

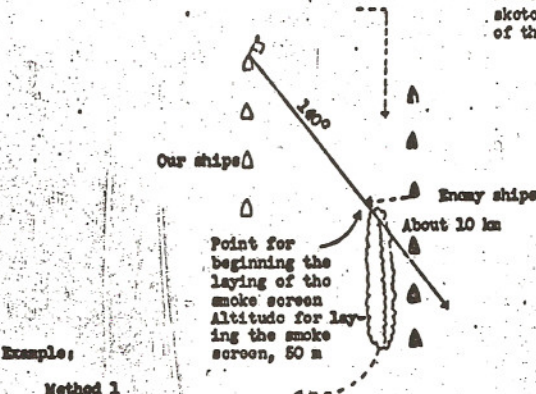
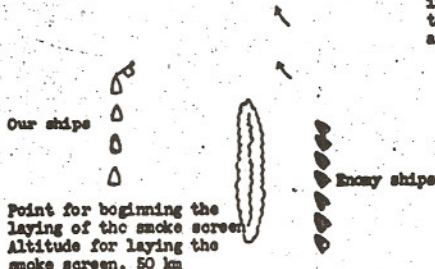
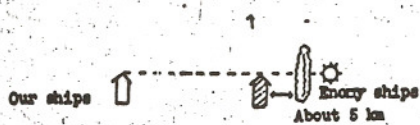
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(8) Preparation, dispatch, rendezvous and commencement of smoke screen laying by airplane smoke screen units.

PREPARATION	DISPATCH	RENDEZVOUS	COMMENCEMENT OF SMOKE SCREEN LAYING
When smoke screen airplanes are to be used, the fleet commander in chief will direct in advance the unit and number of airplanes to be used. The commanding officer of the air flotilla will prepare the smoke screen airplanes in accordance with the above.	The fleet commander in chief normally will order specially the time of arrival of the airplane smoke screen unit over the Main Body (BattleShip Force). In the absence of special orders, the commanding officer of the air flotilla will dispatch the airplane smoke screen unit over the Main Body (BattleShip Force) not later than 20 minutes before the opening of the intended gun action.	Smoke screen units will rendezvous within the effective range of the antiaircraft machine guns (about 2,000 m) on the disengaged side of the Main Body (BattleShip Force) and at an altitude of 300 m or less.	According to orders for the beginning of the laying of the smoke screen.

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(4) Methods of laying smoke screens

MESSAGE	MOVEMENTS AND PROCEDURES OF AIRPLANE SMOKE SCREEN UNITS
Method 1 (The point for beginning the laying of the smoke screen will bear degrees on the flag-ship.)	A smoke screen will be laid as shown in the sketch below in order to attack one element of the main enemy force.  Example: Method 1 Bearing of the point for beginning the laying of the smoke screen, 140°.
Method 2	A smoke screen will be laid as shown in the sketch below in order to envelop the entire main enemy force and to attack enemy auxiliary forces.  Example: Method 2
Method 3	A smoke screen will be laid as shown in the sketch below in order to envelop the entire main enemy force and to attack enemy auxiliary forces.  Example: Method 3
Method 4	A smoke screen will be laid as shown in the sketch below in order to cover the background of the main enemy force, thereby facilitating our attack.  Example: Method 4

(TN Exact tracings from the original document.)

(TN Translation of conventional signs and abbreviations.)

△ - flagship

□ - naval force including capital ships

(6) Communications

MESSAGE	MOVEMENT AND PROCEDURE OF AIRPLANE SMOKE SCREEN UNITS
Prepare to lay smoke screen	Preparing to lay a smoke screen, advance from rendezvous to proper position in the path of the main enemy force, between the opposing main forces.
Begin to lay smoke screen	1. Method 1 Quickly begin moving from rendezvous and begin to lay smoke screen when on the indicated course. 2. Methods 2, 3 and 4 Begin laying smoke screen when directed by the commanding officer of the airplane smoke screen unit.
Stand by to lay smoke screen	Wait orders to lay smoke screen, manoueuering in suitable formation.
Stop laying smoke screen	Leave the scene of operations and return to carrier.

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O. ELECTRIC RANGING

By electric ranging is meant the employment of electric waves and invisible rays for detection and ranging. Electric ranging equipment includes the nocto-vision, television, radar, and radar intercept sets used in electric ranging.

1. General Rules

a. Since devices which radiate electric waves, light rays, etc, and carry on search and ranging by means of the reflected waves are likely to disclose our position, serious consideration must be given to the qualities of enemy devices and our own and their use must be adapted to the enemy situation and to weather and terrain.

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b. Devices which utilize enemy-radiated electric waves, invisible rays, etc, to discover the location of the enemy or which determine that the enemy is using such devices will be used to the fullest extent when alert is necessary.

c. In electric ranging it is essential to detect deceptive measures which the enemy may be employing and to get a true picture of the general situation by good judgment and by making allowance for circumstances.

d. In evading, simulating or jamming electric ranging, consideration will be given to the qualities of our own and enemy devices and aggressive use will be made of those which can be expected to be effective.

It is often very effective to use simulated ranging or jamming while conducting diversionary feinting movements.

11. Radar Detection and Ranging

a. Detection and ranging by means of radar and radar-intercept sets will be adapted to the enemy situation, weather, visibility, etc. It will be employed according to the following standards.

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ENEMY SITUATION*	OUTLINE FOR EXECUTION
When alert against enemy submarine is the chief concern	1. Constant intercept will be carried out. 2. When planning on aggressive attack, search radar will be used only when visibility is poor.
When within patrol range of large-type enemy airplanes	1. Constant intercept will be carried out. 2. Search radar will be used only when visibility is poor.
When there is danger that enemy surface warships may be near but not in sight	1. Every effort will be made to detect enemy search radar and to determine enemy bearing therefrom. 2. Search radar will be used when (TW Portion missing; presumably "when visibility is poor.")
1. When within attack range of large-type enemy airplanes 2. When there is danger that an enemy aircraft carrier may be in the vicinity	Constant intercept will be carried out.
When enemy surface warships have been sighted	1. Radar of ships which are firing will be used chiefly for ranging. 2. Radar of ships which are not firing will be used chiefly to search for airplanes and ships.
1. When .. (TW Portion missing,) tracking of large enemy airplanes 2. When sighted by enemy carrier-borne airplanes 3. When within attack range of an enemy aircraft carrier	1. All radar will be concentrated on search for airplanes. 2. Intercept will be carried out.
During antiaircraft combat	Same as the above, except that antiaircraft radar will be used for ranging against airplanes.

b. Radar ranging will be carried on by each ship. Radar search normally will be consolidated in forces moving as a group within visual signaling range of each other.

c. Shore-based radar normally will be used for ordinary search. Emphasis will be placed on bearings and times at which the enemy is most likely to appear.

d. Airborne electric-ranging devices will be used aggressively according to their capabilities.

e. Search and ranging effected by means of radar and radar intercept devices will be correlated closely with visual ranging using optical instruments. On bearings where lookout is difficult because of distance, darkness, (TH Portion missing.), cloud cover, sun glare, etc., and where blind spots are likely to develop, radar ranging will be used chiefly. Visual ranging will be chiefly used against targets at close range and against airplanes which rush in in great numbers simultaneously from different directions.

Page 14/79 (TH Top half of page missing. Heading in middle of page reads "General action reports and urgent action reports". Remainder not translatable because of missing portions.)

END OF PART VII

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