CHAPTER V.

APPROACH, DEPLOYMENT AND BATTLE MANEUVERS.

Section 1. THE APPROACH.

(FTP 143, Par. 1209-1215)

5101. THE APPROACH OF THE BATTLE LINE will be conducted in such a manner as to—

(a) Enable all ships to open fire promptly.
(b) Enable rapid deployment at right angles to, or within sixty degrees of the axis.
(c) Prevent an enfilade by the enemy.

Section 2. THE DEPLOYMENT.

5201. Commander Battle Line will deploy the battle line on the fleet deployment course as signaled by the Officer in Tactical Command.

5202. Methods of deploying the battle line by the use of "Deploy" signals are illustrated in Plates 9, 10 and 11. The first movement of all divisions in response to any "Deploy" signal is a division column change to the deployment course. Subsequent movements of divisions other than the base unit are always by division column movement unless signal is made directing that simultaneous turns are to be used. This latter method is sometimes desirable to develop maximum gunfire during the deployment maneuver.

5203. The Battle Line will be in Battle Formation when:

(a) A signal to that effect has been executed.
(b) A Battle Line deployment signal has been executed.

5204. When a redeployment is ordered by the Officer in Tactical Command, the Commander Battle Line will redeploy the battle line on the new fleet deployment course.

5205. The general signal "Battle Line is no longer in Battle Formation" places the Battle Line in the compound formation at natural interval existing at the time the signal is executed and requires divisions to assume exact stations as rapidly as practicable.

Section 3. MANEUVERS IN BATTLE FORMATION.

5301. GENERAL RULES for maneuvers given in Articles 2101 to 2119, apply to Battle Formations.

5302. FOLLOW THE LEADER. Ships of each division will follow their leaders in course and speed changes being alert to detect such changes should they be made without signal. Further, when in division line of bearing, ships of the division will form column promptly on the division guide, without further orders, when a signal is made requiring a column change of course by the division, or should the division guide change course without signal. It is incumbent on Division Guides to indicate promptly their inability to keep station in the Battle Line in order that the Battle Line will not be thrown into confusion by ships following such disabled leaders. FTP 143, Chapter XII, Section 12.

5303. LATITUDE IN MANEUVER OF SHIPS. Individual ships will maintain station on the division guides, except as provided in FTP 143, Paragraphs 874 and 1280. Commanding officers must keep ships well closed up in order that division commanders may have ample sea room for maneuvers or action in accordance with article 5304.
CHAPTER VI.

COMMUNICATIONS.

Section 1. RADIO DIRECTION FINDER PROCEDURE.

6101. Organization to secure navigational data and gain information of the enemy while in cruising or approach disposition will be effective on orders from Commander Battle Line or higher authority. Tracking will be discontinued upon deployment or when directed by authority initiating the tracking order.

6102. The flagship of Commander Battle Line is normally the Direction Finder Center.

6103. (a) Group One consists of the leading ship of each division, and is responsible for the search, detection and taking of bearings of enemy transmissions in the frequency band 100 to 225 kilocycles.
(b) Group Two consists of the second ship of each division, and is responsible for the search, detection and taking of bearings of enemy transmissions in the frequency band 225 to 550 kilocycles.
(c) Group Three consists of the third ship of each division, and is responsible for the search, detection and taking of bearings of enemy transmissions in the frequency band 550 to 1500 kilocycles.

6104. Communication with the Direction Finder Center will be governed by the radio and visual conditions in effect. When the radio and visual conditions in effect prohibit transmission of direction finder bearings during darkness, tracking will be continued and the latest information forwarded at daylight.

6105. Reports of bearings to the Direction Finder Center should include the following information in the order listed:
1. True bearing. 2. Frequency. 3. Call sign of transmitting station if obtained. 4. Time bearing was obtained.

6106. In designating direction finder frequencies or targets, and in reporting bearings, signals from the General Signal Book or Communication Procedure Signals will be employed.

Section 2. LOST PLANE AND HOMING PROCEDURE.

6201. Battleship lost plane and homing procedure is laid down in USF-75, Volume Two.

Section 3. SQUADRON ORGANIZATION. (See article 1107)

6301. When the battleships are organized and disposed as two squadrons, the squadron unit frequencies are:— for squadron ONE those prescribed for "batship squadron, left flank"; and for squadron TWO those prescribed for "batship squadron, right flank" in the current "U. S. Fleet Radio Frequency Plan." When such frequencies are not provided, the squadron commander will employ his normal administrative division frequency as the squadron unit frequency.

Section 4. FLEET DISPOSITIONS. (See article 4102)

6401. When a ship, division or squadron is acting as a station unit the commander of such unit shall maintain a continuous watch on the Task Force Commander's Circuit, in order that he may receive and take action on all maneuvering signals transmitted over that circuit. When so disposed, such signals will not be repeated over the battle line circuit. In order that station unit commanders may have control of their units by radio, such commanders, when division or squadron commanders, are authorized to employ their assigned division or squadron frequencies as appropriate, observing the radio conditions in effect.

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CHAPTER VII.

PLATES AND TABLES.

7101. The following plates are illustrative of typical maneuvers for the several compound formations and for deployment by use of DEPLOY signals. No plates are shown of those maneuvers, the evolutions of which are obvious from the descriptions given in FTP 142 and 143 and this publication. Most of the typical maneuvers in the plates are from one formation to another formation completed on the same course. Cases will arise requiring the final course to be different from the present course. In such cases Article 2110 applies.

7102. The division of three battleships is shown as the evolution unit, ships being at standard distance and divisions at standard interval.

7103. Speeds are indicated as FS, SS, 2/3, etc.

7104. Divisions are lettered at the beginning of the maneuver from van to rear, or from right to left: A, B, C, D. Subsequent positions of the divisions are lettered A', B', C', D'; A'', B'', C'', D''; etc. Base unit in each plate is shown in black.
MANEUVERS FOR COLUMN OF DIVISIONS.

TO FORM LINE OF DIVISIONS OR LINE OF BEARING OF DIVISIONS.

CASE: Interior division as base unit on present course.

NOTE: The procedure given below should not be used in cases where units ahead of the base unit are required to drop back their bearing more than 90°. Those cases would be covered by Article 2118.

When the base unit is an interior division, the division guides ahead (or to the right) of the base unit form on the prescribed bearing; division guides to the rear (or to the left) of the base unit form on the reciprocal of the prescribed bearing.

SIGNAL: Form with division guides bearing as indicated (indicating bearing and designating base unit).

Base unit take speed indicated (indicating speed, if desired that base unit take other than standard speed).

Steam at speed indicated for the maneuver (addressed to units in rear of base unit and indicating speed if desired that they take other than full speed).

MOVEMENTS REQUIRED.

Base unit, division B or C, maintains present course at standard speed (or speed indicated).

Division A.

To form line: Changes course (Table II) 90° to right (or left) at speed of base unit and resumes former course at the appropriate time to take new position on the line.

To form line of bearing: Changes course (Table II) to right (or left) to bearing indicated, at speed of base unit, and resumes former course at the appropriate time to take new position on the line of bearing.

Other Divisions.

To form line or line of bearing: If division C is base unit Division B continues on present course at speed of base unit and changes course to follow in the wake of division A, resuming former course at the appropriate time to take new position.

Divisions in rear of base unit.

Divisions C and D, or division D, take full speed (or speed indicated) and change course to left (or right) an amount determined by Table III or by the maneuvering board solution for the speed ratio prescribed, taking speed of base unit and resuming former course at the appropriate times to take new positions on the reciprocal of the prescribed bearing.

Upon completion of the maneuver, the formation will retain speed of base unit until another speed is ordered.

(a) The movements of Divisions C-D in Figure I and of D in Figures II and III are illustrative of the evolutions of units in the rear when line or line of bearing is formed on the leading division.

(b) The movements of Division A in Figure I and of A and B in Figure II are illustrative of movements of evolution units in the van when line is formed on the rear division.

(c) The movement of Divisions A and B in Figure III is illustrative of the movement of all evolution units in the van when forming line of bearing on a unit in the rear.
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MANEUVERS FOR COLUMN OF DIVISIONS.

TO FORM LINE OF DIVISIONS.

CASE: To change the order of divisions.

BASE UNIT: Invariably the rear unit.

SIGNAL: Same signals as Plate 1, plus designation of new order of divisions from the right.

MOVEMENTS REQUIRED.

Base unit maintain standard speed throughout, except when the change of order requires any division to take greater than present interval, in which case it slows to two-thirds speed in such time as not to pass most advanced division or divisions already on line.

Units ahead of base unit maneuver at standard speed to turn up on new tracks on present course. Slow to two-thirds speed if necessary when rear ship of unit has completed turn to new track. When base unit slows to two-thirds speed all units resume standard speed on signal. (NOTE: Units which are required to increase the interval shall use full or flank speed and maneuvering board courses as soon as clear of internal divisions).

PLATE 2. 21
MANEUVERS FOR LINE OF DIVISIONS.

TO FORM COLUMN OF DIVISIONS.

CASE: A flank division as base unit on present course.

NOTE: In changing from line of divisions to column of divisions, this method will always be used unless speed of four-fifths standard speed is signaled for the maneuvering units.

SIGNAL: Form with divisions bearing as indicated (indicating 180° and, when necessary, designating a flank division as base unit).

MOVEMENTS REQUIRED.

Base unit, division A or D, maintains present course at standard speed, (or takes speed indicated for all divisions).

Other divisions change course (Table II) 90° to right (or left), at speed of the base unit, and change course to former course in succession, to follow in wake of the base unit.
MANEUVERS FOR LINE OF DIVISIONS.

TO FORM COLUMN OF DIVISIONS.

CASE: An interior division as base unit on present course.

NOTE: When the base unit is an interior division the division guides ahead (or to the right) of the base unit form on prescribed bearing; division guides to the rear (or to the left) of the base unit form on the reciprocal of the prescribed bearing.

SIGNAL: Form with divisions bearing as indicated (indicating 0° or 180° and designating an interior division as base unit).

Guide (base unit) take speed indicated for the maneuver (if desired that base unit take speed other than standard speed).

Steam at speed indicated for the maneuver (addressed to division(s) which take station ahead of base unit and indicating speed, if desired that it take speed other than full speed).

MOVEMENTS REQUIRED.

Base unit, division B or C, maintains present course at standard speed (or speed indicated).

The division(s) which will be ahead of the base unit upon the completion of the maneuver takes full speed (or speed indicated) and changes course toward base unit an amount determined by Table III or the maneuvering board solution for the speed ratio prescribed, and resumes former course and takes speed of base unit at appropriate times to take new position ahead of base unit.

The other division(s) changes course (Table II) to right (or left) 90° at speed of base unit, and changes course to former course (in succession), to follow in the wake of base unit.

Upon completion of the maneuver the formation will retain the speed of the base unit until another speed is ordered.
TO FORM COLUMN ON INTERIOR DIVISION B
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MANEUVERS FOR LINE OF BEARING OF DIVISIONS.

TO FORM COLUMN OF DIVISIONS.

CASE: An interior division as base unit on present course.

NOTE: The procedure given below will not be used to form column of division guides in a maneuver which would require any division to make a change of course greater than 90° to the right (or left) of the present course.

When the base unit is an interior unit, the division guides ahead (or to the right) of the base unit form on the prescribed bearing; division guides to the rear (or to the left) of the base unit form on the reciprocal of the prescribed bearing.

SIGNAL: Form with division guides bearing as indicated (indicating 0° and designating an interior division as base unit).

Guide (base unit) take speed indicated for the maneuver (if desired, that base unit take speed other than standard speed).

Steam at speed indicated for the maneuver (addressed to division(s) which takes station ahead of the base unit and indicating speed if desired that it take other than full speed).

MOVEMENTS REQUIRED.

Base unit, division B or C, maintains present course at standard speed (or speed indicated).

The division(s) which will be ahead of the base unit upon the completion of the maneuver takes full speed (or speed indicated) and changes course toward the base unit an amount determined by Table III or by the maneuvering board resuming former course and taking speed of base unit at appropriate times to take new position ahead of base unit.

The other division(s) change course to right (or left) to the reciprocal of the present line of bearing (Table II) at the speed of the base unit and resumes former course (in succession) to follow in the wake of the base unit.

Upon the completion of the maneuver the formation will retain speed of the base unit until another speed is ordered by the officer conducting the maneuver.