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CURRENT TACTICAL ORDERS



BATTLESHIPS



1934

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U. S. F. 16

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CURRENT TACTICAL ORDERS

BATTLESHIPS

1934

U. S. F. 16

UNITED STATES FLEET
BATTLESHIPS, BATTLE FORCE
U. S. S. WEST VIRGINIA, Flagship

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San Pedro California,

3 December, 1934.

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9. This publication supersedes those listed in the record of superseded publications, letters, and instructions, page IV. These will be destroyed by burning or deleted from active publications in which they occur.

T. T. CRAVEN.

RECORD OF SUPERSEDED PUBLICATIONS,
LETTERS AND INSTRUCTIONS

Letter, Publication, or Instructions	Superseded by Order No.	AUTHORITY AND DATE
Combatships Letter A16-3(5619) of 14 September, 1934.	1—I	Promulgating letter for U. S. F. 16
Combatships Letter A16-3(1147) of 16 September, 1934.	1—II	Promulgating letter for U. S. F. 16
Combatships Letter S83(2780) of 3 May, 1934.	2—I	Promulgating letter for U. S. F. 16
Paragraph 306, Aircraft instructions, Battleships, Battle Forcé.	2—I	Promulgating letter for U. S. F. 16
Any other previous letters or instructions concerning aircraft recovery issued by Commander Battleships.	2—I	Promulgating letter for U. S. F. 16
Combatships Letter 10—34.	3—I	Promulgating letter for U. S. F. 16

TABLE OF CONTENTSCHAPTER 1GENERAL TACTICAL

<u>Order</u>	<u>Pages</u>	
1—I	1—1	Tactical handling of the battle line upon deployment.
1—II	1—2	Tactical Organization—Battleships.

CHAPTER 2.AVIATION

2—I	2—1—4	Aircraft Recovery.
2—II	2—5—8	Observation Wing Patrols.

CHAPTER 3.COMMUNICATIONS

3—I	3—1	Radio Direction Finder—Use of to locate aircraft.
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CONFIDENTIAL

1—I. TACTICAL HANDLING OF THE BATTLE LINE UPON DEPLOYMENT

1. Upon deployment of the Battle Line, Battleship Division Commanders will maintain the line of bearing of battleship division guides from the Battle Line guide normal to the enemy (or to the signalled General Bearing Line when not in sight contact with the enemy).

2. The center or van center division will be the Battle Line Guide for the purpose of carrying out the instructions in paragraph one, unless another guide or base unit is specifically designated by signal.

1—II TACTICAL ORGANIZATION—BATTLESHIPS

1. Battleships, United States Fleet, when operating as one tactical unit, will habitually be organized as follows:

Strong Division—Batdiv Four.
First Intermediate Division—Batdiv Three.
Second Intermediate Division—Batdiv Two.
Weak Division—Batdiv One.

The Fleet and Force Flagships will normally join, maneuver, and fight with the divisions to which they are assigned.

2. "Natural Order" is defined as:

1. Strong Division.
2. Weak Division.
3. Second Intermediate Division.
4. First Intermediate Division.

3. "Inverted order" is the reverse of the above order.

4. Whenever the phrases "Divisions arranged in order of strength" or "Order of divisions right (left) to left (right) in order of strength" are used, or appear in signals, the count shall begin with the strong division and proceed in descending order of strength.

CONFIDENTIAL2—I AIRCRAFT RECOVERY

1. The procedures hereafter prescribed for aircraft recovery are to be used under normal sea conditions. In heavy weather higher speed on the turns and turns up to 420° may be desirable. In smooth weather it may be unnecessary to make a slick. The officer conducting the recovery may modify the standard procedures as judgment dictates, in order to expedite the maneuver and insure SAFE recovery.

2. The principal requirements for successful aircraft recovery at sea are:

- (a) Large area of smooth water.
- (b) Long part of slick in direction of wind.
- (c) Ship in such a position that planes are not required to head directly toward the ship while landing.
- (d) Slick to leeward of ship so that plane may taxi alongside upwind.
- (e) A good lee with little motion on the ship for hoisting.
- (f) A formation which insures:
 - (1) That the slick is not crossed by the active wakes of adjacent ships.
 - (2) That adjacent ships DO NOT interfere with landing of aircraft.

3. BAKER METHOD.

- (a) Signal—"PREPARE TO PICK UP AIRCRAFT, SHIP(S) STOPPING", side for recovery to be indicated by same signal.
- (b) Signal—"RECALL AIRCRAFT."

All ships:

- (1) Hoist aircraft recall at main yard arm on side of recovery.
- (2) Recall aircraft by searchlight.
- (3) Recall and home aircraft by radio when radio silence does not prohibit.
- (4) Signal—"READY TO PICK UP" when planes are over ship and ship ready to recover.
- (c) Take formation suitable for recovery on course 45° from true wind.

- (d) (1) Signal—"BAKER" at the dip at the fore truck when all ships have reported ready to pick up. This signal indicates "I will shortly maneuver to recover aircraft, ship stopping".
- (2) Haul down guide flags and aircraft recall when "BAKER" is broken.
- (e) Signals—
 - (1) "SHIPS RIGHT (LEFT)," to a course which meets the general requirements previously stated. Normally a 90° turn is suitable.
 - (2) "BACK".
 - (3) "ACT INDEPENDENTLY".
- (f) (1) Execute signal—"SHIPS RIGHT (LEFT)". The angle of turn executed may be varied by Commanding Officers within small limits, giving due consideration to maneuvering qualities of different ships, conditions of wind and sea and general safety.
- (2) Two Block "BAKER" this signal signifies "I have begun recovery maneuver". Planes will get into position to land as soon as slick has formed and ship has swung clear.
- (g) Execute signals—"BACK" and "ACT INDEPENDENTLY" when about 45° from new course. Planes land and ships pick up. During pick up all ships shall employ red and green flags to signal aircraft. Display of red flag will mean "Ship not ready—plane keep clear"; display of green flag "Ship ready—plane come alongside."
- (h) Each ship—
 - (1) Break "AFIRM" at dip at fore truck and haul down "BAKER" when last plane has landed.
 - (2) Two block "AFIRM" when ready to proceed and when adjacent ship away from division flagship has two blocked.
- (i) Division flagships two block "AFIRM" when division is ready to proceed.
- (j) Flagship of officer conducting recovery:
 - (1) Two block "AFIRM" when all ships participating are ready to proceed.
 - (2) Break guide flag and haul down "AFIRM" when formation is ready to proceed.
- (k) Other ship follow maneuvers of Officer Conducting Recovery in hoisting guide flags and hauling down "AFIRM".

4. CAST METHOD.

- (a) Signal—"PREPARE TO PICK UP AIRCRAFT BY PLANE NET", side for first recovery to be indicated by same signal.
 - (b) Signal—"RECALL AIRCRAFT".
- All ships:
- (1) Hoist aircraft recall at main yardarm on side of first recovery.

- (2) Recall aircraft by searchlight.
- (3) Recall and home aircraft by radio when radio silence does not prohibit.
- (4) Signal—"READY TO PICK UP" when planes are over ship and ship ready to recover.
- (c) Take formation suitable for recovery, (line of bearing of ships of each division normal to true wind is a satisfactory one).
- (d) Take course 45° from true wind and speed not less than 12 knots.
- (e) (1) Signal—"CAST" at the dip at fore truck when all ships have reported ready to pick up. This signal signifies "I will shortly maneuver to recover aircraft, using plane nets".
- (2) Haul down guide flags and aircraft recall when "CAST" is broken.
- (f) At MINUS ONE MINUTE hoist signals—
 - (1) "SHIPS RIGHT (LEFT)," to a course which meets the general requirements previously stated. Normally a 90° turn is suitable.
 - (2) Speed signal to give ship approximately 10 knots through water during recovery.
- (g) (1) At ZERO time, execute signal "SHIPS RIGHT (LEFT)".
- (2) Two block "CAST"—This signal signifies "I have begun recovery maneuvers". First plane will get into position to land as soon as slick has formed and ship has swung clear. Plane must land in slick and follow curve of slick to lee quarter, attempting to cut across in a straight line will delay the recovery and probably damage the plane and propeller.
- (h) Execute speed signal (f) (2) above when about 45° from new course.
- (i) Each ship haul down "CAST" when own plane is hoisted in over ship and adjacent ship away from division flagship has hauled down.
- (j) Division flagships haul down "CAST" when division has hauled down.
- (k) Flagship of officer conducting recovery haul down "CAST" when all ships participating have hauled down.
- (l) Take speed of not less than 12 knots. Make signal and execute when last "CAST" is hauled down.
- (m) Repeat (d) through (l) until all planes are recovered.
- (n) Each ship—
 - (1) Break "AFIRM" at dip at fore truck and haul down "CAST" after last plane has landed.
 - (2) Two block "AFIRM" when ready to proceed and when adjacent ship away from division flagship has two blocked.

- (o) Division flagships two block "AFIRM" when division is ready to proceed.
- (p) Flagship of officer conducting recovery:
 - (1) Two block "AFIRM" when all ships participating are ready to proceed.
 - (2) Break guide flag and haul down "AFIRM" when formation is ready to proceed.
- (q) Other ships follow motions of Officer Conducting Recovery in hoisting guide flags and hauling down "AFIRM".

5. During battleship aircraft operations the following reports will be made immediately by Commanding Officers to division commanders and by division commanders to the officer conducting the operations, using general signals.

- (a) "Number of planes launched".
- (b) "All aircraft recovered or accounted for" or number which are accounted for.

6. Any Commanding Officer who, after two blocking "BAKER" or "CAST", desires that aircraft DO NOT land will immediately haul that flag down TO THE DIP. This signal will indicate to the aircraft that landings WILL NOT BE attempted on the present recovery maneuver and pilots will keep their planes in the air until the governing flag is again displayed at full hoist.

2—II OBSERVATION WING PATROLS

1. While GUNNERY OBSERVATION is the primary mission of aircraft of the Observation Wing, situations will require their use as patrols and when so used, the following orders will govern:

(a) All distant patrols will be conducted by planes operating in pairs.

(b) The following table indicates the fuel endurance of planes and specifies the length of the watch for patrols, unless the latter is changed by specific orders.

TABLE ONE

<u>EQUIPMENT</u>	<u>FUEL</u>	<u>ENDURANCE</u>	<u>Normal Watch</u>
Radio alone	110 Gal.	03U-3 seaplane 5½ hrs.	(3 hours
		03U-1 amphibian 4½ hrs.	(3 hours
Machine guns and Radio	110 Gal.	03U-3 seaplane 5 hrs.	(3 hours
		03U-1 amphibian 4 hrs.	(3 hours
Bombs and Radio	110 Gal.	03U-3 seaplane 5 hrs.	(3 hours
		03U-1 amphibian 4 hrs.	(3 hours
Machine guns, Bombs, and Radio	77 Gal.	03U-3 seaplane 4 hrs.	(2 hours
		03U-1 amphibian 3 hrs.	(2 hours

(c) Commander Battleships will designate by general signal the equipment to be carried.

(d) Division Commanders will maintain patrols in the sectors assigned to their respective divisions. When any pair of planes is made up from two ships, the senior aviator shall be placed in charge.

(e) The point of origin of all patrol sectors is the FLEET GUIDE and all angles are measured to the right from the FLEET COURSE.

(f) All planes not actually on patrol will be maintained in readiness for launching on thirty minutes notice for gunnery observation, or for the formation of an attack group.

(g) If radio silence is not ordered, each ship will establish communication with own planes immediately after launching. Communication will be reestablished at intervals not greater than thirty minutes, but not more frequently than every ten minutes to insure reliability. No other transmissions will be made except contact reports, or in case of emergency.

(h) Bombing and strafing attacks will be confined to light craft against which attacks may be effective.

(i) No reliefs will be accomplished on station; relief watches will be launched at approximately the same time as recoveries of the previous watches are made.

(j) AIRCRAFT SHALL BE OVER PARENT SHIPS READY FOR RECOVERY AT THE TERMINATION OF THEIR WATCH.

(k) Unless otherwise signalled the method of recovery will be at the discretion of Division Commanders.

(l) The instructions in Current Tactical Orders, U. S. Fleet, 1934, and Current Tactical Orders, Aircraft, U. S. Fleet, 1934, will be complied with by aircraft while maintaining patrols.

2. The following standard patrols are prescribed for the Observation Wing:

(A) OUTER-AIR PATROLS.

(a) Signal—Establish outer-air patrol, plan to be indicated by numeral. Unless otherwise prescribed the radius will be twenty-five miles.

FOUR BATTLESHIP DIVISIONS PRESENT IN A FLEET DISPOSITION

In compound formations, CENTER DIVISIONS are defined as those divisions with the least angular displacement from the FLEET AXIS on either side. The terms, VAN CENTER and REAR CENTER divisions are used to identify the interior divisions in simple formations.

PLAN ONE—Complete circular patrol.

Right flank or rear division assigned sector, 90° to 180° ;

Right center or rear center division, 180° to 270° ;

Left center or van center division, 270° to 360° ;

Left flank or van division 0° to 90° ;

PLAN TWO—Semi-circular patrol 0° to 180° from the Fleet Axis.

Right flank or rear division assigned sector, 135° to 180° ;

Right center or rear center division, 90° to 135° ;

Left center or van center division, 45° to 90° ;

Left flank or van division, 0° to 45° .

PLAN THREE—Semi-circular patrol 180° to 360° from the Fleet Axis.

Right flank or rear division assigned sector, 180° to 225° ;

Right center or van center division, 225° to 270° ;

Left center or van center division, 270° to 315° ;

Left flank or van division, 315° to 360° .

PLAN FOUR—Semi-circular patrol 270° to 90° from the Fleet Axis.

Right flank or rear division assigned sector, 45° to 90° ;

Right center or rear center division, 0° to 45° ;

Left center or van center division, 270° to 315° ;

Left flank or van division, 315° to 360°.

PLAN FIVE—Semi-circular patrol 90° to 270° from the Fleet Axis.

Right flank or rear division assigned sector, 90° to 135°;

Right center or rear center division, 135° to 180°;

Left center or van center division, 180° to 225°;

Left flank or van division, 225° to 270°.

THREE BATTLESHIP DIVISIONS PRESENT IN A FLEET DISPOSITION

PLAN ONE—Complete circular patrol.

Right flank or rear division assigned sector, 0° to 120°;

Center division, 120° to 240°;

Left flank or van division, 240° to 360°;

PLAN TWO—Semi-circular patrol 0° to 180° from the Fleet Axis.

Right flank or van division assigned sector, 0° to 60°;

Center division, 60° to 120°;

Left flank or rear division, 120° to 180°.

PLAN THREE—Semi-circular patrol 180° to 360° from the Fleet Axis.

Right flank or rear division assigned sector, 180° to 240°;

Center division, 240° to 300°;

Left flank or van division, 300° to 360°.

PLAN FOUR—Semi-circular patrol 270° to 90° from the Fleet Axis.

Right flank or rear division assigned sector, 30° to 90°;

Center division, 330° to 30°;

Left flank or van division, 270° to 330°.

PLAN FIVE—Semi-circular patrol 90° to 270° from the Fleet Axis.

Right flank or rear division assigned sector, 90° to 150°;

Center division, 150° to 210°;

Left flank or van division, 210° to 270°.

TWO BATTLESHIP DIVISIONS PRESENT IN A FLEET DISPOSITION

PLAN ONE—Complete circular patrol.

No attempt will be made to conduct a complete circular patrol with less than THREE battleship divisions present.

PLAN TWO—Semi-circular patrol 0° to 180° from the Fleet Axis.

Right flank or van division assigned sector, 0° to 90° ;

Left flank or rear division, 90° to 180° ;

PLAN THREE—Semi-circular patrol 180° to 360° from the Fleet Axis.

Right flank or rear division assigned sector, 180° to 270° ;

Left flank or van division, 270° to 360° .

PLAN FOUR—Semi-circular patrol 270° to 90° from the Fleet Axis.

Right flank or van division assigned sector, 0° to 90° ;

Left flank or rear division, 270° to 360° .

PLAN FIVE—Semi-circular patrol 90° to 270° from the Fleet Axis.

Right flank or van division assigned sector, 90° to 180° ;

Left flank or rear division, 180° to 270° .

(B) INNER-AIR PATROLS.

(a) Signal—Establish inner-air patrol, plan to be indicated by numeral. Unless otherwise prescribed the radius will be FIVE miles, and in this type patrol only one plane per sector will be used.

(b) The sector assignment for inner-air patrols are the same as those given previously for outer-air patrols.

3—I RADIO DIRECTION FINDER—USE OF TO LOCATE AIRCRAFT (Supplementary instructions to Part IV, USF-10)

1. When occasion arises to pilot aircraft back to the ship, a responsible officer aboard ship, preferably the Communication Officer, will be charged with homing the plane. He shall supervise the taking of bearings and issue all instructions to the plane.

2. It will always be assumed that the first bearing of the plane is bilateral and that the plane may be either side of the direction finder. The plane will be directed to fly on a course 90° from the line of this bearing, preferably in the direction of land, until the change of bearing indicates clearly on which side the plane is. The plane will then be given the true course to rejoin, and will be required to repeat same back to the ship. Bearings will be taken frequently thereafter to check and furnish corrections to the course given the plane if necessary. The plane will check courses given using the homing device.

3. Particular attention must be paid to the wording of instructions to the pilot to eliminate any possibility of misinterpretation. Instructions to the pilot will always contain the true bearing of the plane to the ship and omit any reference to the bearing of the plane.

If the plane are not available, the pilot will carry out the same navigation with the homing device, i. e.—after determining the bearing, fly on a course 90° until the change of bearing indicates clearly the

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3. Particular attention must be paid to the wording of instructions to the pilot to eliminate any possibility of misinterpretation. Instructions to the pilot will always contain the true course for the plane to the ship and omit any reference to the bearing of the plane.

4. If radio bearings of the plane are not available, the pilot will carry out the same navigating procedure as above using his homing device, i. e.—after determining the bearing, fly on a course 90° from this line (preferably toward land) until the change of bearing indicates clearly the true direction of the ship.

5. Except in wartime, whenever a ship is engaged in locating a plane, all other radio communications shall be subordinate to those necessary for the operation and antenna opened as necessary to obtain accurate bearings.