a mistake to apply this sound defensive rule of the British to the American situation without considerable modification. In the first place, the British fleet needs to move comparatively short distances in order to act on any side of the British Isles, whereas the U.S.Fleet may have duties in two separate oceans. Second, the possible ensmies of the United States are far distant, and our fleet bases do not cover the sea approaches to them; as a result, our naval dispositions for defense are unlikely also to be suitable for offense. Third, the United States is a continental nation, and practically self-sufficient in a material way. It has an immense population distributed over a wide expanse of territory. It appears inconceivable that any probable foreign coalition would be able actually to conquer the continental United States, even if our fleet were badly defeated at sea.

These considerations lead us to the conclusion that the defensive function of our fleet, with respect to our home territory, is relatively somewhat less important than is that of the British fleet. Therefore, it might be less dangerous for our fleet than for the British to conduct a major offensive at a distance from home waters, so far as territorial security of continental United States is concerned. However, in accepting such a conclusion, it is well to recall the responsibilities that the United States has assumed under the Monroe Dootrine with respect to the defense of the Caribbean and South America.

It is a maxim that the defense is a stronger form of warfare than the attack. The reason is, that in the offense a force must move out into the open, must deploy, must create weak points on its flanks and rear, and so expose fractions of its strength to unexpected assault by stronger enemy detachments. Therefore, in order to assume a general offensive, a decided preponderance of strength should be available, so as to be able to accept losses that may ensue from many minor conflicts with an active enemy. It is seldem that a belligerent will be strong enough to launch offensives in two directions at the same time; consequently, the side taking the offensive must usually be content with a strict defensive in all other directions and in all other theaters. That is, it must provide ample security both for the striking force and for vitally important areas and positions.

This does not mean that an absolutely secure passive defense can ever be provided in all directions, because such a thing is impossible. The best rule of all seems to be that ab offensive movement will provide the maximum of security only when vigorously directed against some objective so valuable to the enemy that he must continuously devote his full effort to its protection, and therefore will not have strength left for an important offensive of his own. An offensive will thus be sound only if launched at the correct objective from positions favorable for success; only if sufficient strength is available to attain the objective against probable opposition; and only if it has the freedom to persist in spite of enemy resistance or counter attack. Similar considerations should influence the dispositions that may be taken for defense.

One great advantage of the offensive, provided the exact objective is not prematurely disclosed, is that the defense may sometimes be induced to

divide its strength in order to protect several positions that seem equally threatened. The attacker has the initiative as to the objective, and may often force the defender to conform to his movements and plans. In the Seven Years' War, England used its superior fleet to cover repeated descents by a small expeditionary force upon the French coast. France was thus forced to maintain a large number of troops scattered among several positions at home, and could neither use them to reenforce her army that was operating against Prussia, not to reenforce her defensive garrisons in Louisbourg and Quebec.

During the periods when sufficient strength for a major offensive is not available, a belligerent will necessarily assume a posture of defense. It was Napoleon's view that the defensive is the more usual condition, as expressed in his maxim that, "The whole art of war consists in a well reasoned and strictly judicious defensive, followed by audacious and rapid attack." Therefore the strategic attitude should never be passive even when on the defense, because an attacking enemy will invariably so expose himself as to present many opportunities for rapid, minor offensives that in the aggregate may pay important dividends. In Corbett's words, it is well to recognize the "power that lies in a well-applied defensive." But always the defender should prepare to assume the offensive promptly upon the retreat of the attacker, so that he may be able to reap the harvest that he can obtain in no other way.

Decision as to whether the strategic attitude is to be offensive or defensive, should, therefore, be made only after a full consideration of the important elements of the particular situation in which we may find ourselves; that is, the nature of the objective we desire, and the influence its attainment will have on the war; the relative strengths and weaknesses, naval, military, diplomatic and economic, of belligerents; the geographical situation of each; and the losses we feel able to sustain in gaining our objective.

However, there is one spiritual element, one condition, that should never be eliminated from our consideration. Whether or not we at first assume an attitude that is, strategically, offensive or defensive in character, it is of the utmost importance that we not neglect what is called "the spirit of the offensive". Such a spirit will impel its possessors to be ready, and actually to seize, every favorable situation for gaining an important advantage over the

enemy. It is particularly during the time that a belligerent is, through weakness, forced to act on the strategic defensive, that he should be on the lookout for opportunities for minor gains through the use of local offensives. But such operations should be made to pay for themselves. Foch sais, "It is not enough to throw oneself upon the enemy like a wild boar." Each effort should be calculated, and to be profitable the damage inflicted upon the enemy should always be relatively greater than the damage suffered by one's own forces. The greatest danger in remaining long in a defensive attitude, for the purpose of conserving strength for a future offensive, is that this may tend to kill initiative, as well as the spirit of dash and daring so needful for military success. Hence the necessity, from the moral standpoint alone, for encouraging minor enterprises that, while contributing to the major offensive, will constantly engage the attention of the enemy and inflict loss upon him.

The true spirit of the offensive, that is, a constant readiness to meet
the enemy, but to risk loss only when there seems a reasonable chance for commensurate gain, is not a morbid resignation to sell one's life dearly, but is an
active determination always to make one's blows count. Furthermore, it is
different from the attitude of the commander who will never move forward
without first being sure of favorable results, by eliminating all chance.

Napoleon said, "War cannot be made without running risks." A correct conception
of the true spirit of the offensive may often lead a commander to take great
risks, although he should do so only when he feels certain that the chances
of great results are definitely in his favor.

(a) Destruction of Engagy by Decisive Battle.

As we have mentioned, a weaker naval force will doubtless use all means to avoid trying final conclusions with a naval force known to be stronger.

How, then, can the stronger force bring the weaker to action so as to be able to destroy it? Foch said, "You cannot strike an enemy who is running away in order to shun the blow. You must first take him by the collar to compel him to receive the blow."

That is, you must arrange matters so as first to meet the enemy at the time he is the weaker and in a vulnerable position, and you must fix him in that position until you have finished with him. Jellicoe brought scheer to

action at JUTLAND under circumstances very unfavorable for the latter, but
was unable to hold on long enough to deal a shattering blow. Instead of making
Scheer keep turning away from his base by continuous pressure with all available
forces, Jellicoe, himself, broke off the action just long enough to permit
the High Seas Fleet to escape in the darkness.

If one fleet is to be successful in accomplishing the destruction of the enemy, it must have the greater strength and skill, again emphasizing the moral, as well as the physical elements. If it is sufficiently strong, it will then have the ability to dispose of the enemy. But there is one thing even more important than ability, and that is the willingness to fight. Its leader must recognize that the ultimate test of a fleet is its power in battle, and he must have the moral and physical courage to force a decisive action at the right time and place.

In 1781, during the American Revolution, a combined Spanish and French
fleet of 50 ships cornered the British Channel Fleet of 30 ships in the undefended Bay of Torbay. The Allied Fleet without doubt then had command of
that decisively important sea area; it could have permanently secured that command
by destroying the British fleet, and England would then have been at the mercy
of the Allied armies. But it was engaged in some minor enterprise and sailed
away. The Allied commander had the ability, but not the willingness to fight.

In order to bring a weaker enemy away from defended ports and into a vulnerable position, only one of two very simple conditions need be established:

- (a) Something the enemy greatly values is in actual danger, and he feels compelled to expose himself in order to protect it.
- (b) An opportunity appears to be presented to the weaker adversary to inflict a relatively greater loss on the stronger than he expects to suffer himself.

The decision to establish the first of these conditions brings us another step in the reduction in the relative importance of the objective. In order to attain the ultimate objectives of the war, we said that we must first dispose of the enemy fleet. Now, we find that, in order to dispose of the enemy fleet, we must take definite action with respect to an immediate objective that will

bring the enemy fleet out where we can get hold of him during a period when we are the stronger.

In the English-Dutch naval wars, the English Fleet invariably stationed itself in a position to intercept the Dutch trade convoys. Nearly every battle occurred as the result of the determination of the Dutch Fleet to protect its valuable property afloat.

The orders of his government to Admiral Cervera in the Spanish-American

War were confused, but we are justified in the inference that the reason he

was sent to Cuba was for the purpose of interfering with the transport of

American troops, and raising the American blockade, and thus permitting adequate
support to be sent to the Spanish armies in Havana and Santiago.

Merely to threaten to take action of this characteris seldom enough.

Bona fide operations will be required against objectives such as trade, military communications, or fixed positions. If the enemy values the objective sufficiently his entire fleet will come out to protect it. However, since such an objective is subsidiary to the primary objective, which is the destruction of the weaker fleet, it is important that the stronger fleet refrain from becoming so involved in the operations for securing the minor objective as to be unable to take advantage of the opportunity to destroy the weaker fleet the moment it makes its appearance.

In 1866 the Italian Floot attacked Lissa, partly for the purpose of forcing the weaker Austrian floot out of port and into action. The Italian admiral permitted one of his strongest vessels to be badly damaged in an engagement with shore batteries. He also allowed his floot to become so scattered that he could not concentrate to meet the Austrians when they suddenly appeared. The result was the complete destruction of the stronger Italian floot.

When we consider the second condition, we see that the stronger party
may present his weaker opponent with an opportunity to inflict heavy losses
either deliberately, as by a strategem; or through making unsound dispositions;
or because the nature of the situation does not permit him to avoid risk.

A famous successful stratagem by the Japanese at Port Arthur caused the Russian Port Arthur fleet to abandon sea operations almost entirely. The Russian Fleet had been in the habit of coming out in strength to drive off

Japanese light forces operating in the vicinity, but of remaining in a position where it could quickly regain the cover of the shore defenses. During the night of 12 April, 1904, the Japanese laid a mine-field in the Russian cruising ground. On the 13th Japanese cruisers and destroyers vigorously attacked Russian light forces near the port. The Russian Fleet came out at once, whereupon the Japanese cruisers retired slowly for about 15 miles. Togo's entire fleet suddenly appeared. The Russians succeeded in escaping to their defended cruising area, but when there ran into the newly-laid mine field. The battleship Petropavlovsk sank with all on board, including the Russian Commander-in-Chief, Makaroff. Another battleship was badly damaged.

An example of an opportunity given the Germans during the World War by unsound British dispositions, occurred in the battle cruiser action on the Dogger Bank in January 1915. The Germans failed to grasp this opportunity through equally incorrect dispositions.

German raiders had successfully bombarded Scarborough and Hartlepool in December. Two predictions seems reasonable: 1st, that the Germans would try the same thing again; and 2d., that the British would try to catch them at it. Both these predictions were fulfilled.

one armored cruiser, four light cruisers, and several destroyers, with a view to raiding British light forces on the Dogger Bank. This raid was unsupported, the rest of the German Fleet remaining in port or in the Baltic. The British immediately learned that a sortic was in progress, and sent out their entire fleet to intercept the raiders. On 24 January, at 0715, Admiral Beatty's force of five battle cruisers, seven light cruisers, and 35 destroyers encountered Hipper. The nearest British support was the 3d squadron of battleships and a squadron of cruisers, 30 miles to the north, while the remainder of the Grand Fleet was much further away. When the action was completed at 1100, the 3d Battle Squadron and the Grand Fleet were 75 and 175 miles distant, respectively. If the High Seas Fleet had left port and had assumed a position to support Hipper, it might have been able, at one blow, to have destroyed British superiority at sea.

During a considerable period of her war with Revolutionary France, Great Britain was so concerned with territorial safety at home that the sea forces she could spare for the Mediterranean were too weak to discharge all of their duties, one of which was the containing of the French fleet based at Toulon. As a result, this latter fleet was able to evade the rather meagre squadron under Melson, and to escort Napoleon's army to Egypt. Napoleon's conception was a grand one and might have had far-reaching results, as in Egypt he had a superior army across a very important British supply line. However, in the end this move was converted to a British advantage, because Nelson's prompt destruction of Bruy's fleet in the Battle of the Nile left Napoleon's army without support.

All of these are examples of naval strategic maneuver, which involves what are sometimes called the principles of movement, surprise, and superiority. In effect, maneuver consists of the strategic redistribution of forces for the purpose of effecting against the enemy an unforeseen concentration, designed to be decisively superior in that particular situation. Most frequently, maneuver is immediately concerned with the creation of subsidiary situations which may then be exploited for inflicting severe losses upon an enemy whose defense is too strong for direct attack.

It will be noted, of course, that the degree of success that may result from the use of maneuver will depend upon the enemy's reaction to it, or whether or not he has enough time to defeat it. We recognize that the enemy is constantly scheming to put us at a disadvantage. If he makes a correct analysis of our intention, in time, we may find that he has turned the tables on us, and that we have only succeeded in putting our heads into the lion's mouth. Hence the imperative need for secrecy in all our preparations, and for rapidity in the execution of our plans. It is particularly dangerous to employ the same form of maneuver repeatedly, or to aim several successive similar attempts at the same physical objective, because such misuse of maneuver will almost surely give the enemy the opportunity he is looking for.

Maneuver may be tactical as well as strategic in character. Thus Nelson successfully employed tactical maneuver when at Trafalgar he was able to concentrate an unexpected and overwhelming superiority against Villeneuve's center and rear.

The device of maneuver is well known to the land forces. On land, one of its most common applications is the movement of strong forces toward the enemy's

line of communications for the purpose, not primarily of getting across the line, but of dislodging his main army from a strong position, and into a weaker one where he can be more easily defeated. Such was the purpose of Lee's plan for the Seven Days' Battle in the Civil War, and Jackson's movement through the mountains around Pope's right flank. The latter operation had the result of driving Pope out of his strong position on the left bank of the Rappahannock, and led to a complete disaster to the Union Army in the Second Manassas Battle.

This strategic device, maneuver, is equally important to naval forces, a fact that has frequently been overlooked. A considerable period of the World War elapsed before its usefulness became so apparent to the High Commands of either the British or the German Fleet that they devoted much energy to its employment. But from about the beginning of 1916 both were endeavoring to put the other at a disadvantage where decisive losses could be inflicted, through the employment of maneuvers of the most elaborate character. For example, it was through the use of a deseiving maneuver at the beginning of the Battle of Jutland that Hipper drew Beatty into a trap set by Scheer with his High Seas Fleet; but Scheer promptly fell into a similar trap when Beatty in turn led him into contact with Jellicoe and the concentrated British Grand Fleet. In both these cases a chance seemed to be presented to overwhelm a weaker enemy detachment, but both opportunities were frustrated through prompt support of the exposed detachments.

In allecture it is impossible to do more than to indicate the bare outlines of the complicated strategic situations that may be involved in a campaign
to force decisive action upon an unwilling enemy. In closing this section of
our subject, we will merely remark that the Commander of the superior fleet
will never bring the enemy to action merely by sailing forth and inviting him
to fight: it is essential that, through successful enterprise and maneuver,
he himself create conditions that will force the weaker Commander to expose
himself to the chance of battle as the lesser of the two evils.

Part II.

(b) Destruction of Enemy by Attrition.

By the term "decisive battle" we refer to a single major action between large concentrations of naval forces of all categories, pushed to the point where the damage to one side is so serious as completely to change the naval situation. We sometimes use the term loosely when speaking of small concentrations and lesser situations. By the word "attrition" we seek to describe the gradual wearing away of the strength of the opponent through numerous successful minor actions between small groups. Attrition may for the weaker fleet be the only hope of upsetting an unfavorable balance, but both sides may be expected to be on the lookout for minor, as well as major, opportunities to inflict damage upon the enemy. Neither side will deliberately remain long in a position where attrition is likely to be successful against it.

We may conceive of two general methods for the employment of attrition:

1st, by the use of special weapons developed for minor attacks

upin strong naval vessels,

2d, by superior concentrations against exposed detachments.

For a long time the chief strength element of navies has been battleships, which, concentrated in numbers, could defeat all attacks by weaker vessels.

Minor craft were supplied for scouting and for exercising control of the sea, these operations being carried on under the protection furnished by the gun power of squadrons of battleships. In the wooden ship era, the fire-ship provided the principal form of minor attack designed for use against battleships, and these latter promptly developed a successful defense by the use of booms and numerous small patrol craft.

Vessels designed for secuting and control work still remain, but within the past few years navies have introduced three new and very important means, other than gun-fire, for inflicting naval demage. All are employed by special types of naval craft which individually are weak: surface torpedo vessels of various sizes, submarines, minelayers, and airplanes. From a broad viewpoint, these minor naval types are designed principally as a major threat against battleships.

Small surface torpedo craft are likely to find their chief use in attack on surface vessels in narrow passages or coastal waters. Destroyers are useful

for fleet battle when strongly supported by heavy surface vessels, or for night attack on large, slow-moving dispositions, but do not have a long radius nor very good sea-keeping qualities. Submarines have a special facaility for concealment, and have long endurance, but their slow speed hampers them in effecting heavy concentrations, except in an area through which it is well known the enemy must pass. Mines can be used to form an almost impassable barrier along the home coasts or sometimes even in the open sea, and, to a limited extent, can be placed by stealth in enemy waters. But they cannot be laid in deep water, and, once down, cannot move. Aircraft have the power of rapid concentration and attack within the limit of their range from their bases, and they are the only category that can be used against naval vessels when at anchor in defended harbors. Torpedoes, mines, and bombs, when within the sphere of their effectiveness, all are dangerous weapons against ships of all categories.

quantities; that is, with an effective concentration. They have the advantage of being capable of rapid manufacture, and sometimes can be prepared in secrecy. Submarines, because they were used in large numbers, would possibly have been decisive for the Germans if the United States had not entered the war on the Allied side. On the other hand, poison gas and tanks were first employed in small quantity, before a sufficient concentration had been prepared, and this premature appearance merely gave the enemy enough warning to permit him to evolve an adequate defense.

Similarly, the femous torpedo assault by Japan on the Russian Port Arthur fleet, before the declaration of war, was effectively morally, but not very effective materially. The reason was, that it was made up of a succession of attacks, rather than a single, concentrated attack. During the night of 8-9 February, 1904, the Russian Fleet lay outside Port Arthur, without having assumed a condition of readiness for defense. Ashore, the batteries were not manned, the guns were still secured for the winter, and no ammunition was at hand. Between midnight and two a.m. ten Japanese destroyers attacked in three separate waves. At eight in the morning a division of cruisers approached for the purpose of recommaissance. The destroyers had made torpedo hits on three large vessels, but the principal result was to alarm the fleet and garrison, so that when at noon Togo attacked with his main fleet, he was

warmly received, and was driven off after inflicting only minor damage. Had
he sent his destroyers in at dawn, and followed them immediately with his major
attack, he would have found conditions ideal for completely destroying the
entire Russian Fleet without severe loss to himself.

Strategically, these new minor weapons have their greatest value in the defensive. As a result, we may expect important enemy naval operations to be pushed back several hundred miles from well-defended coasts, so that it will be more difficult than ever to control sea areas close to an enemy's home waters.

It is frequently asserted that battleships will continue to overcome minor opposition, and will always remain the principal strength element of the fleets. Such a statement expresses only a half truth. Even before aerial bombs became a factor, Admiral Scheer said: "If (the German) fleet went into the English Channel by the Dover-Calais Straits its tactical situation would be simply hopeless. It would have no room to maneuver against torpede and mine attack." We recognize clearly that battleships no longer have the freedom of movement they once had, and that they can not operate indefinitely in waters where they are exposed to attack by torpedoes, mines, and bombs. It is, perhaps, more truthful to say that battleships do remain the essential strength element of fleet, but they must be provided with adequate security through appropriate operating conditions and measures of defense. The measures most likely to be successful now seem to be:

- (a) Operation of battleships in waters where heavy minor concentrations are improbable; that is, at a distance from fixed centers of enemy resistance,
- (b) Increase in defensive power through structural improvement and the addition of considerable minor gunfire,
- (c) Direct protection by naval types less tulnerable than are battleships to minor gives attack.
- (d) Counter-attack upon centers of minor activity.

Perhaps Mahan's statement is true that the principles of naval strategy remain unchangeable, but it is certain that recent developments have modified their application almost beyond recognition.

The initial German naval conception during the World War failed to appre-

ciate the changed conditions of modern naval war. Traditionally, the British have boasted that their naval frontier was upon the enemy's coasts. The Germans therefore expected that the British fleet would at the beginning appear in strength close to Helgoland. In their view, such action would have been in accord with the idea of Clausewitz that the stronger military force should at once set out to attack the enemy's principal concentration. The German High Command planned to wait quietly in the German bight, and, after their light forces had gradually worn away the British superiority by the use of mines and torpedoes, to send out their main fleet to sweep up the remains.

The British naval offensive was conducted in accordance with naval, rather than with military ideas. Furthermore, it was modern, and took account of the torpede and mine. The result of their offensive was a great British army in France, starvation in Central Europe, greater attrition against the Germans than they suffered themselves, and, finally, a fleet battle where the British were in greatly superior strength.

The employment of the second general attrition method, that is, concentration against exposed detachments, may be suitable under several different conditions. Secuting and patrol lines, raiding forces, blockade and trade protection squadrons, convoys and escorts, all perform essential duties, but involve the deployment of weak forces that invite attrition. But it is particularly against an enemy engaged in an overseas offensive movement that the greatest opportunities for attrition, both by minor attacks and superior concentrations, may be expected to occur. In such cases, the presence of a slow convoy and the probability that detached forces will be used, will permit a series of harassing attacks by submarines, aircraft, destroyers, and fast battleships that may be very destructive in the aggregate. After establishment of an overseas base the great stream of supple vessels that an active enemy, even though very inferior in strength, will be able to exploit to his own advantage. In the days of sail, the difference in speed between war vessel and merchant craft was small and rapid communication facilities did not exist; it was then sometimes possible to pass convoys over uncommanded seas and adequately protect them through control of the departure and destination areas. Today, when aircraft are available for scouting large sections of the sea,

and radio can quickly assemble high speed vessels for attack, it seems probable that open sea attrition will be more successful, and therefore more continuous protection seems necessary. During the early wars with France, British overseas expeditions to the colonies, in outting distance between themselves and home, also were moving away from the chief centers of enemy naval strength. These expeditions are not comparable with those against foes situated on the opposite side of an ocean. In such a case, while the fleet on the offensive is near its home bases, it is reenforced by minor elements and land defenses; but as it moves away, it loses this support. When it approaches hostile territory, it encounters resistance not only from the principal enemy fleet, but alse from increasing numbers of minor units. The advancing force becomes weaker the further it goes toward the party on the defensive. Only when it can establish a broad strategic front projected from nearby bases having an interlocking defense, will it be able to support its deployed forces under the advantageous conditions enjoyed by the defense.

Wide deployment of naval forces always is necessary to gain information of the enemy, to prevent him from making surprise attacks, and to establish conditions for bringing him to action. Adequate support of exposed detachments is necessary if they are to continue to operate. When the enemy learns of the existence of this support, this may be expected to lead him to employ stronger forces for the attack. The result sometimes is that comparatively minor tasks finally involve the employment of very large forces. During the war after the Germans had destroyed the escorts of one or two convoys from Norway, on several occasions Jellicoe covered the convoy route with the entire Grand Fleet. The Battle of Jutland resulted from Scheer's determination to raid British shipping near Norway, in the hope of enticing a British detachment of moderate size into action with the High Seas Fleet.

It is obvious, however, that the entire fleet cannot be used for the immediate support of every minor operation. Risks must be accepted, and a plan of operation adopted that accords with the importance of the objective, and with an evaluation of information as to the probable distribution of own and enemy strength.

Thus we see that an effective degree of concentration, together with effective maneuver and security, are important considerations in the distribution of forces in preparation for attrition attacks, as well as for establishing the conditions for decisive battle. In addition, if the weaker fleet is to be successful in gaining relative strength through the use of attrition, it is essential that it shroud its movements in the greatest secrecy, so as to be able to surprise exposed enemy detachments before these can be withdrawn or reinforced.

The great drawback, in deciding to make attrition our principal means of injuring the enemy, is that its results depend to so great an extent upon what the enemy may do, that it becomes an uncertain method at best. Under favorable circumstances it may promise decisive results. Under others, it is a two-edged sword which may do as much damage in one direction as in the other.

(c) Destruction of Naval Forces by Land Operations.

The third general method that has been employed for the destruction of naval forces has been their capture by land operations. While this method lies primarily within the province of the army, its purpose is to assist the fleet in gaining command of the sea. It usually involves the cooperation of naval forces in such work as the blockade of the exits from the enemy naval base, contingents, and in the case of amphibious expeditions, direct support for effecting a landing.

So many cases have occurred where land troops have been instrumental in destroying naval detachments while they have been shut up in port that the possibility of the future employment of the method, either by or against ourselves, should not be overlooked. When conditions are favorable for its success, and sufficient land troops are available, it forms the one sure way of destroying naval forces that have taken refuge from a superior enemy by retiring to their bases.

The special conditions that seem to be required are that the fleet to be attacked must be denied escape or reinforcement by way of the sea, and that the attacking land forces must be free from interference by strong land forces long enough to complete their work. These conditions require a superior blockading naval force, and the defending base so situated that it can not easily be

relieved overland. Such locations may be an island which can not be reinforced because local command of the sea has been lost; a base surrounded by an expanse of difficult terrain, or one very close to enemy territory; or one whose defense can not be ensured because troops are needed elsewhere. A few examples may be cited as typical of the many variations that have occurred in the use of this method.

In 1758 during the Seven Years' War the major French armies were operating on the eastern frontier against Hanover and Prussia. For protection of her naval and commercial ports France depended upon a strong seaward defense afforded by coastal fortresses, which within a few days might be reenforced by the mobilization of scattered detachments of militia.

In June, Howe, with a small naval escort and supporting detachment, conducted British transports across the Channel to St. Malo, where 15,000 troops landed. He then blockaded the port. Anson placed his British Channel Fleet in a position to intercept the Brest fleet if it should try to interfere with the expedition from England, although he kept his fleet sufficiently far from Brest to permit the French fleet to sortic if it desired. The British army found itself unable to capture the fortress, but within the port, whose entrance was covered by the French guns, the troops destroyed four frigates, eight privateers, 62 merchantmen, and various small craft which were ready for sea. The expeditionary troops then re-embarked before superior French land forces could assemble.

This expedition was intended partly to destroy French vessels which were shortly to sail to the defense of Canada, partly to get France to weaken her army in Germany in order to reenforce her coast defenses, and partly to induce the French fleet to leave Brest in order to protect St. Malo, in which case Anson was prepared to engage it decisively. This may be taken as an illustration of the use of a minor maneuver for the purpose of establishing conditions favorable for the accomplishment of major objectives.

At the outbreak of the American Civil War a considerable number of decommissioned Union naval vessels, many large naval guns, and quantities of naval material were at the Norfolk Navy Yard. The South had only very small amounts of war material, no navy, and few manufacturing plants. The Governor of Virginia appreciated the desirability of capturing the Navy Yard and its ships and supplies, and he succeeded in setting on foot the organization of a military force composed of Norfolk citizens and Navy Yard mechanics. The Northern authorities were unable to take effective steps for protecting the Yard, and on 21 April, 1861, evacuated it after destroying most of the ships and buildings, and part of the military material. The Northern losses amounted to eleven warships, old and new. Southern authorities saved the steam frigate MERRIMAC, many large naval guns, and some other stores and equipment.

The Allied Expedition to the Crimean Poninsula was projected for the purpose of capturing the main Russian base at Sebastopol. The Russian Black Sea Fleet consisted of fifteen battleships, several frigates and brigs, and various small vessels. As soon as the somewhat stronger Allied naval forces passed the Straits, this fleet retired to the protection of the fortified harbor of Sebastopol. There they remained until the surrounding heights were captured by the Allies, whereupon the Russians themselves destroyed their entire fleet.

A quite similar instance occurred in the case of the Russian Pacific
Squadron during the Russo-Japanese War. Here the Japanese had full command of
the sea through blockade of the fleet in Port Arthur, but that was not enough,
because of the projected voyage to the Pacific of the Russian Baltic Fleet. It
became necessary for the Japanese, in order to retain sea command, to destroy
the Russian Pacific Squadron through the capture of its base before arrival of
the Baltic Fleet. The seizure and capture of Port Arthur by the Japanese land
forces followed.

What in several respects may eventually be considered a naval classic eccurred in the Spanish-American Wer. In the island of Cuba was a well-equipped Spanish army of 200,000 men, of whom 25,000 were in Santiago and the surrounding districts. The bulk of the remainder were near Havana. Communication between the two parts of the Spanish army was difficult except via the water route.

Hany European military writers have ridiculed the American military effort because it was not made directly against the strongest part of the Spanish force at Havana. Instead, as soon as Cervera's fleet entered Santiago it was promptly blockaded by the entire American fleet, and an expeditionary force of 16,000 men was hastily got together and landed near Santiago for the express purpose of

capturing the Spanish naval force. Army operations were so far successful that CERVERA put to sea and lost his fleet in a naval action. With the command of the sea absolutely secure for the United States, the entire Spanish garrison of Cuba surrendered only 84 days after the declaration of war, and without having been able to fight a land battle of anything like major proportions. Sixteen thousand troops, by means of an ex-centric attack, were able to justify the power of an army of 200,000 and of the entire Spanish Navy.

III. CONTAINING ENEMY NAVAL FORCES.

We have indicated that political aims should always determine the selection of the major objectives of naval warfare; that the command of certain particular sea areas is desirable only in proportion to its usefulness in attaining the ultimate naval objectives; and that the destruction of the naval forces of the enemy will always be the most direct and effective means for assuring the command of the strategically important areas.

However, even after the most patient and brilliant effort it may prove to be entirely impracticable to create conditions which will permit us to destroy the enemy fleet. It may be too strong for us. Or, on the other hand, if the enemy fleet is the weaker, its Commander may be constantly on his guard, and may resist every temptation which we may set up for him. He may not feel justified in risking all his chances of winning the war by accepting a decisive action. He may escape by remaining in port or by retiring to an area where we are too weak to attack him, but from which he may continue operations that will effectively dispute our command of an important part of the sea. Getting at the main reservoir of enemy naval strength in such positions may be beyond our power, or may require so long a time and so great an effort that unsuccessful land operations, or diplomatic failures, or economic exhaustion, may finally defeat us. In cases where time may be vital to our final success, and the command of the sea is immediately necessary in order to bring effective pressure upon the enemy nation, some method of obtaining the command must be found other than through the destruction of the enemy fleet.

In order that they may exert a disruptive influence in the areas which are vital to our success, the enemy naval forces must actually operate in them.

Therefore, if it is within our power to exclude those forces from the area in dispute, we may be able to obtain practically the same results as if we were to destroy them. It may prove to be possible to exclude the enemy from our areas by the successful employment of containing operations.

The definition of "contain" is, "To hold within fixed limits." which accurately describes the general objectives of containing operations. The limits we would prefer to assign to the enemy forces are those within which he can do us no particular harm. Our effort should be designed to restrain them at such a distance from the areas we wish to control as will prevent them from interfering with our projected operations in those areas.

Evidently, therefore, when we resort to containing operations, we are deciding not to take as our immediate naval objective the destruction of the enemy naval forces. We no longer are chiefly interested in trying direct conclusions with him, but prefer to gain our ends by keeping him at a distance. We decide to by-pass the enemy and devote ourselves to the direct accomplishment of the major aims of the war as a whole.

There are two general conditions when operations seem suitable for containing the enemy, rather than attempting to destroy him. One of these conditions exists when we are the stronger, but are unable to get our hands on him, although he may threaten our operations. The other condition occurs when our available naval force is the weaker; or, being the stronger, if for any reason is unable for the time being to afford the losses that might be incurred through forcing a decisive action.

Two distinct types of containing operations may be employed. The first is by blockade of the area in which the enemy fleet or detachment is operating. The second type involves the operation of all or part of our naval forces in a manner which so threatens something the enemy holds valuable that he will remain near it in order to protect it. Broadly speaking, only the stronger force is able to amploy the method of blockade, while either the stronger or the weaker force may employ the threat method, although there are exceptions to this statement.

There is also an important variation of the second form of containing operations. The situation may be such that we believe that the exertion of the full strength in an area may frustrate our attempts at its control. But if we can

induce the enemy to expend a large portion of his strength in another direction, that is, to divert part of his war effort, we may find it possible to attain our objective. In this case, we create favorable conditions for ourselves by the use of a diversion designed to contain enemy forces out of the area in which we are most interested.

(A) BLOCKADE.

When we speak of "naval blockade" in connection with the contest for command, we are not particularly interested in commercial blockade, which is used for interrupting enemy trade. A naval blockade aims primarily at the restraint of an enemy naval or military force, although it will also be effective for commercial purposes. Naval blockade seeks to establish conditions such that the enemy force will have the option of remaining where he is or of accepting decisive action as soon as he comes out.

Sir Julian Corbett has gone to great lengths in expounding fine distinctions between "close" and "open" blockade. The real difference seems to be that, as practiced by the British, the close blockade always endeavored to bring him out. It seems preferable to view the open blockade as simply a method of maneuver designed to bring the enemy to action, and not merely to contain him. In the present paper we will treat the blockade as a method of keeping the enemy in his present position, and also of preventing important reenforcements from reaching him. Instead of Corbett's terms, it seems better to use the two terms "distant blockade" and "close blockade", as referring to the geographical separation of the blockading force and the port blockaded.

This difference is shown by the fact that in order to hold the enemy in position, sometimes the blockading fleet has not remained in front of the port, but has taken station at a more distant base. In order to hold the hostile fleet in place, this base had to be so located as to command the exits from the enemy port, and thus to make it probable that the enemy could be brought to action before escape to the open sea. Only a few cruisers were left on direct watch in front of the enemy port. In their distant position the blockaders had the advantage of a secure position in bad weather, but could go to sea at any time for training. They often could accomplish other tasks, such as covering trade or military convoys. But this form of blockade was never fully effective

unless the base of the blockaders occupied a central position having interior lines with respect to the enemy port. Unless such a base was available, the enemy sometimes escaped and did great damage without being caught, while at other times reenforcements arrived which made him the stronger. For example, the English Fleet in the Thames estuary during the Dutch-English naval wars could usually intercept the Dutch Fleet whether it went up the North Sea er out through the Channel. Also, Togo in position at the Elliot Islands could cover the Japanese transport routes to Manchuria, and could also makers surely intercept the Russian Fleet before it could make good its escape to Vladivostok. On the other hand, a British fleet at a covering position in Torbay could by no means insure interception of the French Brest fleet, and therefore, strictly speaking, was not a true blockading force.

A close blockade was conducted by stationing the blockading fleet directly off the enemy port, where contact would always be assured. The great difficulties with close blockades in the distant past were that occasionally the blockaders were driven off by stress of weather, while the wear and tear of remaining at sea for long periods required considerable additional strength for the purpose of providing periodic reliefs. But on the whole the close blockade was usually more effective than the distant blockade. During the wars of the Napoleonic period, when the British were particularly alarmed over the prospects of a French invasion, Bresty Cadis and Ferrol were blockaded by strong forces kept constantly before them.

The United States Navy has frequently been criticized by European experts for its manner of conducting the blockade of Santiago during the Spanish-American War. In this case the American ships were maintained in a semicircle close to the port, and left their positions only to go to Guantanamo for coal. This method might have become very ancomfortable during the hurricane season or if the operation had been prolonged.

But the fact is, there was no central covering position in the south coast of Cuba having interior lines with respect to Santiago. The Spanish had no torpedo boats worthy of the name, and thus there was no great danger in a close blockade. Furthermore, the Spanish vessels were thought to have superior speed, and a distant fleet could not have overtaken them. Finally, the Navy counted upon the army's efforts to drive the Spanish Fleet to sea. In spite of criticism.

the method actually employed seems to have been the correct one. At all events, the blockade was effective practically, whatever it was theoretically.

Only under exceptional circumstances will it ever again be possible for naval forces to maintain a close blockade. Blockading fleets will be forced to remain at a distance where they can receive protection against torpedoes, mines, and bombs, those weapons which have become so important for increasing the power of the defense. Jellicoe states that:

"--- The advent of the submarine and the destroyer, and, to a lesser extent, the use of the mine rendered --- impossible (the disposition of) our squadrons --- in the vicinity of those ports of the enemy in which his fleet lay. --- No large ship could cruise constantly in the vicinity of enemy bases without a certainty that she would fall an early victim to the attacks of submarines. --- Even if the submarine danger could be overcome, the heavy ships would be so open to attack by enemy destroyers at night --- that they would certainly be injured, if not sunk, before many days had passed.

"These facts had been recognized before the war and a watching policy from a distance decided upon - - - for the purpose of preventing enemy vessels from gaining the open sea."

Thus we must face the fact that, although sea communications have become tremendously increased in importance in modern times, modern fleets no longer can employ close blockade, which for so many years proved to be one of the most effective methods for preventing the weaker navy from interrupting the maritime communications of the stronger.

The distant blockade remains, but the use of aircraft will further increase the separation of the blockading fleet from the bases under blockade. Geographical situations which especially favor a distant blockade therefore now have a greater relative value, as compared with the past. For example, the situation of Great Britain with respect to the northern coasts of Europe, and the situation of Japan with respect to the coast of Northern Asia, are such that it is comparatively easy for these two powers to establish effective distant blockades, particularly as geographical conditions even permit the torpedo, mine, and bomb to be turned to the very great advantage of the blockader.

The geographical situation of the United States is totally different from those of Great Britain and Japan. This country would be able to station forces in position from which they might blockade any fleet which might be based entirely within the Caribbean, but does not now possess any territory from which it could maintain an effective blockade of the home ports of any probable enemy. Conversely, it does not seem possible for any foreign power, or any coalition of powers, to blockade the ports of the United States, so long as we retain our present relative naval and air strength.

There are two exceptions to the general rule that only the stronger fleet is able to enforce a naval blockade. The first occurs when a power occupying the fortunate position of Great Britain wishes to maintain command of the open sea by blockading a fleet within an almost totally enclosed area such as the North Sea. Britain is able to close the Channel with torpedoes, mines, and bombs alone; therefore, enemy forces destined for the Atlantic must be so strong, and must proceed via such a long roundabout northern route, that the British might even have a fleet considerably the weaker of the two and still prevent anything but sporadic interruptions of her open sea control.

The second exception occurs when, as in the Russo-Japanese War, a fleet is interposed between two enemy detachments, each weaker than the blockader, although they are stronger in the aggregate. The problem here is for the blockader to maintain a central position in order to prevent the concentration of the separated detachments.

(b) Threat to Critical Positions and Areas.

The simplest illustration of the influence of a small detachment in a threatening position for containing strong forces is the case of a military fortress which lies close to the line by which a hostile nation seeks to push forward an army of invasion. If the army should ignore the fortress by leaving it in its rear, the garrison can easily interrupt all of its communications. Therefore, the army has the choice of leaving a blockading detachment behind, or else of stopping to invest and reduce the fortress. In the first case, the invader seriously reduces his offensive strength, while in the second he loses time which may prove to be invaluable to the defender.

Strong positions which shield comparatively weak naval forces may have precisely the same effect upon a fleet endeavoring to establish itself at a distance from its home bases. This is particularly the case where a maritime defile exists. It is easy to imagine the deterrent effect which small British naval forces at Gibraltar and Suez would have upon an attempt by the Italian navy to operate from bases outside the Mediterranean.

In the Seven Years' War the principal British objective was the conquest of Canada. To effect the conquest it was considered necessary to capture Quebec by means of an amphibious expedition, while Montreal was to be taken by land troops based in Northern New York. The British possessed Halifax and had a greatly superior navy. But the strongly fortified French port of Louisbourg lay close to their proposed line of marine communications to the St. Lawrence. The attempt on Quebec was delayed for three years because it took the British two seasons to reduce Louisbourg, and they were unwilling to commit themselves to a major operation in Canada so long as Louisbourg remained in French hands. After its reduction, it then became safe for the British to undertake the expedition against Quebec.

Similarly, the existence of two or three securely defended positions in the Pacific Mandates from which minor Japanese naval forces could operate, would constitute so great a menace to communications that it is doubtful if an American fleet or army could afford to undertake extensive operations in the Western Pacific without either first reducing these bases, or first destroying a large portion of the Japanese navy.

The method of containing through a threat to critical positions and areas is one that operates both in peace and war. The existence of the German, French, and Italian navies has for many years had the effect of containing the major portion of the British navy within European waters, and at times even within the North Sea. It was not only the naval strength exhibited by the United States during the Spanish-American War, but also the entirely new threat of the rapidly expanding German fleet in the first years of the present century that led England to abandon the Western Hemisphere as an area of possible naval activity, a retreat which she signalized by the acceptance of the Hay-Pauncefote Treaty. It is generally to be doubted, so far as we can not foresee the future, that England will

ever feel free to permit any considerable part of her battle fleet to become involved in a naval struggle to the eastward of Suez. So long as other strong navies exist in Europe the British Fleet is likely to be contained in Northern European waters in order to prevent an invasion of the British Isles or a complete disruption of the maritime lines which supply necessary food and raw materials.

Possibly some of us still remember the fears of the American people during the Spanish-American War of a sudden descent upon the Atlantic coast by the Spanish Fleet. In response to public outery a squadron of our naval vessels remained in northern waters at a time when they would have been very useful in the Caribbean.

Naval officers are accustomed to smeer at this action as indicative of the weakness of the political department in dealing with the major objectives of the war.

Nevertheless, had it come, lives and property would have been lost, and there was a natural demand of the population for naval protection. This sort of thing can not be looked upon as unusual, but must be expected, and ought to be considered to the extent required by military or political reasons. In the case of England, fears of this kind are very real, and are based on vivid memories of several actual invasions in the not very distant past, and upon air and naval raids within the present generation. It has been said that approximately 300,000 troops and many anti-aircraft batteries and airplanes were held in England because of the constant fear of raids and even invasion.

Where fears of this kind have been strongly held by one nation, the potential opportunity has existed for its enemy to play upon these fears and reduce the strength that could be put into the field against it. Thus one fleet, by constantly threatening raids or invasions, may sometimes contain even considerably stronger enemy naval forces by inducing them to remain within supporting distance of their own coasts or outlying islands. Nor are the civilian populations of the threatened districts the only ones who may be expected to exhibit alarm. The Commander-in-Chief of a major overseas expedition would have a right to feel very tender as to the security of the intervening bases that the him to his home territory, if he knows that, as soon as he becomes seriously committed, his enterprising enemy will try to cut his line by the capture of one or more vital positions. In such a situation he is likely to feel the worth of a piece of advice that

Napoleon once gave to the French Directory. He said, "Don't overreach yourselves by grasping at more than the conditions warrant."

(c) Diversions.

Containing operations through the use of diversions may often become of major importance, and may thus justify a long period of preparation. The British government's conception of the Seven Years' War was to make a strong defensive effort in Europe, as the basis for a successful offensive in America. The offensive was designed to attain the principal war objective, which was the expulsion of the French from Canada. For several years before the war British diplomats carried on negotiations and intrigue with the aim of involving France in a first class war with Prussia. The defensive purpose of a land war between these two powers, which England proposed to support only with money and a few troops, was to contain in Europe as many French soldiers as possible, so that they could not be used to reenforce the garrisons of Canada. A further purpose was to require France to make such a great land effort that she could devote but few resources to building up her navy. The was occurred approximately as England planned. By diplomatic effort she was thus successful in establishing a major diversion on the Continent for the French military power, with the result that conditions were created which were particularly faverable for success for the British specialty of amphibious warfare. The basis of the effort was sound: that is, the diversion was created in a theater where success was absolutely vital to France, whereas success on the Continent was by no means vital to England.

It seems necessary, if a substantial diversion is to be created, that the effort be made in an area where the enemy cannot afford to fail. As an hypothetical example of diversion, a major power other than Russia at war with Japan, would be far more likely to succeed if it could persuade Russia to launch and sustain a powerful offensive in Manchukuo. It seems vital to Japan to exclude any other military power from the control of Manchukuo, and therefore she would be likely to make such a strong effort to defend that territory from Russia, that she would have but little strength remaining for expenditure in any other direction.

Diversions may sometimes be created in important minor theaters. For several centuries Spanish wealth was largely based on the trade which centered around Havana. In all of her wars, Havana therefore formed a tender spot, and she always

devoted a considerable part of her resources to its protection.

France induced Spain to intervene in the Seven Years' War chiefly in order to obtain ships and additional troops for attempting an invasion of England.

However, England had already established a fairly secure control of the Caribbean, and was known recently to have reenforced her squadrons in that area. Therefore, when Spain entered the war in 1761, instead of holding her fleet in position for the English invasion, she sent most of her war vessels then in commission to Havana to protect that port against the British forces based on Jamaica. Here the Spanish ships remained, in spite of the efforts of the French admiral on the station to effect an Allied concentration for attack on the British fleet and the capture of the Jamaica base.

The British collected a fleet weaker than the aggregate of the Allied naval strength and interposed between the two detachments. With the aid of an army of about 12,000 men, the British Fleet then captured Havana, including 15 Spanish ships of the line, about 12 frigates, and 100 merchantmen. Although the enterprise paid for itself through the capture of large quantities of booty, its principal effect was the creation of a diversion at a distance from the English Channel, whose control England could not afford to lose for a moment. While it will not be asserted that the invasion plan would have been successful even if the entire Spanish fleet had remained in Europe, its failure was ensured by successfully containing so much of the Allied naval strength in an area not vital to England.

IV. CONCLUSION.

With this example we may close this general survey of the operations involved in the contest for command of the sea. No attempt will be made to summarize what has been said, because the outline already distributed is a sufficient summary.

It may be desirable, however, to emphasize several of the major conclusions;

First, the immediate concern in naval warfare always remains the control of

transit of particular parts of the sea. The importance of free transit in these

parts varies, depending upon the relative influence in promoting the attainment

of the major war objectives.

Second, naval forces can control transit by securing command of sea areas, but this is possible only through active operations at sea. The location and

characteristics of own and enemy bases relative to an area in dispute finally determine the degree of possible naval activity in that area. Therefore, the selection of objectives and the direction of naval effort should be governed by the availability of naval bases which will support the establishment of an adequate sea control.

Third, adequate concentration, dependent upon a central position, interior lines, and a proper sconomy of force, are necessary for the security of the command of an area.

Fourth, the primary objective of naval operations usually is the nullification of enemy power to exert an influence at sea. Mullification may be obtained through destruction of enemy forces, or by containing them. These may be the necessary immediate objectives, but are only means to an end, which is the promotion of the political aims of the war. Mullification of enemy power may be assisted by taking advantage of enemy mistakes, but can best be accomplished by the active creation of conditions which will force the enemy into an unfavorable situation, whether the general attitude is offensive or defensive. That is, the use of strategic and tactical maneuver is necessary in order to place the enemy at a decisive disadventage.

Fifth, our study of naval warfare should include a mental adaptation of past naval experience to the particular problems which may confront American naval officers. What we should seek to establish is a system of national strategy, and national tactics.

Finally, we recognize that few naval commanders are confronted with a simple problem. Their missions will usually require many complicated operations, distinct in themselves, and differing in their nature. Of these operations, success in those involved in contesting or exercising command of the sea may be a prerequisite for success in those operations which contribute directly toward success in the war. Nevertheless, it is the operations which contribute more directly to the final overthrow of the enemy, and which make him willing to accept a peace satisfactory to ourselves, that are of the greatest final military and political importance. In subsequent lectures other members of the Staff will analyse the general forms exhibited by naval operations not directly concerned with obtaining and maintaining the command of the sea.