

HEAVY CRUISERS AS A DETACHED WING

533. The winning of a decisive engagement with a minimum of loss requires that every available weapon be brought to bear on the enemy battleline. When heavy cruisers are not required for the support of other light forces, and when battlelines are heavily engaged, heavy cruisers may be employed advantageously in firing on the flanks of the enemy battleline.

ATTACKS ON AIRCRAFT CARRIERS

534. During an engagement, cruisers, particularly heavy cruisers, should seize any opportunity to attack enemy carriers which become exposed.

COMMUNICATIONS

535. After action is opened, communications either by radio or visual cannot be expected to function as smoothly as when not under gunfire. Therefore unit commanders should endeavor to conduct their units so that a minimum of signalling is necessary, and individual ships, in the absence of signals, normally will conform to the movements of their unit commanders. Auxiliary signal stations and radio should be maintained in readiness and sufficient personnel to man them should be held in reserve.

536. In preparing for hostilities and action, particular care should be exercised:

- (a) That the communication organization and installation is so arranged as to facilitate and speed up the handling of encoded tactical signals, day or night.
- (b) That duplicate (separated) visual and radio material arrangements are kept ready to function, so that if one station is destroyed the other will function.
- (c) That circuit discipline, and the ability to shift frequencies with facility, without unauthorized emissions, are maintained.

FIRE DISTRIBUTION

537. The detailed gunnery doctrine for cruisers is stated in sub-type publications and should be carefully followed by 6-inch and 8-inch cruisers for their respective sub-types. The fire distribution of all cruisers should, however, be in accordance with the following general principles:

- (a) Divided fire should be used only when by reason of concentrations or inferiority in the number of our ships we cannot otherwise cover all necessary targets.
- (b) For heavy cruisers, concentrations greater than triple are not desirable. For light cruisers, concentrations greater than double are not desirable.

CHAPTER VI  
DAMAGE CONTROL

Reference: War Instructions, Chapter VIII, Section 1; F.T.P. 170; U.S.F. 11, Chapter IV.

GENERAL.

600. Damage control consists of the methods necessary to preserve watertight integrity, stability, and maneuverability; to control list and trim; to effect rapid repairs of material; to provide adequate protection from fire and chemical agents; and to facilitate care of wounded personnel.

601. The objective of damage control is the maintenance of the ship's maximum offensive power.

602. Training should be conducted with a view toward indoctrinating the operating personnel thoroughly and continuously in the approved methods of controlling damage, in order to make it fully a regular ship's activity with which the entire crew of officers and men are familiar and for which they hold themselves jointly responsible.

603. The control of damage is an integral part of combat efficiency and is of equal importance with other factors such as gunnery, engineering, and communications. Each of these factors must be given the attention and assigned the time and personnel necessary for its proper development.

604. Due to the light construction of cruisers the maintenance of flotation by watertight integrity and damage control is of primary importance. The design of cruisers is such that a torpedo or mine hit damages compartments almost all the way across the ship and results in very little list if the ship is properly conditioned, and therefore the greatest attention should be given to the upkeep of athwartship bulkheads and closures to the end that the water is prevented from spreading fore and aft from the damaged compartments. Commanding Officers should exercise the utmost care in the preparation of Damage Control Bills and Compartment Check-off Lists, and thoroughly train their crews in maintaining watertight integrity and in minimizing the extent of any damage.

605. The employment of heavy cruisers is apt to require these ships to cruise in Material Conditions Yoke and Zed for longer periods than other types. The Commanding Officers should give careful consideration to the maintenance of the efficiency of their crews during these periods. The classification of fittings for the setting of Material Conditions must be thorough and honest to the end that when the Commanding Officer or higher authority prescribes a Condition, it will be known to be both adequate for the occasion and dependable; while, on the other hand, such that permission, normally, should not have to be asked or granted to keep open (running) fittings required to be closed (stopped) by the Material Condition in effect. In wartime or simulated wartime, the Commanding Officer, in the interest of greater security, should direct the closing (stopping) of fittings in addition to those required to be closed (stopped) by the material condition in effect, if required by the tactical situation or permitted by the temperature or other operating conditions.

606. In unarmored ships it is particularly important that secondary ship control and gun control stations be prepared to take over effective action without interruption. Thus may be accomplished by isolation what cannot be accomplished by protection.

607. It is important that secondary power, lighting, and communication leads, and temporary replacements for these, be provided.

608. The ability to remain perfectly dark and silent is a valuable asset.

609. Personnel should be taught when not actively employed in action to seek the maximum shelter from gunfire, strafing, and splinters, if only temporarily, to the end that unnecessary casualties may be avoided. Personnel required at stations but not actively employed should be taught to lie down, relax, reduce the target area for splinters, increase body stability.

610. Special cognizance should be taken of the limitations of drills and of target practices in the habits of personnel. This is particularly important in the effect of bursting projectiles and own gunfire on unusual bearings. Provisions should be made particularly to avoid and minimize temporary deafness, and temporary blindness from glare at night.

CHAPTER VII  
INTELLIGENCE

GENERAL

Reference: War Instructions, Articles 602, 818-823, 10121; General Tactical Instructions, Article 55; U.S.F. 10; U.S.F. 11, Chapter I and III; U.S.F. 70.

700. One of the most important functions of cruisers in war is that of securing information of enemy forces; and thereafter of using in conjunction with the information as gained by the cruisers themselves, the information concerning the enemy in our theater of operations furnished by higher authority and others, together with the meteorological conditions in that area. All material available should be associated and evaluated for Combat Intelligence to assist the commander to visualize and estimate the enemy's situation in his theater of operations.

701. Each ship should have an intelligence detail to correlate, digest and evaluate all information so that the Commanding Officer may visualize the existing situation. This is especially important should a Commanding Officer find himself operating under circumstances not covered or contemplated by his orders or in case he should succeed to the command of a division or other unit.

ORGANIZATION

710. There should be detailed in each cruiser and each cruiser task force an organization of all its intelligence agencies.

711. In each cruiser an intelligence unit should be organized with as much permanency as possible, and the personnel should be specifically designated to perform intelligence duties as required. A procedure should be formulated covering the organization and functions of the intelligence unit in performing the duties which would be required of it during war. Training for this unit may be had in peace time cruising, chart problems and battle exercises.

WORK OF INTELLIGENCE UNIT

720. (a) Collect systematically information of all kinds concerning the war situation.
- (b) Determine or estimate the position of enemy forces relative to own forces.
- (c) It may be necessary to present the whole strategic situation or a localized part of it. Sometimes both will be necessary and must be maintained simultaneously. In case the number of observations justifies it, a special plot of radio bearings would be desirable.
- (d) Keep an intelligence journal so that important items of information will not be overlooked in situations involving operations extending over several days.
- (e) Develop the intelligence work sheet classified according to subjects.
- (f) File systematically despatches and reports so that they can be referred to readily. The work of the Intelligence Unit is described in detail in Chapter IV of ONI 19.

INTELLIGENCE ANNEX

730. An intelligence annex should be attached to Operation Orders when required. Decisive elements of information of the enemy should be designated. Channels for making reports of contact and of movements and dispositions should be indicated. Periodic Intelligence Bulletins and reports should be scheduled.

RESULTS OF SCOUTING

740. The reports and results of scouting to be valuable must be quickly available. The information they supply should be kept in such form as to be ready for use. Standard "Contact Codes" and the "Information of the Enemy" Section of the General Signal Book provide means for transmitting and interpreting information in terms that have been carefully selected and that are mutually understood by originator and addressee.

ENEMY INFORMATION

750. In making enemy information reports, the provisions of U.S.F. 11, Chapter III must be thoroughly understood and carefully followed. Particular attention is directed to paragraphs 2, 4, 7, 9, 10 and 12 of that chapter.

INFORMATION AGENCIES

760. Other than expertness in the details of sight contact and in the measurement of ranges and bearings by instruments, attention should be given to using secondary means:

(a) Silhouette and Horizon Method of Estimating Ranges:

A position in the forward control station of a cruiser provides the height necessary to use this method to advantage.

(b) Radio:

In addition to the common ship use of this equipment there are valuable possibilities in connection with scouting lines and shore stations; and in the quality and quantity of radio activity. Valuable and significant information as well as misleading information often comes by radio broadcasts.

(c) Sonic and Supersonic Equipment:

The most probable application of this equipment to cruiser work will be at night and during low visibility.

(d) Cryptanalysis:

Cruisers should observe and forward intercepted enemy despatches which are estimated to be important and of value to a decrypting unit. Special instructions may be expected for guidance in collecting and forwarding such information and material.

(e) Aerological Analysis and Weather Prediction:

The Aerological Unit provides a service that is of great value in planning and carrying out operations. The meteorological data of cruisers widely dispersed is of great value to the Aerological Unit making the forecast. Instructions covering the making of weather reports should be included in

the Intelligence Annex to an operation order if such reports are considered of particular value in accomplishing the mission. Such instructions should be based on the following considerations:

- (1) Messages probably must be by radio.
- (2) They should be sent out in a cryptographic system so as to deny such information to the enemy. Messages should be short so as to minimize the possibility of obtaining radio bearings.
- (3) A minimum number of reports should be sent; only a sudden change of general conditions would warrant a report.
- (4) Messages should not be written in standard form. In this connection special weather codes are now being developed.
- (5) The question of whether the information transmitted would be of more value to the cruiser command than disclosing own position to an enemy should be carefully considered.
- (6) In peacetime operations where planes are actually being used, or it is anticipated that they will be used, considerable latitude should be observed in the use of radio in order to insure the safe operation of aircraft in the open sea. Outlying cruisers should report adverse conditions if occurring suddenly or such weather information as is believed to be of value to aircraft in the interests of safety.

761. One of the most valuable accomplishments of cruiser personnel is the ability to recognize enemy and friendly ships and aircraft on sight at long distances, quickly at night. Instruction of officers and lookouts by silhouette and actual observation is mandatory.

(BLANK)

CHAPTER VIII  
COMMUNICATIONS

NO TEXT