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U. S. Naval War College.

THE SERVICE OF SECURITY.

Lecture delivered July 27, 1914.

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To the Officers

of the

Class of January, 1914.

Coordination of Destroyers with other types

THE SERVICE OF SECURITY.

Frederick the Great once said:

"It is pardonable to be defeated, but never to be taken by surprise."

A force taken by surprise may be compared to a sleeping man attacked by a well prepared enemy. Astonishment, confusion and alarm are opposed to coolness, preparation, and confidence: and severe blows may be received before any can be given in return. The surprised force must possess many elements of superiority over its assailant to be able to overcome the enormous disadvantage at which it is taken: and a surprise generally means defeat.

If the entire force could be kept continually on the alert, ships in battle formation, steam for maximum speed, etc., surprise would be impossible: so too, if the plans and movements of the enemy were accurately known by the commander, surprise could be easily avoided. But to keep the force always in battle formation, to maintain steam for maximum speed at all times, would cause an enormous expenditure of fuel and so reduce the radius of action of the force as to seriously decrease its efficiency, and the knowledge of the enemy's movements and objects is generally incomplete and usually inferential.

To guard against surprise use is made of detachments of small fast ships to cover the area from which the main force may be threatened. This duty is called "Protective Reconnaissance" or "Protective Scouting".

Protective Scouting is that which is confined to ensuring the absence of the enemy from areas from which the main body may be threatened, or to obtaining just sufficient warning of his proximity, and to preventing the intrusion of enemy scouts of small fighting value.

Protective scouting is a passive operation. It differs from aggressive scouting in that its mission is one of security, the warning of the enemy's presence being its principal object.

As the area from which the main body may be threatened moves with the movement of the main body, the area observed by a force engaged in this service, is based upon the course and speed of its own main body. The area to be searched is controlled by information of one's own main body in contradistinction to information of the enemy main body which information usually controls the area to be searched.

No force however strong, or how apparently free from observation, should fail to detail a sufficient force for protective scouting, unless covered by a protective screen, for the knowledge as to whether or not the enemy is informed of one's own main body's position may be of vital importance in the succeeding operations.

In detailing a force for protective scouting the commander should keep in view five conditions:

- (a) The arc to be covered.
- (b) The radius of the arc.
- (c) The desirability of preventing intrusion by enemy scouts.
- (d) The speed and strength of the ships detailed.
- (e) The proportion of the force that can be spared for detached duty.

The arc to be covered depends upon the information of the enemy's scouting forces and of his main body. If the information is definite it may be possible to limit the area searched by the protective scouts to an area from which the enemy will probably approach. It is usually advisable, if the force is sufficient, to carry the arc through the entire three hundred and sixty degrees.

The radius of the arc is dependent upon the state of preparedness for battle of the main body, if preparations are complete not much warning will be required; if, however, the main body is steaming at low speed to save fuel, the protective force should be at a distance sufficiently great to assure the main body ample time to prepare for battle.

The desirability of preventing intrusion by enemy scouts depends primarily upon the probability of the enemy making a destroyer attack. If the enemy has no destroyers present, close observation will do little more good than the location of the protective scouts. If destroyers are present with the enemy force it is desirable to reduce observation to a minimum. If scouts are to be denied entrance, the distance between ships engaged in protective scouting should not exceed fifteen miles; if the warning of the presence of the enemy main body is the only duty of the Protective Scouts, the distance may be increased.

If enemy scouts are to be denied intrusion, the distance of the protective scouts from the main force should be greater than the range of visibility of the smoke of the main body.

The speed and strength of the ships detailed for protective scouting will seldom be a matter of choice. Such ships as are available must be used giving preference to fast ships that can avoid the enemy if of inferior force, and overtake the enemy if of superior force; the number of ships is dependent upon conditions (a), (b), (c).

The proportion of the force that can be spared upon detached duty depends largely upon the force of the enemy, the probability of attack and the relative speed of the forces. The smaller the force the fewer the ships that can be spared. No set proportion could in any way fix the proper force.

A commander when detailing a force for protective scouting, must balance his desire for adequate protection against his reluctance to detach a large proportion of his force, and a suitable compromise is not always easy to fix. If this force is distant, concentration for battle is delayed; if close, security from observation by scouts is not assured.

Fast ships of small fighting value are probably the best type for this service, though, when such vessels are engaged in

aggressive scouting, destroyers or even battleships may be forced to do this duty.

In the preceding pages only that branch of the service of security which aims at the prevention of a surprise attack or observation by scouts has been discussed.

Two other branches of the service of security are recognized, as follows:

- (a) Security against the enemy's observation of the main body, or main body and train, effective against any force other than the enemy main body.
- (b) Security for the main body and train against actual torpedo attack.

Under the first heading come the forms of operations known as "Offensive Screening" and "Protective Screening".

Under the second heading "Defensive Screening".

Security against the enemy's observation may be afforded by three methods:

- (1) By destroying the enemy's observation, (scouting) force.
- (2) By furnishing the main body such information of the enemy's forces that it will be enabled to avoid them by maneuvering.
- (3) By denying information to the enemy's reconnoitering forces at such a distance from the main body that its exact location can not be determined.

Offensive Screening

The first type of these operations "Offensive Screening" is a combination of methods 1 and 2 given above, and can only be undertaken when the force available is much stronger than the reconnoitering force immediately opposed. If by taking the offensive against the enemy's reconnoitering force it can be destroyed or pushed back upon its own main body, the greatest amount of security has been given to one's own main body.

The principal task of the "Offensive Screen" is to defeat

or contain the enemy's reconnoitering force. This force must be located before it can be attacked. The main strength of the screen should not therefore be too widely separated from the main body until the enemy searching force is located.

An advance by the screen in strength previous to the location of the enemy searching force might be but a blow in the air. If it failed to find the enemy searching force it might continue the advance in the wrong direction, thereby affording the searching force the opportunity of locating the main body without opposition. The enemy scouting line must be first located by advanced scouts.

The advanced scouts having located the enemy scouting line the screen should advance to engage. A greatly superior strength should be brought into each action, if possible. The ideal is to be so superior as to crush the opposing ships without sustaining any damage. This can hardly be hoped for, but as successful search requires dispersion, so successful screening requires concentration. If, therefore, the ships of the screen are fast enough to act together in overpowering enemy scouts some concentration should always be possible.

The loss or injury of a ship is a greater disadvantage to the searching force than to the screening force for the area assigned to the injured ship must be left unsearched or other ships must increase their areas, thus decreasing the efficiency of their search.

Every victory will increase the morale and will decrease that of the enemy. The loss of any ship in the searching force will cause a greater dispersion of the remaining force. If evasion by the main body becomes impossible and offensive action is decided upon these successful engagements will greatly facilitate one's own scouting operations.

The advanced scouts must be faster than any ships of the enemy searching force if possible. In fact successful screening requires ships that are faster than the ships of the searching

force and of equal or greater strength. The screen must be faster than any force of superior strength that the enemy might send against it.

In order to locate the enemy scouting line at a distance sufficient to permit of concentration of the screen and attack upon the enemy reconnoitering ships before some of these enemy ships could sight the smoke of the main body, it will be necessary to guard against all methods of search that might be used by the enemy, and the screen so arranged that if the enemy scout can not be stopped he can not make contact during that day-light. These forms may be considered as follows:

1. Direct method,
2. Out and In method.
3. Some form of Retiring Search.
4. Trailing.

To guard against the direct method there must be two lines of scouts ahead of the main body separated by a distance equal to night run of enemy scouts plus night advance of own force.

In taking up positions for search operations, which would be the only probable use of the direct method, we may assume that the speed of the enemy scouts will be their economical speed, say twelve knots, the night run would therefore be approximately 144 miles. Assuming speed of own force as ten knots, the night advance of own force would be 120 miles. The distance between the advance scouts of the screen and the advance guard should be approximately 264 miles.

To guard against the Out and In method there must be a line of the screen not further ahead of the main body than the day-run of the enemy scouts plus day-run of own main body. Assuming enemy scouting speed as 20 knots the distance must not exceed three hundred and sixty miles. The advance guard can fulfil this condition.

To guard against the Retiring Search Method it will be necessary to have Flank Guards. For any given position it is possible to determine the course that an enemy must be steering to intercept the main force, assuming the scouts to be using the retiring search, when the point of departure and own speed are known and enemy speed assumed.

Knowing own main body speed and assuming enemy speeds of twenty to fifteen knots, the danger area can be calculated. Allowing for area covered by the main body and train and a factor of safety for visibility of smoke the length of the line to be covered by the flank guard can be calculated.

To guard against trailing there must be a line of the screen in rear of the main body at a distance not less than daylight run of scout minus daylight run of main body, equal to approximately 120 miles.

The sketch indicates the formation as it would be used by the Black Fleet under the above assumptions.

FORCES.

5 BB, 6 B, 23 S, 4 F, 8 E.

In addition to the Offensive Screen there would be required a force for "Protective Scouting", and when the area of probable destroyer attack is reached, for "Defensive Screening".

Enemy ships that can not be destroyed should be tracked.

PROTECTIVE SCREENING.

Unless the force available for screening operations is much superior in strength to the scouting force of the enemy, the operation of offensive screening is attended with much danger and a large chance of failure. In cases where the forces are nearly equal, or the screening force is inferior it is better to attempt to deny information of the location of the main body from a distance such that the exact location of the main body can not be accurately determined.

This operation is called Protective Screening and the Protective Screen is placed at a distance from the main body such that any enemy force approaching may be met and repulsed by a superior force before it can see the smoke of the main body. This distance will depend upon the strength of the force detached for the screen and will vary with the number of ships available, and the amount of arc around the main body that may be exposed to the enemy.

A Protective Screen is designed not only to give warning of the enemy's approach, but also to deny information to any enemy force weaker than his main body, and it must be the aim of the commander to block absolutely the passage of any such enemy forces. Such enemy forces as make contact with the screen should be pursued and destroyed if possible to do so without seriously reducing the efficiency of the screen.

If the force detailed for protective duty is not strong enough to fight to deny information to the enemy, its value lies in the information it can obtain of the enemy's scouting forces from which information the main body may be able to maneuver to avoid observation. In this case, the operation has merged into Protective Scouting.

The sketch shows the Blue Fleet and train enroute from Guam to a base further West, with a force detailed as a protective screen.

The doctrine of the Blue Protective Screen is as follows:

1. The position of the Protective Screen must be across the probable course of the enemy's search.
2. It must be at a distance from the screened force sufficient to stop the enemy's scouting ships beyond daylight sight contact of the smoke of the main body.
3. The object of the protective screen being to destroy the enemy's scouting efforts, it should be able to detect an enemy's approach without turning it back.

4. In rear of the observing force, in the outer line of the screen, there should be a force of sufficient strength so distributed that it may concentrate from several directions upon an approaching enemy.
5. Destroyers in the outer line of the screen have a two-fold mission (a) to detect and report approach of enemy scouts, (b) to attack enemy scouting force after nightfall.
6. As an observing force, destroyers occupy the outer line of the protective screen.
7. As an attacking force, destroyers in the outer line should be arranged in strong groups.
8. Upon contact with enemy, neighboring destroyer groups concentrate and keep touch with enemy preliminary to attack after dark.
9. Any enemy force seeking to penetrate the screen is the legitimate object of attack by destroyers of the screen, after dark.
10. It is impracticable to have the protective screen occupy its distant position from the main body during daylight and draw it in to a position in the defensive screen during dark.

The three lines of the Protective Screen are called:

- (a) Pickets,
- (b) Outguards,
- (c) Supports.

If there is an additional force for general support of the line of resistance it is called the Reserve. It would be centrally located, but nearer the van of the screen than the rear.

From the statement of the object of the Protective Screen, from the doctrine and from the sketch, it will be noticed that the dreadnaught battleships are placed as a support for the

screen. The use of such ships for screening can only be justified when the force protected is of vital importance to the successful issue of the campaign. This will be the case in a large oversea campaign in which the train and transports must be afforded the greatest security.

It is seldom that such a screen would surround a fleet unaccompanied by a train, for the exposure of major ships in the screen would not be justified if the protection they afforded was only for the benefit of weaker and less valuable ships of war.

The area to be covered by the Protective Screen is controlled by the course and speed of the main body but the distribution of ships in the screen should be modified to present the strongest force in the most probable area of contact with enemy ships.

The main body may be maneuvered within the protective screen in such manner as to prevent observation by enemy ships making contact with or partial piercing of the screen, it may by taking advantage of information from the screen avoid a force which successfully penetrates the screen.

The protective screen maintains its position during darkness and must during daylight hours be prepared for maximum speed at all times after an area of probable contact has been reached.

The main force must defend itself during darkness and for this object there must be a separate and distinct screen which is called the Defensive Screen.

The Defensive Screen.

The Defensive Screen is a close screen around the main body, train or whatever force is to be guarded, for the purpose of disclosing the approach of enemy vessels, especially torpedo craft, and of destroying such enemy vessels sighted.

The usual formation is circular or polyhedral, surrounding the forces to be guarded, in two or three lines. The outer line, called pickets, is composed of vessels of small value, but having good searchlights -- gunpower is valuable but not a necessity.

The second line, called outguards, composed of vessels of good anti-torpedo battery, such as small cruisers; a third line, called supports, of major ships.

The distance from the force to be guarded is dependent upon the number of vessels available. Vessels in the outer line should not be at a distance in excess of four thousand yards, less distance is preferable. This line should be at least ten thousand yards from the force guarded.

The cruisers in the second line should be about three thousand yards inside the pickets, and so situated that they command with guns the passages between pickets.

The supports should be about three thousand yards inside the cruisers, (outguards).

The force guarded should be in such formation that the ships of greatest value are inside. In case there are transports, the inner position should be assigned to them.

The formation of train, transports and battleships within the Defensive Screen, should be an open one. Distances of 1000 yards if possible. If the formation is of more than one column, the columns should be at intervals of at least four thousand yards.

Destroyers should not be considered available for use in a defensive screen. If there is a protective screen they should be detailed to that. If there is no protective screen, they should be used offensively against the enemy main force. In any case they should be so disposed as to make certain that they will not under any circumstances be mistaken for enemy destroyers. Their gunpower is small and the possibility of confusion due to mistaken identity is great and might be disastrous.

If present, they should be assigned a station well outside the screen or within the screen in such a position that they can not be mistaken for enemy destroyers.

Upon an enemy force being disclosed the pickets illuminate the force and use such gunpower as they have to destroy the attacking force.

The cruisers (outguards) fire at the attacking force which is illuminated by the searchlights of the pickets. When the attacking force had advanced beyond the power of the searchlights of the pickets, or in case the number of searchlights in the picket line is insufficient to illuminate all the attacking force, the outguards turn on their searchlights.

The supports continue to fire at the ships illuminated by pickets and outguards until the attack has reached the line of supports at which time they take up the illumination and fire is opened by ships of the main force.

In case the enemy destroyer attack is supported by battle-cruiser or other ships of good gunpower, they may attempt to prepare the way for the torpedo attack by attacking ships of the picket line and the outguards. Such an attack is disastrous to the screen, and major ships must be detached and directed to engage such enemy vessels. *Should be countered by sent mines at hand.*

Service of Security General.

^{above mentioned} The types of operations which constitute the Service of Security, have ~~now~~ been discussed. The typical forms discussed have considered the entire fleet as being available. In many minor operations the Service of Security is equally important but the force available is seldom adequate to any of the prescribed types. *Depending upon circumstances* In this case the forces available must be used offensively, protectively or defensively as the circumstances dictate.

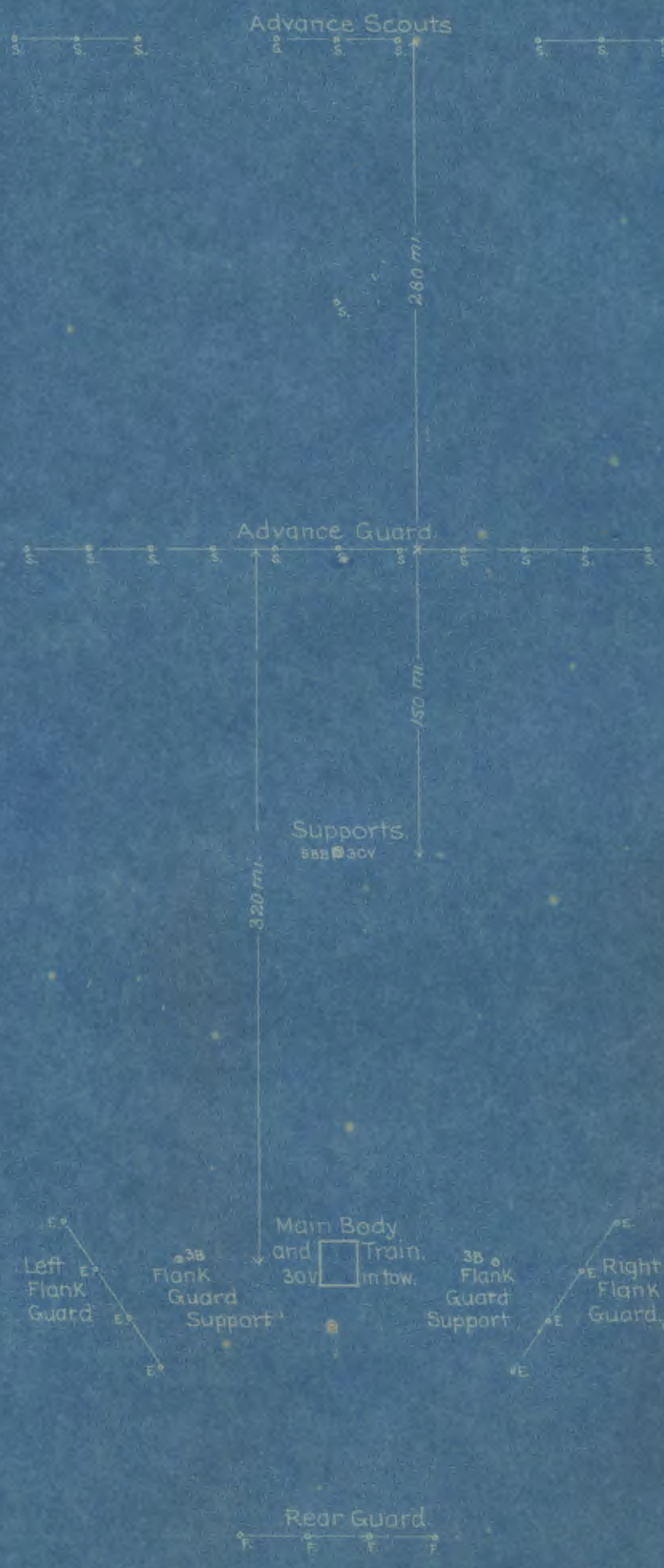
Offensive movements are preferable as they destroy enemy

ships or interfere with scouting operations. The dispersion of force in such operations must be carefully balanced with the chance of the enemy making contact with the screened force, in superior strength, during the absence of the screen.

Protective operations are the next in efficiency. If sufficient force is present, enemy scouts should be denied information of the force screened. If this is impossible, the enemy scouts should, several hours before dark, be driven outside of visibility of the smoke of the force screened.

Defensive operations are least efficient for the enemy being aware of the location and formation of the force at dark, can make his attack under the most favorable conditions.

(W. S. P.)
(July 28, 1914).



Screening Force
5 BB, 6 B, 4 F, 8 E, 2 S.

OFFENSIVE SCREEN.

