

INTRODUCTION AND TABLE OF CONTENTS

This booklet is an introduction to Japanese Battleship and Cruiser Tactics and Doctrine. Standard cruising and attack formations are illustrated, based upon diagrams in original tactical documents. Torpedo and gunnery doctrine are discussed in depth, though the former will be treated in more detail in a destroyer manual. The white pages are taken almost entirely from primary sources. The reference section at the end details section by section the sources consulted. The pink pages are from primary and secondary sources.

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# BATTLESHIP AND CRUISER DOCTRINE, IMPERIAL JAPANESE NAVY

## I. GENERAL

At the beginning of the war the policy in the Japanese Navy was for Combined Fleet Headquarters to issue detailed operations orders. Combined Fleet was also the source of doctrinal pronouncements regarding type operations. By mid-1943 nearly two years of war experience and the influx of a large number of short service officers highlighted the need for uniform type doctrine.

On August 15, 1943 Fleet Commanders were ordered to form doctrine-tactics boards for the promulgation of tactics and doctrine. The urgency of this problem is best illustrated by the fact that the basic order enunciating this policy urged the responsible officers to forward new concepts to the fleet in rough form if deemed sufficiently important. The fact that war operations prevented combined exercises was recognized and liaison between fleets and Combined Fleet Headquarters was urged. The Commander Third Fleet was responsible for developing light force doctrine for cruisers and destroyers assigned to the carrier forces while Commander Second Fleet would issue orders to light forces assigned to the battleship, diversion attack and night operations forces.

At this time the battleship force(Main Body-old tactical designation) and cruiser forces(Advanced Force-old tactical designation) were combined into the Diversion Attack Force, a title deemed more descriptive(in carrier warfare terms) of the role of battleships and cruisers. First Fleet, the old battleship force became a headquarters force and contained only those special ships assigned to Commander, Combined Fleet, such as light cruiser OYODO.

## II. BATTLESHIP DOCTRINE AND PROCEDURE

A. TACTICS-The basic evolution unit is the battleship squadron, designated by the Arabic numeral-Roman letter "S" combination which corresponds to its squadron number thus; 1S=First Squadron, 3S=Third Squadron etc. Standard distance for battleships is 800 meters. Speed signals with acceleration tables for battleships are as follows:

SPEED	STAN. 12	14	FULL 16	BS 1 18	BS 2 20	BS 3 22	BS 4 24	BS 5 26
Time required to acc. from one speed to the next	1-0	1-0	2-30	2-30	3-0	3-0	4-30	
Total elapsed time	1-0	2-0	4-30	7-00	10-00	13-00	17-30	

Time in minutes-seconds.

STAN.=STANDARD; BS=BATTLE SPEED.

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B. DOCTRINE-GENERAL-In the approach phase of a battle the Japanese battleship force will steam in an ALERT CRUISING DISPOSTION or APPROACH DISPOSITION similar to those in the sections on Diversionary Attack or Night Operations selected by the officer in tactical command. When contact is obtained the vanguard(cruisers and carriers) will proceed immediately in the direction of the enemy (of course carriers will avoid visual contact). If the vanguard and battle line contact the enemy at about the same time the vanguard will maneuver and become either the leading or rear unit depending on the overall tactical situation. It is suggested that the officer in tactical command dispatch preliminary orders for deployment when the main bodies are about 50 km(30 miles) apart, about 15 minutes before opening gunfire. The guide will normally be 1S(YAMATO, MUSASHI) and the direction of deployment(left or right) will be ordered at this time. The APPROACH DISPOSITION is a line abreast of lines of squadrons at approximate right angles to the direction of the enemy, with the order of battle being a column formation. Prior to deployment the interval between squadrons will be maintained at 4 km. unless otherwise signalled.

1. Day Action-Day actions by surface forces normally are actions on the same course with a concentration on the enemy van. At a suitable time deployment will be completed. The surface forces will proceed into the path of the enemy main force and take up a position which will permit them to overwhelm the enemy van. All forces will cooperate in cornering the enemy main force, then the whole force will concentrate and destroy the enemy. If the enemy deploys for an action on opposite course during the fight, an action on opposite course normally is carried out.

The types of day action are established as follows:

TYPES	OUTLINE OF ACTION	
DAY ACTION KO(A)	After the battleship squadron has begun the fight, at the first opening the entire force will carry out a strike.	METHOD 1 The leading unit will move out. Later it will return. At that time the deployment will be made.
DAY ACTION OTSU(B)	When visibility is very good, for a while the Battleship Squadrons will fire at long range with the angle of elevation of the main batteries at about maximum. The auxiliary(light) forces will maneuver out of effective range of the enemy main batteries. Guns of large caliber and torpedo attacks by cruiser divisions will be used to create an opening. Then the entire force will make its strike.	METHOD 2 The whole force will deploy as a unit. Unless otherwise ordered this method will be used.
DAY ACTION HEI(C)	Local superiority will be obtained by drawing up the entire force in a compact formation. One flank of the enemy main force will then be attacked.	

Thus there are five basic methods of conducting day action:

1. DAY ACTION KO-METHOD 1
2. DAY ACTION KO-METHOD 2
3. DAY ACTION OTSU-METHOD 1
4. DAY ACTION OTSU-METHOD 2
5. DAY ACTION HEI

The types of action on opposite course are established as follows:

TYPE	OUTLINE OF COMBAT
Action on Opposite Course METHOD 1	Using the greater part of the auxiliary(light)forces an advance will be made into the path of the enemy main force, then an attack will be delivered.
Action on Opposite Course METHOD 2	The dispositions of the time will be used and an engagement while circling on opposite course will be carried out. Unless otherwise ordered, this method will be used

An outline for conduct of Day Action is as follows:

Day Action Ko and Otsu, Method 1-Vanguard proceed in direction of enemy to obtain information of situation. When ordered to deploy 3S(KONGU, HARUNA) take station about 8 Km. obliquely to the rear of 1S(YAMATO, MUSASHI). 3S will maneuver so it can begin gun action against enemy MAIN BODY simultaneous with 1S. Other leading units (heavy cruisers and destroyers) will endeavor to deliver effective torpedo attacks against enemy MAIN BODY simultaneous with 1S opening fire, reporting the time of firing and running time to Commander Main Body (1S), maneuvering to take station in the order of battle after firing their torpedoes.

Day Action Ko and Otsu, Method 2-Same as Method 1, except 3S doesn't move out so far

1S will concentrate fire on the enemy van, signalling the opening of gunfire.

Smoke will be used to attempt to divide the enemy.

Detached enemy units will be taken under fire before the main gun action opens.

Van and rear guard light forces will, under their commanders, attack the enemy with guns and torpedoes as the opportunity presents itself. In the strike or mop-up phase the entire force will close the enemy attacking fiercely. Cruisers will open the way for destroyers and both cruisers and destroyers will deliver repeated torpedo attacks. Destroyers will attack the enemy main force and guard against possible reversal of course by the enemy main body.

Vigorous pursuit is recommended.

## 2. Dusk Action-The types of Dusk Action are as follows:

TYPES	OUTLINE OF COMBAT
DUSK ACTION KO	This type is based on Day Action KO. A single decisive action will be fought. Unless otherwise ordered this method will be used.
DUSK ACTION OTSU	Night fall will be awaited with the object of fighting a night action. Then an all out action will be joined.

In addition to the application of Day Action instructions every attempt is to be made to silhouette the enemy and take advantage of any meteorological phenomena. In Dusk Action OTSU the force remains concentrated to avoid defeat in detail.

## 3. Night Action-The types of Night Action are:

TYPES	OUTLINE OF COMBAT
NIGHT ACTION KO	The entire force acting as a unit will carry out a night action against a single target
NIGHT ACTION OTSU	When the enemy is divided, the entire strength will be used to attack and destroy the nearest and most powerful enemy forces. Then the rest of the enemy will be dealt with.
NIGHT ACTION HEI	When the enemy is divided our forces also will divide and carry out night action.
NIGHT ACTION TEI	The routed enemy will be pursued. He will be engaged and destroyed as in the outline of day pursuit action. One element will be designated to destroy enemy ships which are damaged.
NIGHT ACTION BO	Enemy screening forces will be secretly bypassed and night action carried out against the enemy Main Body.

Normally the fast battleship squadron (3S-KONGO, HARUNA) will be the only battleships to actively participate in night fighting, cruisers and destroyers being better adapted to night fighting. The fast battleship squadron will participate actively in night action. It will normally be responsible for the cover and advance of the NIGHT OPERATIONS FORCE.

## 4. Dawn Action-The types of Dawn Action are:

TYPES	OUTLINE OF COMBAT
DAWN ACTION KO	The enemy fleet will be engaged and attacked all through the night by the air and submarine forces. The surface forces will concentrate and approach the enemy. A dawn action will be carried out in accordance with Day Action HEI
DAWN ACTION OTSU	1. The Night Action of the surface forces having been broken off, fighting will be rejoined in accordance with the outline of Dawn Action KO 2. Night Action will be ended about four hours before dawn. The concentration will be based on the position of the Main Body (1S usually or force under senior commander present) as indicated by distance and bearing from the enemy main force. The order of stations for each force will be ordered.
DAWN ACTION HEI	The Night Operations Force will attack the enemy repeatedly during the night. The Main Body and Fast Battleship Force will participate in this and carry out a Dawn Action.

In actions KO and OTSU the enemy should be kept to the east if possible and gunfire opened about 30 minutes before sunrise.

In action HEI the Main Body will approach from the direction of the Night Operations Force when attacking. The Night Operations Force, if seperated will avoid confusion and being destroyed in detail attempting to rendezvous with the Main Body.

5. Immediate Action-This is the euphemism the Japanese gave to being taken by surprise. In language typical of Japanese Navy tactical documents (and those of other navies though the refrain is greater in Japanese manuals) the enemy situation is to be ascertained and the tactical initiative seized by Immediate Action; excellent tactical philosophy (in fact, obvious) though practical application might be difficult. There can be no doubt that the spirit of this maxim was adhered to in the Japanese Navy.

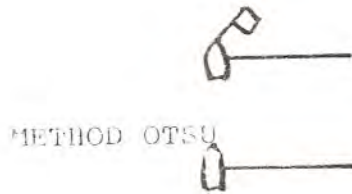
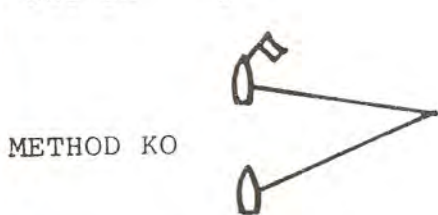
6. Narrow Waters-Action in Narrow Waters will be carried out as follows:

Not only is an engagement in Narrow Waters greatly hampered by the terrain, but very often both sides will plan to move under cover of night and launch an improvised surprise attack. It is essential therefore, to have undergone definite and detailed study and practice. In a complex and difficult place of battle it is all the more important to maintain close liaison between the various air, sea and land forces; to develop approach and withdrawal tactics adaptable to the enemy situation; to perfect identification of friendly forces, measures for meeting the attacks of enemy craft etc, and to carry out the engagement from start to finish under a well-organized unified command.

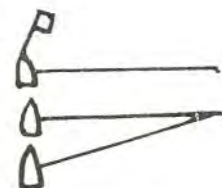
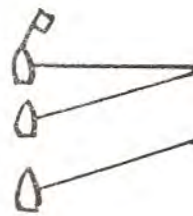
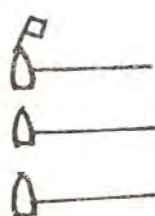
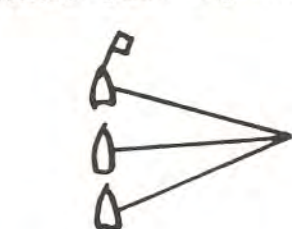
C. DOCTRINE-GUNNERY Japanese battleships are to open fire at maximum effective range, with OPEN FIRE given by Commander 1S, all ships opening fire at the same time. The range is to be closed as quickly as possible though prolonged masking of main battery turrets is not recommended. The enemy van is to be attacked unless the opposing battle lines are on opposite courses in which event the enemy rear is to be attacked. The methods for directing fire distribution are:

SQUADRON FIRE DISTRIBUTION

TWO SHIP SQUADRONS (1S and 3S)



THREE SHIP SQUADRONS (2S)



METHOD KO

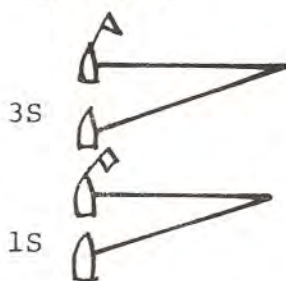
METHOD OTSU

METHOD HEI

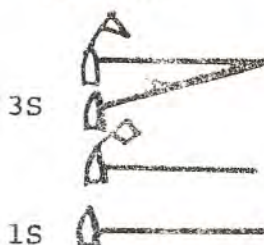
METHOD TEI

BATTLE LINE FIRE DISTRIBUTION (1S and 3S or 4 Ship Squadron)

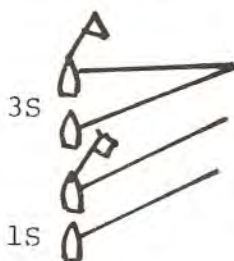
METHOD 1



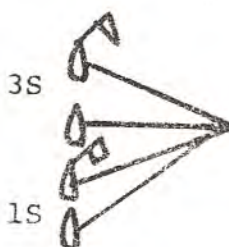
METHOD 2



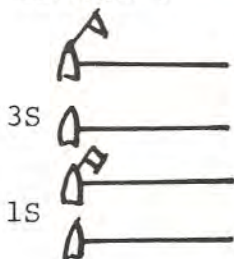
METHOD 3



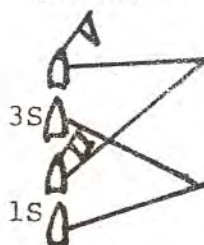
METHOD 4



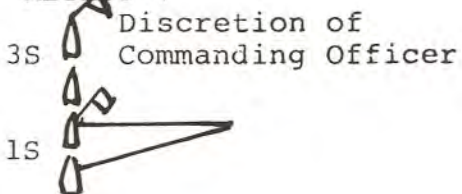
METHOD 5



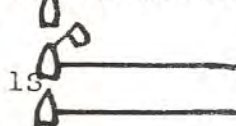
METHOD 6



METHOD 7



METHOD 8  
Discretion of  
Commanding Officer



In all firing the STANDARD TARGET (i.e. the target from which counting is begun) is the target toward which the ship in which the senior officer present is firing.

Gunfire distribution may be ordered by the fleet commander or squadron commander in the event of a change in the tactical situation.

In DAY ACTION OTSU heavy concentration on the enemy van will be the method chosen (the enemy rear may be chosen in certain conditions in action on opposite course).

At the height of combat firing will be distributed along the whole enemy line (Main Body) insofar as possible.

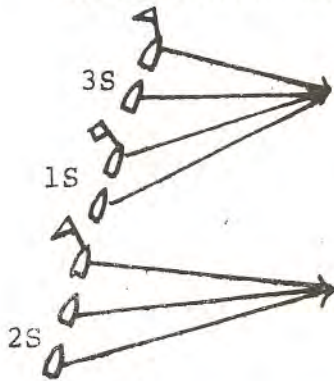
Divisions already engaged will communicate targets under fire and method of directing gunfire to units entering action.

In the event of a group withdrawal by the enemy, battleships will concentrate on the enemy rear or flagship. Enemy ships making smoke to cover withdrawal will be taken under immediate fire by the ship nearest that ship. When the enemy flees in confusion individual speedy pursuit will be conducted. In poor light enemy light forces will become the primary targets for battleship guns.

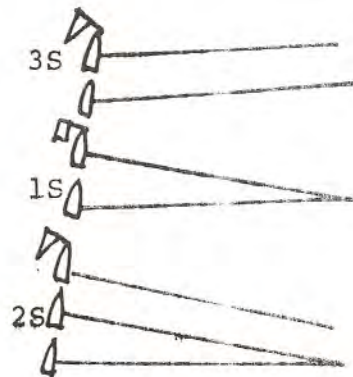
Use of main battery guns in anti-aircraft will be at the discretion of individual ship commanders.

EXAMPLES OF METHODS FOR DIRECTING GUNFIRE

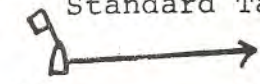
METHOD 4 Standard target is A  
2S executes METHOD KO



METHOD 2-Standard target is A-Target for 1S is B. 2S executes METHOD TEI



1S executes METHOD OTSU  
Standard Target is A

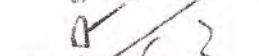
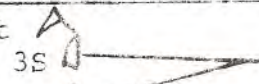


2S executes METHOD TEI



S  
M  
O  
K  
E

METHOD 2-Standard target is A.  
2S executes METHOD HEI



S  
M  
O  
K  
E



### III. CRUISER DOCTRINE AND PROCEDURE

A. TACTICS-The basic evolution unit is the cruiser(usually heavy) squadron, designated by the Arabic numeral-Roman letter "S" combination which corresponds to its squadron number thus; 4S=Fourth Squadron etc. Standard distance for cruisers is 800 meters. Speed signals with acceleration tables for heavy cruisers are as follows:

SPEED	STAN 12	14	16	FULL 18	BS1 20	22	BS2 24	26	BS3 28	30	BS5 31	32	BS5 33
Time required to accel. from one speed to the next.	1-0	1-0	1-0	2-30	2-30	2-30	2-30	2-30	3-0			4-30	
Total elapsed time.	1-0	2-0	3-0	5-30	8-00	10-30	13-00	13-00	16-00			20-00	

#### B. GENERAL DOCTRINE

The standard cruiser squadron combat formation is the single column with the flagship in the lead though a fine quarter line may be used.

Cruisers are to provide covering gunfire for destroyers in torpedo attacks and when enemy battleships or cruisers are present launch their(cruisers') torpedoes against those major units. They are to use their guns only against enemy light forces, though the use of torpedoes against enemy light cruisers and destroyers is not prohibited if the tactical situation indicates it is proper.

#### 1. Day Action-The types of Cruiser Day Action are:

TYPE	OUTLINE OF ACTION
DAY ACTION I	A combination of all forces will close on the enemy swiftly and destroy him at one stroke
DAY ACTION RO	In drawing out the enemy, torpedoes will first be fired secretly from long range. Normally a swift assault by all forces will develop simultaneously with the arrival fo the torpedoes at the target
DAY ACTION HA	A long range frontal engagement(TAIJISEN) will be undertaken at dusk with the object of precipitating a night action.
DAY ACTION NI	A test of strength will be avoided. A conclusive battle will be joined after the enemy has been drawn out by friendly forces.

#### NOTES:

1. An engagement on same course will be called METHOD 1, and an engagement on opposite course will be called METHOD 2.
2. Special orders will not be issued for METHOD 1.

The cruiser forces are responsible for screening the battle force and reporting enemy dispostions to facilitate the deployment of the battle force and exploiting torpedo opportunities. If the enemy battle line is observed deploying a large spread of torpedoes should be fired across the enemy line of advance to confuse or destroy the enemy battle line early in the action.

ter deployment the heavy cruisers' primary function is to attack enemy cruisers and cover destroyers in their torpedo attacks on the enemy battle line. Torpedo opportunities against the enemy battle line are to be seized and in case of enemy cruiser pressure becoming too great then torpedoes should be fired against them.

Night Action-Open Sea-As darkness approaches cruisers are to do their utmost to maintain contact with and close the enemy, attacking and breaking through the enemy's outer screen. They are to fire star shells and use their searchlights to assist destroyers in their attacks. They are also to take advantage of the confusion created by the destroyers and fully exploit all gunfire and torpedo opportunities. If the Japanese fleet is under attack by enemy light forces the cruisers are charged with defeating enemy cruisers and destroyer forces.

Night Action-Narrow Waters-In narrow waters star shells and searchlights will be used freely in melee type action. Ships are to be constantly prepared for rapid changes of target.

### CRUISER GUNNERY DOCTRINE

Surface Gunnery-Day-Division commanders will give fire distribution orders, though captains can direct fire on enemy ships which appear unexpectedly. The methods employed are generally similar to those used in battleship gunnery doctrine (see table that follows) with concentration on the enemy van emphasized. Discretion in changes in firing distribution orders is allowed in the following circumstances:

1. When a particularly advantageous or dangerous target appears unexpectedly.
2. When the target ship falls out of line.
3. When the target has run into an excessive concentration of fire.
4. When the range becomes too great or firing becomes difficult due to smoke and the like.

### TANDARD OPENING RANGES FOR HEAVY CRUISERS ARE:

- |                     |               |
|---------------------|---------------|
| 1. Against CV/BB/CA |               |
| a. With spotting    | 25,000 meters |
| b. Without spotting | 23,000 meters |
| 2. Against CL       | 15,000 meters |
| 3. Against DD       | 12,000 meters |

With 17,000 meters the optimum range for large combatants and 11,000 meters for light cruisers and smaller. Indirect fire is not liked though, in case of smoke, it will be used. In unusual circumstances independent fire may be ordered with ship captains selecting the most promising targets. Main battle force of ships is not to be split.

Method of fire direction		Method 1	Method 2	Method 3	Method 4	Method 5	(When the ships of the division cannot open fire simultaneously*)		
When unit consists of four ships	Engagement on same course								
	Engagement on opposite course								
When unit consists of three ships	Engagement on same course								
	Engagement on opposite course								
When unit consists of two ships									

\*they will go into action in (1) (2) (3) (4) order, starting with the lead ship

NOTES: 1. a primary target(ship at which concentrated fire is directed).

2. a ship out of range.

3. In the absence of special orders, the leading enemy ship(or two ships) will be the primary target ship(s).

4. When it is desired a concentration of fire against any ship of the formation, the order will be given as follows: "Fire direction Method \_\_, Primary target ship \_\_." The fire direction methods outlined above will be used.

2. Surface Gunnery-Night-Gunfire is to be opened at 18,000 meters when star shells are used for illumination while 10,000 meters is opening range when searchlights are used(12,000 meters in the South Seas).

3. Anti-Aircraft Gunnery-Anti-aircraft cannon and heavy machine guns are to be used in surface engagements at the discretion of the ship's captain.

Standard opening ranges for anti-aircraft weapons are

CANNONS(12.7cm,12cm,10cm,7.6cm)	10,000 meters day
	7,000 meters night
MACHINE GUNS(25mm,13mm,7.7mm)	3,500 meters

D. TORPEDOES-The center ship in the enemy's lead battleship division is the point of aim for torpedo attacks. When an enemy division contains two or four units the Number two ship will be chosen as point of aim. Torpedoes will be set at 6 meters depth for battleships and large carriers; 5 meters for heavy cruisers and medium carriers; while 3-4 meters will be used against mixed formations. The optimum ranges for firing torpedoes is considered 5 kilometers(3 miles). This, of course, applies to standard attacks. Generally #2 torpedo speed(36 knots) will be used for day or night fighting though squadron or ship commanders may make appropriate speed changes depending on the tactical situation. Concentrated salvos or spread salvos may be used depending on the tactical situation.

Single line ahead or a quarter line(line of bearing) of less than 30° are the preferred torpedo firing formations. In quarter line care is to be taken to avoid torpedoes of ships ahead in the formation.

The type 93 torpedo allows Japanese cruisers to conduct LONG RANGE CONCEALED ATTACKS. All spotting and lookout information is to be used to insure adequate information for long range attacks. Spare torpedoes from the disengaged side are to be used as first reloads thus giving the tubes on the engaged side of Japanese heavy cruisers three shots per tube. Torpedoes are to be used liberally. In the advanced phases of a battle, the primary aim is to approach as close to the enemy as possible and to fire liberally at short range without giving the enemy a chance to get back. In all cases, however, continuous firing will be by order of the commander.

In NIGHT LONG RANGE CONCEALED ATTACKS firing will be at the limit of the field of vision and all aids to fire control will be exploited(starshells, parachute flares, aircraft dropped float flares, radio direction finders and radar) so firing beyond the field of vision can be accomplished. Ideally concealed attacks will be timed so the torpedoes arrive at the time night attacking destroyers arrive at firing position. In carrying out concealed joint torpedo actions from both flanks of the enemy main force while in separate contact with both quarters of the enemy, the time of firing will be designated, and normally the basic course and speed of the enemy will be given by order. In order to make firing at the designated time possible, each ship will proceed toward the enemy and make timely position reports. All ships will maintain close liaison, get on the target and fire at the time designated. The angle of fire will be selected to cover a direct advance or a 40° evasive turn by the enemy. Concealed firing carried out in cooperation with friendly cruiser squadron in contact on the opposite flank will follow an outline set forth above.

E. AIRCRAFT-Japanese cruiser (and battleship) based aircraft are tactically assigned to the Cruiser Squadron Commander while they are the administrative responsibility of the ship's captain. In operations the aircraft on the windward catapult will be launched first. Unless otherwise ordered aircraft will return to their ship upon completion of their mission, conducting a short ASW search before recovery. In special cases they might be put ashore at a friendly base after their mission is completed.

The functions of cruiser floatplanes are as follows:

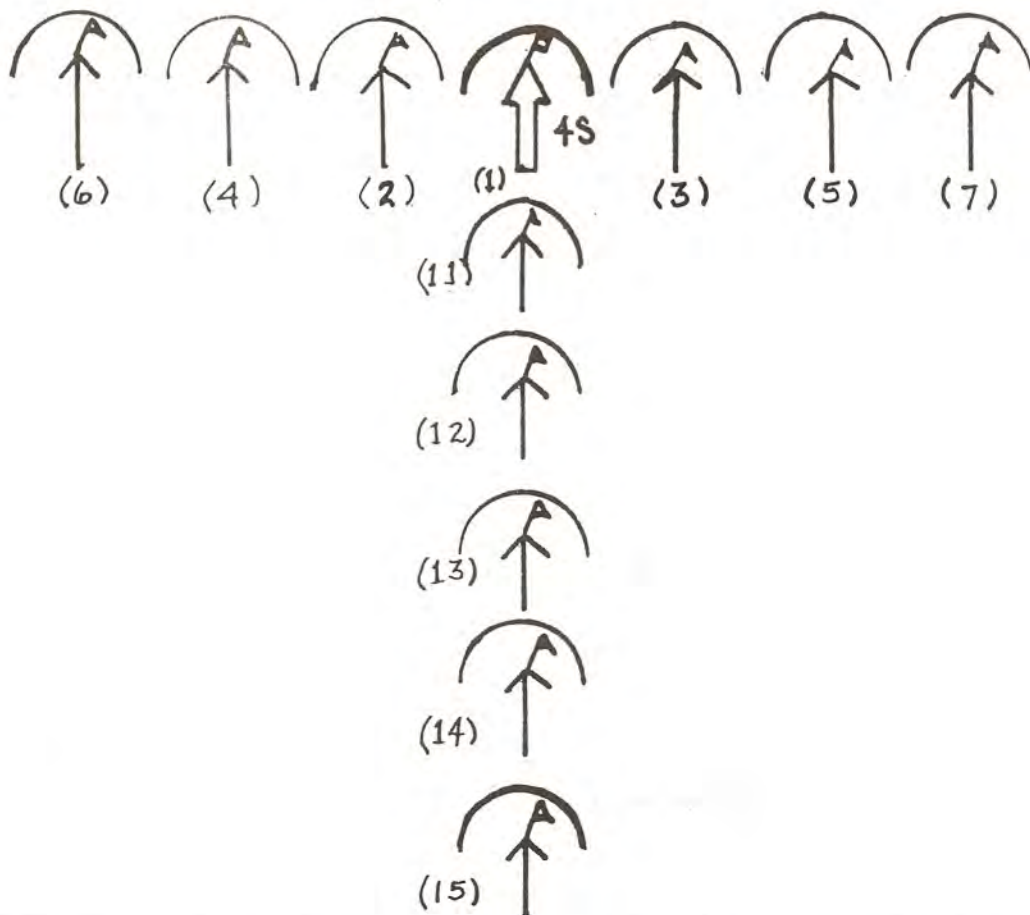
TYPE	PRIMARY FUNCTIONS	SECONDARY FUNCTIONS
Three seat aircraft (E13A & E16A)	Search, tracking, reconnaissance	Attack, Anti-Submarine, Anti-aircraft Patrol
Two seat aircraft (FM)	Anti-submarine, anti-aircraft patrol, gunnery and torpedo observation, search, reconnaissance.	Attack
NOTES: Other functions will be performed depending on the battle situation and other considerations.		

#### IV. DIVERSION ATTACK FORCE (YUGEKI BUTAI) DOCTRINE

A. GENERAL-First and Second Diversion Attack Force are the Tactical designations for the ships of Second and Fifth Fleets, respectively (after 1943) when these forces operate as surface action groups.

B. ALERT CRUISING DISPOSITIONS (KEIKAI KOKO)-There are ten basic types of Alert Cruising Dispositions (ORDERS FOR CRUISING UNDER ALERT) employed by FIRST DIVERSION ATTACK FORCE (1-YB). Unless otherwise signalled the stations in the disposition are as shown on the series of sketches under the heading ORDER FOR CRUISING UNDER ALERT. If the Officer in Tactical Command wishes to construct an Order for Cruising Under Alert he may do so by reference to the sketch entitled STANDARD ORDER FOR CRUISING UNDER ALERT and signalling his ships as follows:

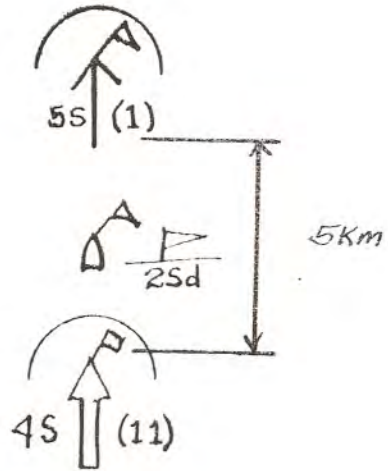
1. TYPE OF ORDER OF CRUISING UNDER ALERT PER SKETCHES IF APPLICABLE: OTHERWISE BLANK
2. GUIDE UNIT. ABSENT SPECIAL ORDERS 4S.
3. AXIS OF FORMATION (JIKU KOKO) WHICH WILL BE THE ACTUAL COURSE UNLESS OTHERWISE SIGNALED.
4. STATIONS FOR SQUADRONS WITHIN THE FORMATION.
5. INTERCHANGING OF LEFT FLANK SQUADRONS FOR RIGHT FLANK SQUADRONS WILL BE CALLED THE ALTERNATE METHOD AND WILL BE INDICATED BY NUMERAL FLAG S (OTS U)



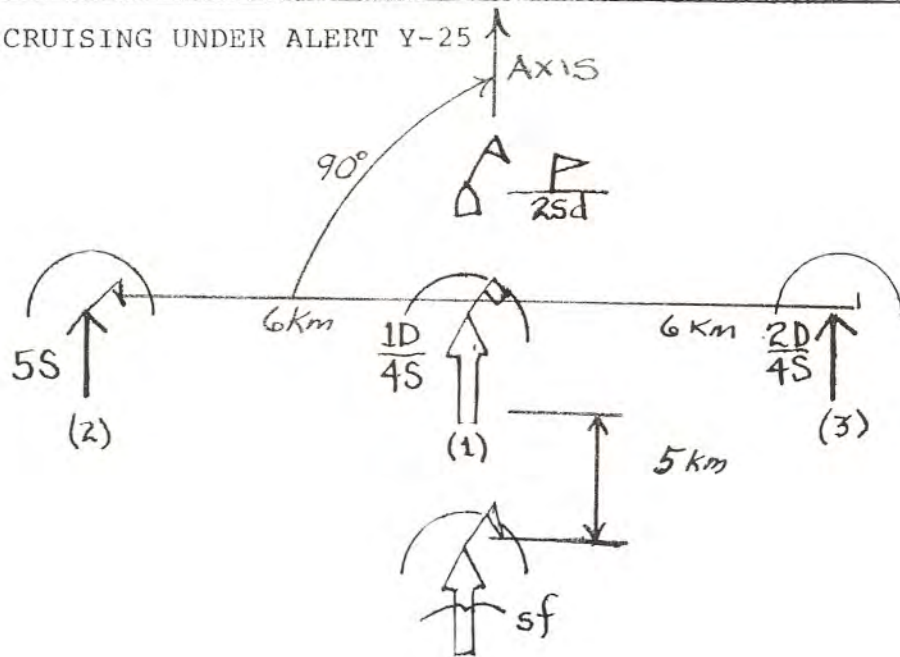
Any alert cruising disposition can be constructed from this chart. Numbers appearing in parentheses indicate station number for each unit or ship in the order of cruising under alert. The station of the units in line should be directly astern of the center of the units in line abreast. Absent special order A will be 6 kilometers and B will be 5 kilometers.

NOTE: The semicircles represent destroyers in a screen ahead of a formation of large combatants. The method for locating ships on the semicircle is illustrated in the diagram which follows this section and is entitled **STANDARD DIRECT ESCORT DISPOSITION**.

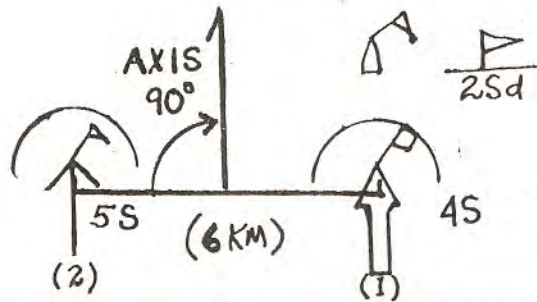
ORDER FOR CRUISING UNDER ALERT Y-24



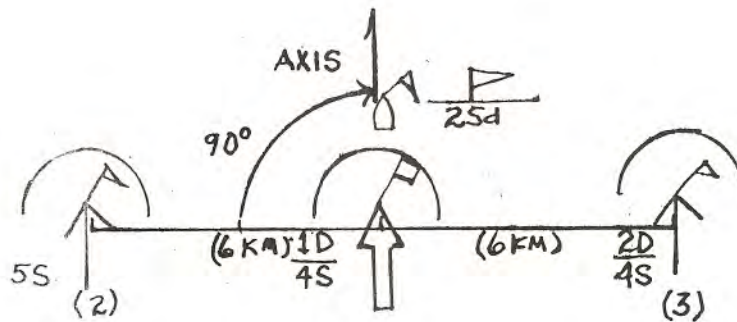
ORDER FOR CRUISING UNDER ALERT Y-25



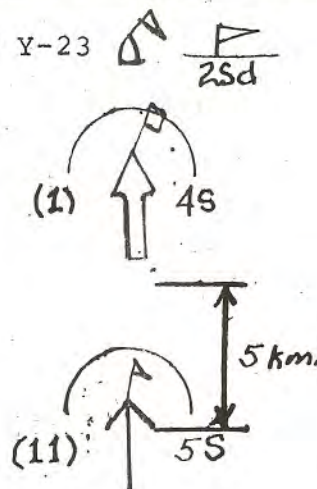
ORDER FOR CRUISING UNDER ALERT Y-21



ORDER FOR CRUISING UNDER ALERT Y-22

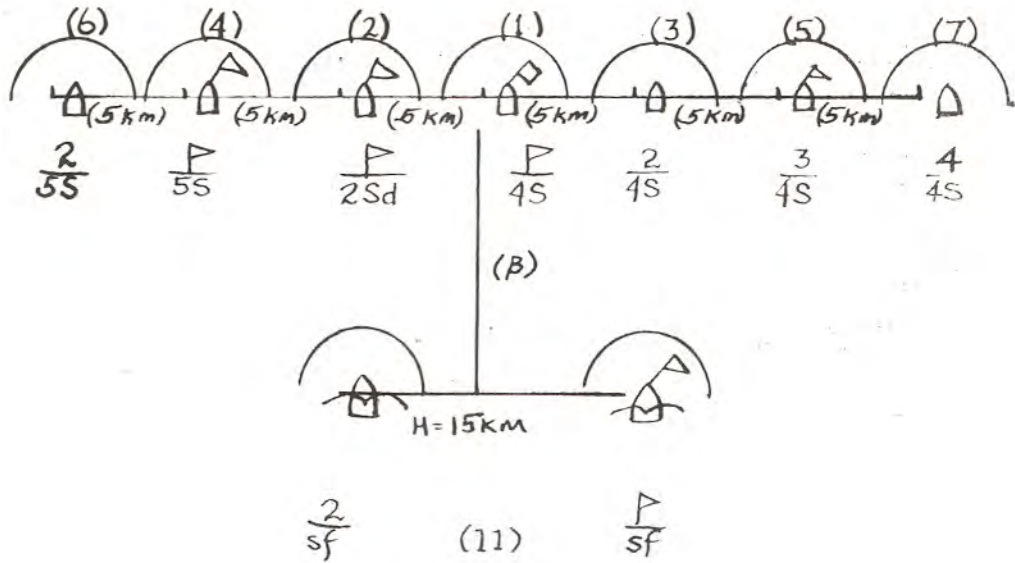


ORDER FOR CRUISING UNDER ALERT Y-23

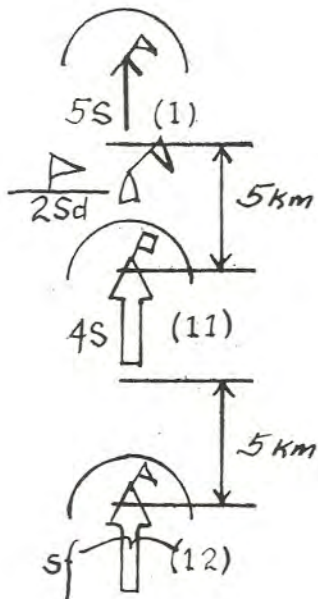




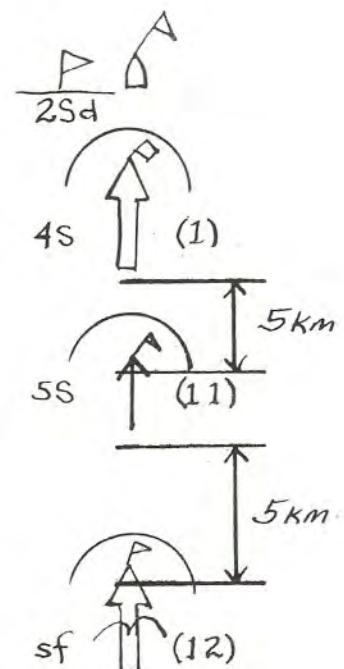
ORDER FOR CRUISING UNDER ALERT Y-26



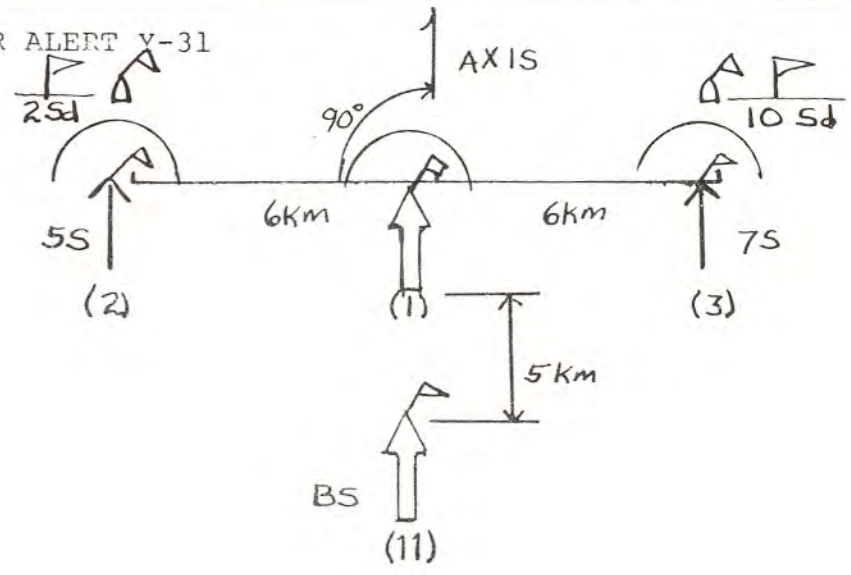
ORDER FOR CRUISING UNDER ALERT Y-28



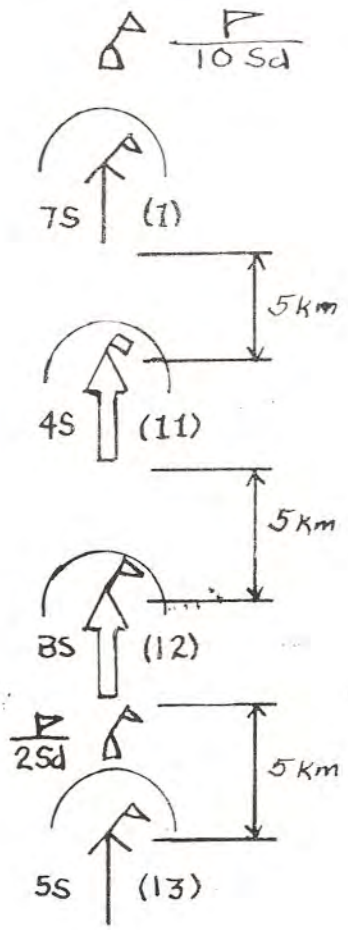
ORDER FOR CRUISING UNDER ALERT Y-27



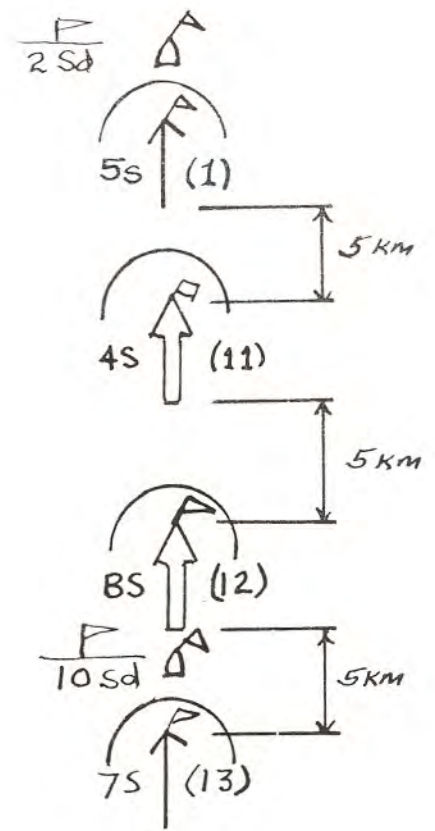
ORDER FOR CRUISING UNDER ALERT Y-31



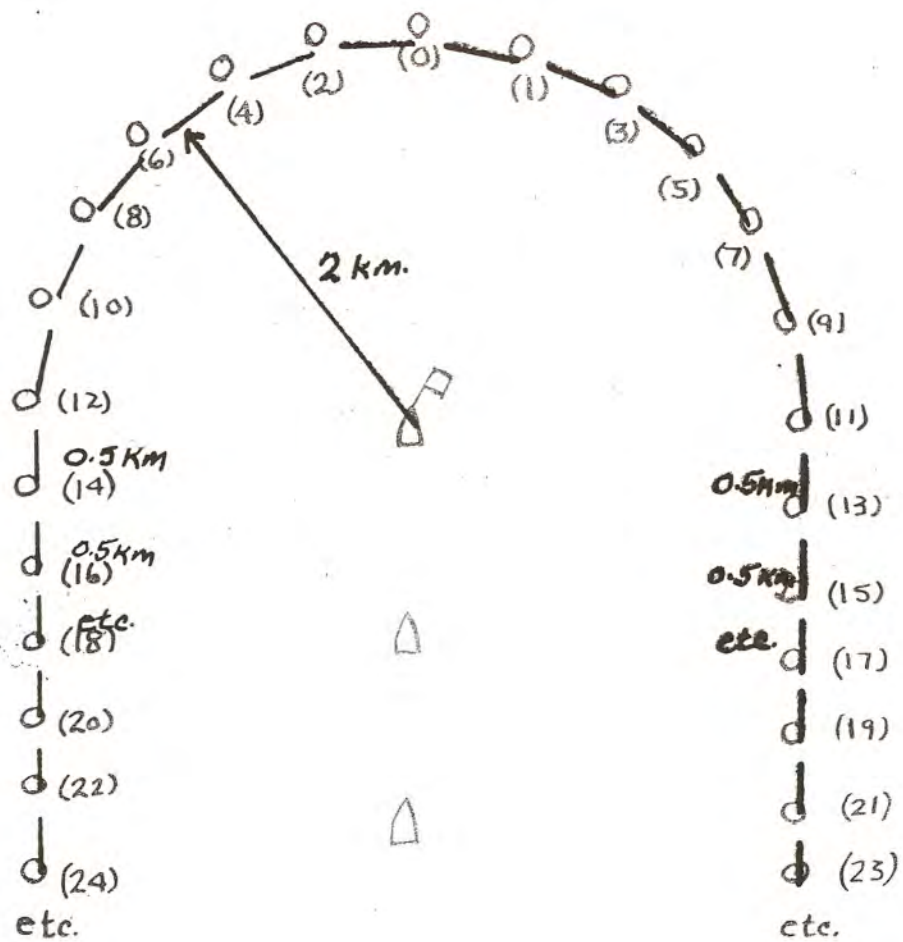
ORDER FOR CRUISING UNDER ALERT Y-32



ORDER FOR CRUISING UNDER ALERT Y-33



STANDARD DIRECT ESCORT DISPOSITION



C. APPROACH DISPOSITIONS-The basic types of APPROACH DISPOSITIONS are shown in the series of sketches entitled ORDER OF APPROACH. The stations are determined by direct reference to the sketch or to the signal STANDARD ORDER OF APPROACH issued by the senior officer. The direct escort rules are the same as those employed in Alert Cruising Dispositions. The method for signalling Approach Dispositions is as follows:

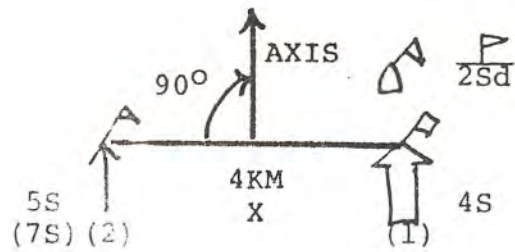
F  
 TAKE STATION IN ORDER OF APPROACH  
 1 3 UIDE  
 2 ORDER #  
 3 AXIS  
 4 COURSE  
 5 SPEED  
 6 X \_\_\_\_\_  
 7 Y \_\_\_\_\_

During the Approach phase the senior officer will signal the Order of Battle thus:

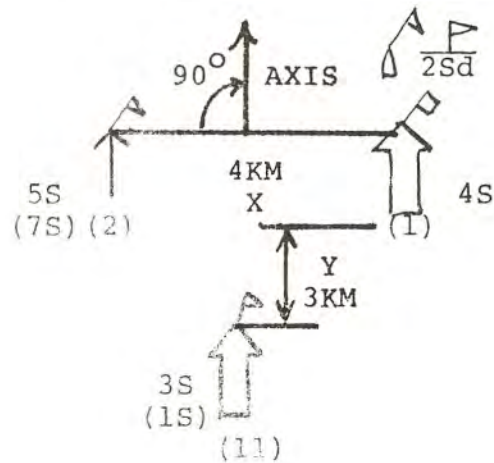
Order of Battle	1	2	3	4	5	6
Order	DESRON	CRURON	DESRON	DESRON	CRURON	CRURON
in	CRURON	DESRON	CRURON	CRURON	DESRON	DESRON
Line	CRURON	CRURON	DESRON	CRURON	CRURON	DESRON
of			CRURON	BATRON	DESRON	CRURON
BATTLE			BATRON	DESRON	BATRON	BATRON
			CRURON	CRURON	CRURON	CRURON

- Notes:
- The station of the individual cruiser squadron and destroyer squadron in each order of battle depends on the station order at the time.
  - The standard interval between units will be 4 km. This will be shortened as much as possible.
  - The aircraft carriers will maneuver skillfully in a position suitably distant from the enemy.

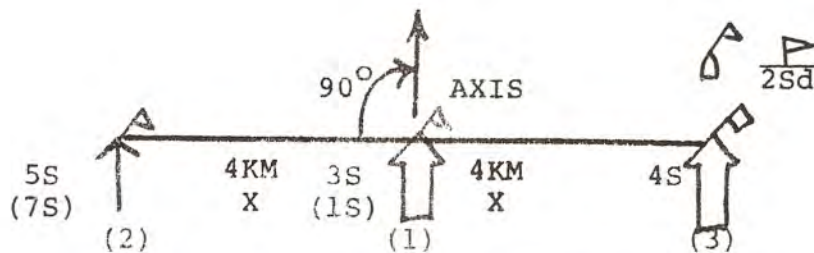
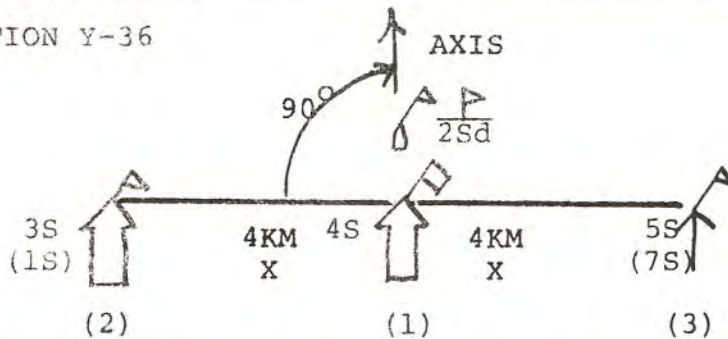
APPROACH DISPOSITION Y-31



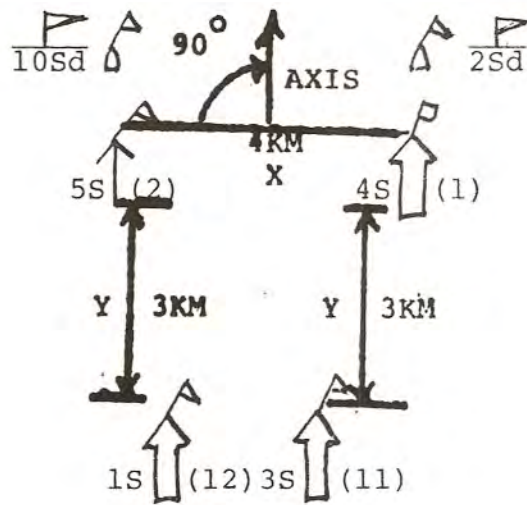
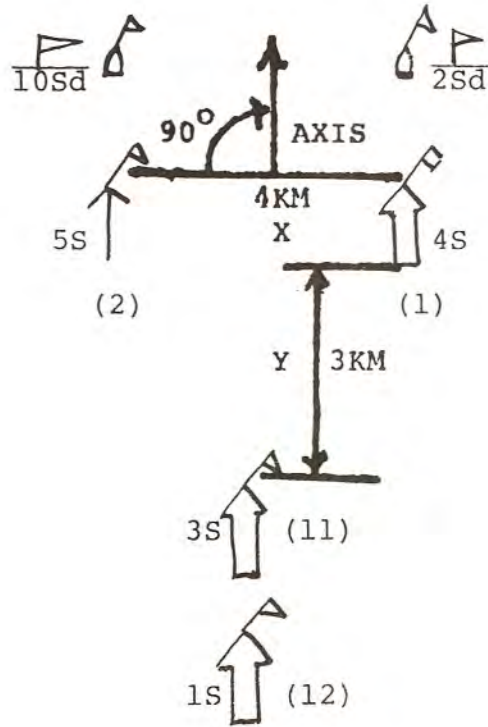
APPROACH DISPOSITION Y-35



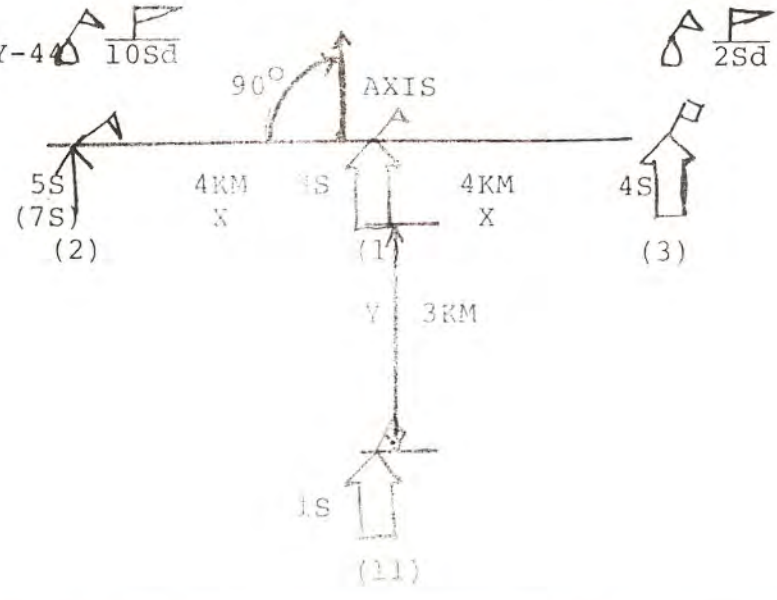
APPROACH DISPOSITION Y-36



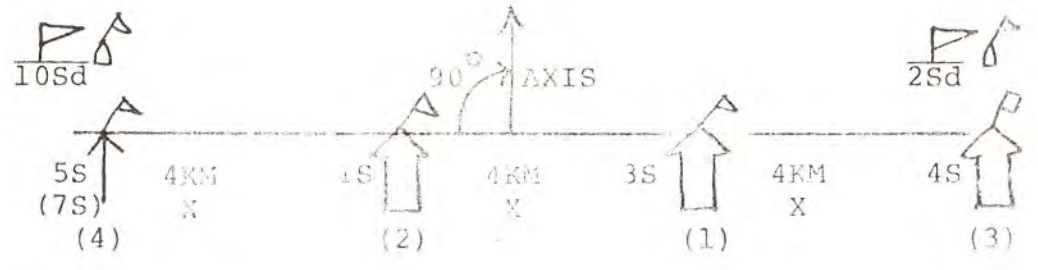
APPROACH DISPOSITION Y-41



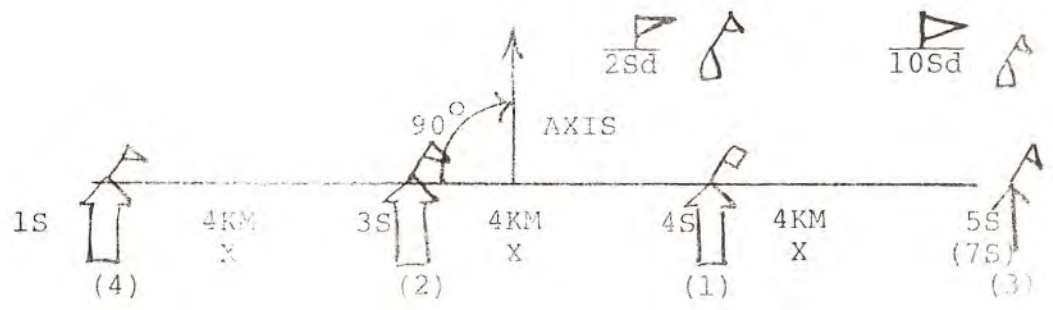
APPROACH DISPOSITION Y-44



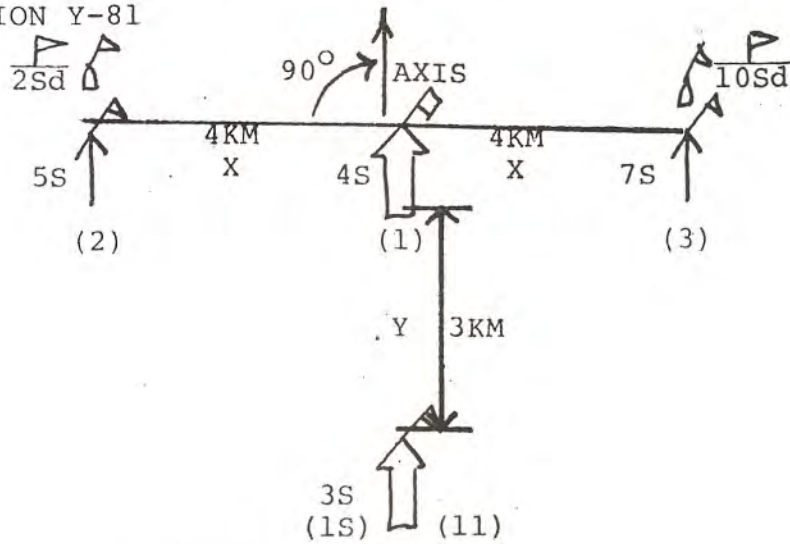
APPROACH DISPOSITION Y-45



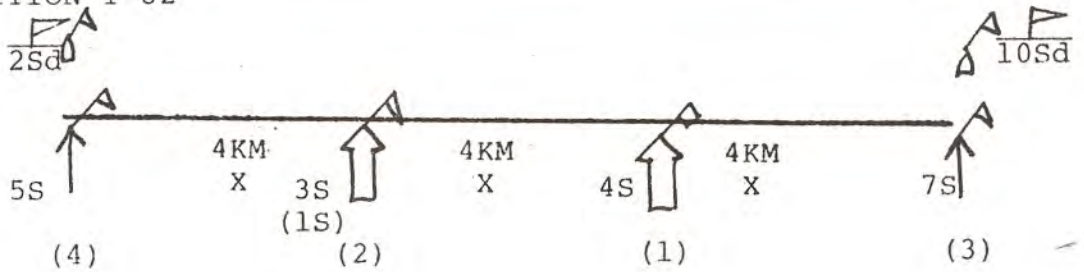
APPROACH DISPOSITION Y-46



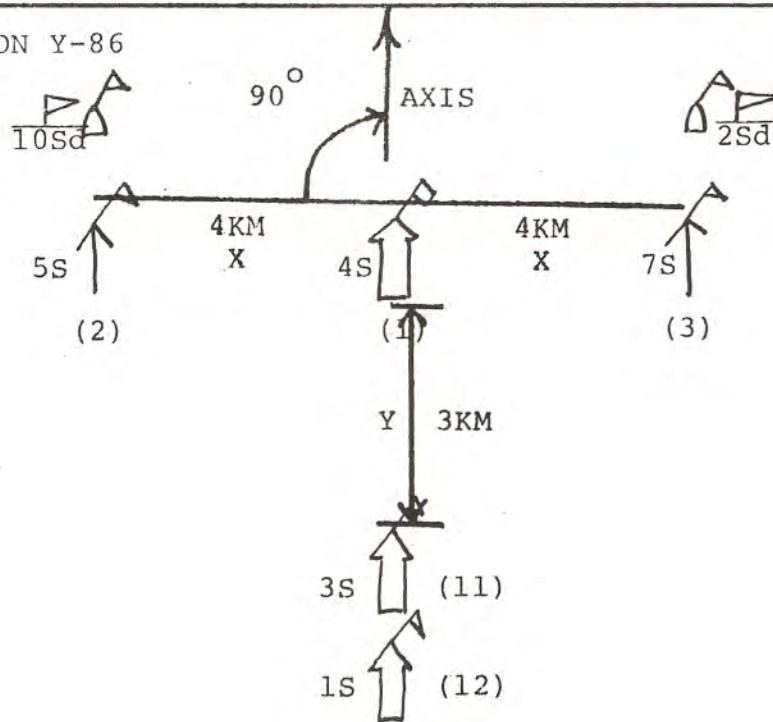
APPROACH DISPOSITION Y-81



APPROACH DISPOSITION Y-82

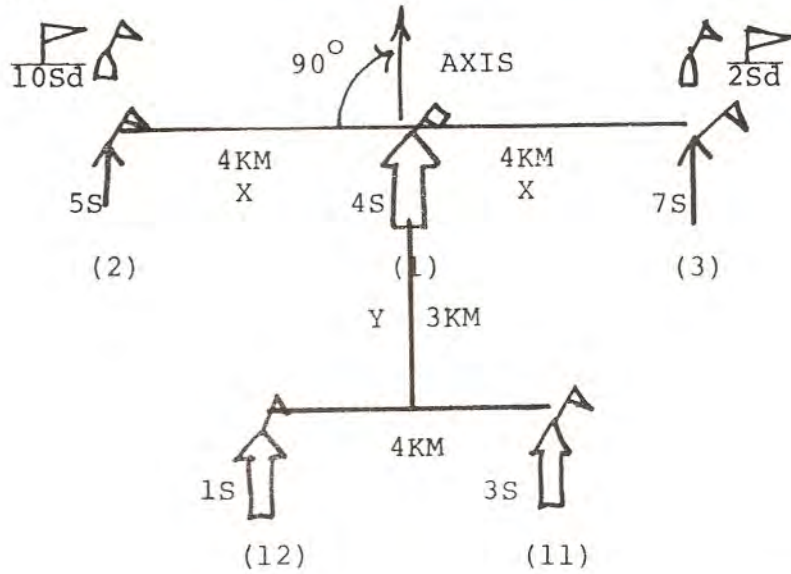


APPROACH DISPOSITION Y-86

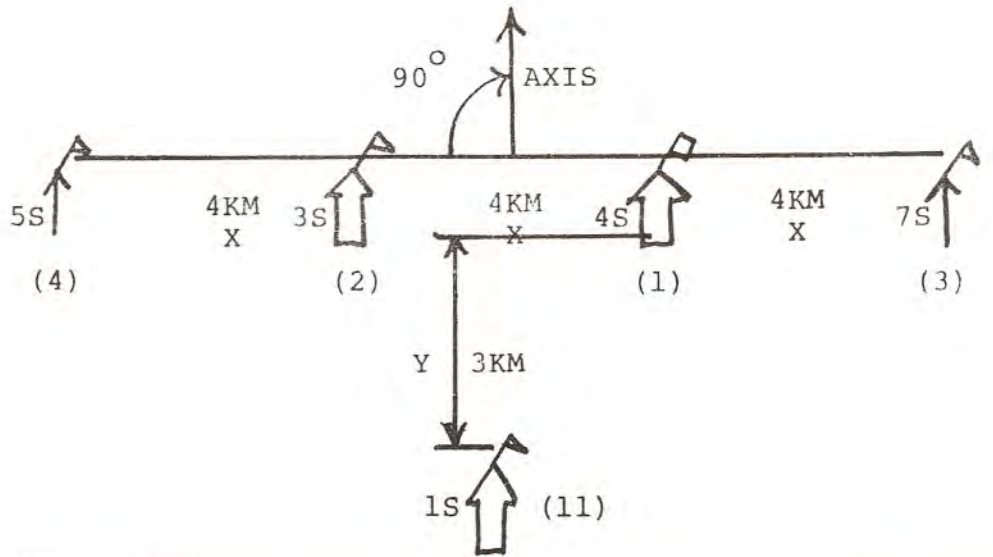




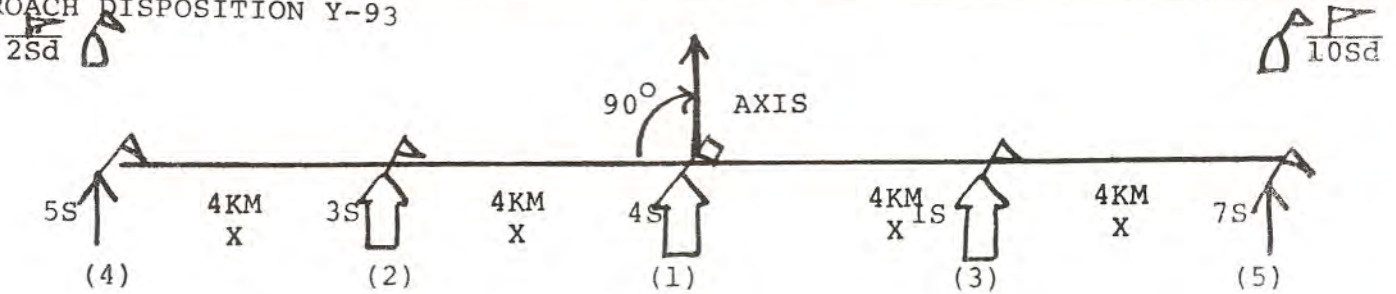
APPROACH DISPOSITION Y-87



APPROACH DISPOSITION Y-89

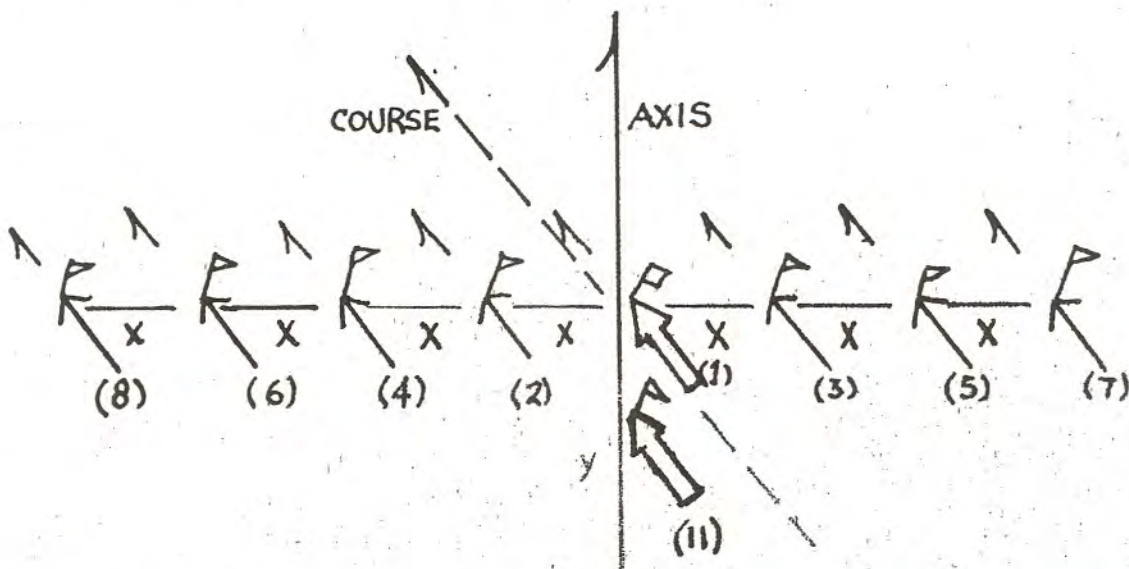


APPROACH DISPOSITION Y-93



STANDARD ORDER OF APPROACH

(This will be referred to as ORDER OF APPROACH 0)



In the absence of special orders X will be 4 KM and Y will be 3 KM

11 occupies the position behind the center

The direct escort deployed at 11 in Order of Cruising Under Alert will meet with Commander Destroyer Squadron Two

When a station number is missing, the formation will be shortened in the direction of the guide

The chart indicates when the AXIS of the formation and the COURSE differ

D. DIVERSION ATTACK FORCE COMBAT DOCTRINE-In Day Combat cooperation with air forces is highly desirable though if the tactical situation indicates it is proper surface combat without air cover might be sought. Day combat with enemy battleships and aircraft carriers is to be avoided unless an exceptionally good opportunity presents itself. In such a case long range torpedo warfare is preferred as the opening method. In attempts to break up invasion convoys surface forces are to remain outside air range until the invasion force is committed at which time a quick strike at close quarters is to be made.

The Methods of Day Combat for I-YB are:

A-The entire force will unite and approach the enemy swiftly and annihilate him  
 B-While the enemy is being decoyed, he will be fired on from a distance. Then normally, when the torpedoes have had time to reach their targets, the shift to the attack will be made.

C-A long range bombardment will be carried out at dusk prior to the shift to a night attack.

D-A test of strength will be avoided and the enemy decoyed by a friendly force which does not commit itself, then a decisive attack will be made.

Method 1 will be on same course.

Method 2 will be on opposite course.

In surface mobile warfare(carrier fighting) antiaircraft is the most important type gunnery. Use of radar is recommended and all forces are admonished to be on the lookout for aircraft that are high flying, very low flying or using the sun or clouds for cover. All aircraft within 15km(9 miles)("the zone of fire") are to be taken under intense fire immediately. Outside 15km fighters are to be used(AIR COMBAT ZONE) though large caliber weapons will be fired outside the 15km zone under proper circumstances. The maximum opening ranges for guns in antiaircraft fire are:

a. Large caliber weapons(over 20cm)	25km(15 miles)
b. 20 cm guns	20km(12 miles)
c. 15 cm and 15.5 cm guns	15km(9 miles)
d. Dual purpose(HA/LA). guns	12km(7.25 miles)
e. 25mm guns	3.5km(2 miles)
f. 13mm guns	2.5km(1.5 miles)
g. 7.7mm guns	1 km (0.6 miles)

If the enemy aircraft are under attack by friendly fighters even in the ZONE OF FIRE they will not be fired upon unless they are threatening the ship taking them under fire or important friendly ships. Priority of AA targets is as follows:aircraft threatening or damaging the firing ship or important friendly ships; aircraft within gun range; and aircraft not under fire by friendly forces. When any aircraft approaches ships are to maneuver but avoid reduction in the effectiveness of fire. At close quarters the required movements will be executed if necessary without regard to the development of fire power. At night radar is to be used and maximum illumination and fire power will be brought to bear in an attempt to shoot down the enemy quickly.

A. GENERAL-Night combat doctrine is governed by the basic principal that all units will search diligently for the enemy, who will be tracked doggedly once discovered. Every attempt will be made to outflank enemy formations and new units if isolated from older units will be attacked first. Enemy carriers, battleships and cruisers are the prime targets in that order, with transports being given top priority in interception operations.

B. OPEN SEAS-Planned surprise attack is the basis for success in night operations, consequently all available techniques for discovering the enemy will be utilized. Battleships will use their superior firepower to break through enemy screens to support cruisers and destroyers in their attacks. Cruisers will support battleships in covering torpedo attacks, particularly with O HASSHA (Type 4 projectiles) and star shell illumination. Destroyers will rush in and destroy the enemy main body with torpedo attacks. Generally carriers will avoid night combat.

Identification of friendly forces information and devices will always be at the ready in night action.

Because of the dangers of night operations knowledge of the enemy and one's own forces is essential. The following reports are the standard required by Japanese Night Doctrine:

TYPE REPORT	ITEMS OF REPORT	ITEMS TO NOTE
When the enemy is discovered	Strength, position, course, speed, disposition, position relative to own forces, action to be taken by own forces (when necessary).	The discovery of the enemy will be quickly reported and then the foregoing items will be reported in succession
When the enemy disappears from sight	Conform to above	
(a) When there is a change in the situation (b) When help from friendly forces is requested. (c) When the occasions requires.	Enemy situation, course, speed, location, strength, disposition, and changes in the foregoing	Even when there is no extensive change in the enemy situation, it is permissible to report to that effect.
When dispositions have been made. When the situation requires.	Station of own unit, including location and range and bearing from the enemy.	
When preparations for the attack have been completed	Organization of preparation for attack (include station of own unit when necessary).	
When proceeding to the attack.	Proceeding to the attack when necessary arrangements for attack, attack course, direction of torpedo action and whether on same or opposite course.	
Moment when attack is completed	Attack completed.	
After attack completed	Combat situation; results of the attack, losses, station, movements of own unit.	

The types of NIGHT OPERATIONS are as follows:

TYPE	OUTLINE OF COMBAT
Night Op. KO	All forces combine and carry out night operations against a single objective
Night Op. OTSU	If the enemy is dispersed, generally our entire force will be used first to destroy his newest and most powerful units and then will engage his other units.
Night Op. HEI	When the enemy is dispersed, our force will also separate and carry out night operations.
Night Op. TEI	When the enemy is making a disorganized retreat he will be pursued and annihilated, using the outline of daytime pursuit action as a guide. One element will be assigned to destroy damaged enemy ships.
Night Op. BO	When there is an enemy screening force, it will be bypassed unobserved and night operations will be carried out against the enemy main body.

C. SCOUTING-Cruisers are the principal surface scouting vessel though destroyers and even battleships can be used if there are insufficient units to cover the assigned scout sectors. Cruisers will be accompanied by destroyers if enemy action is probable. Scouting units will avoid engagement, tracking, reporting and assembling friendly forces. In the event of counterattack by the enemy then the tracking unit may fight and then resume tracking. Cruiser divisions will not normally be reduced below a section (two ships) for scouting duties. Signals for Scouting Dispositions will normally include basic course, speed and disposition chosen. Scouting Dispositions are shown on the following pages.

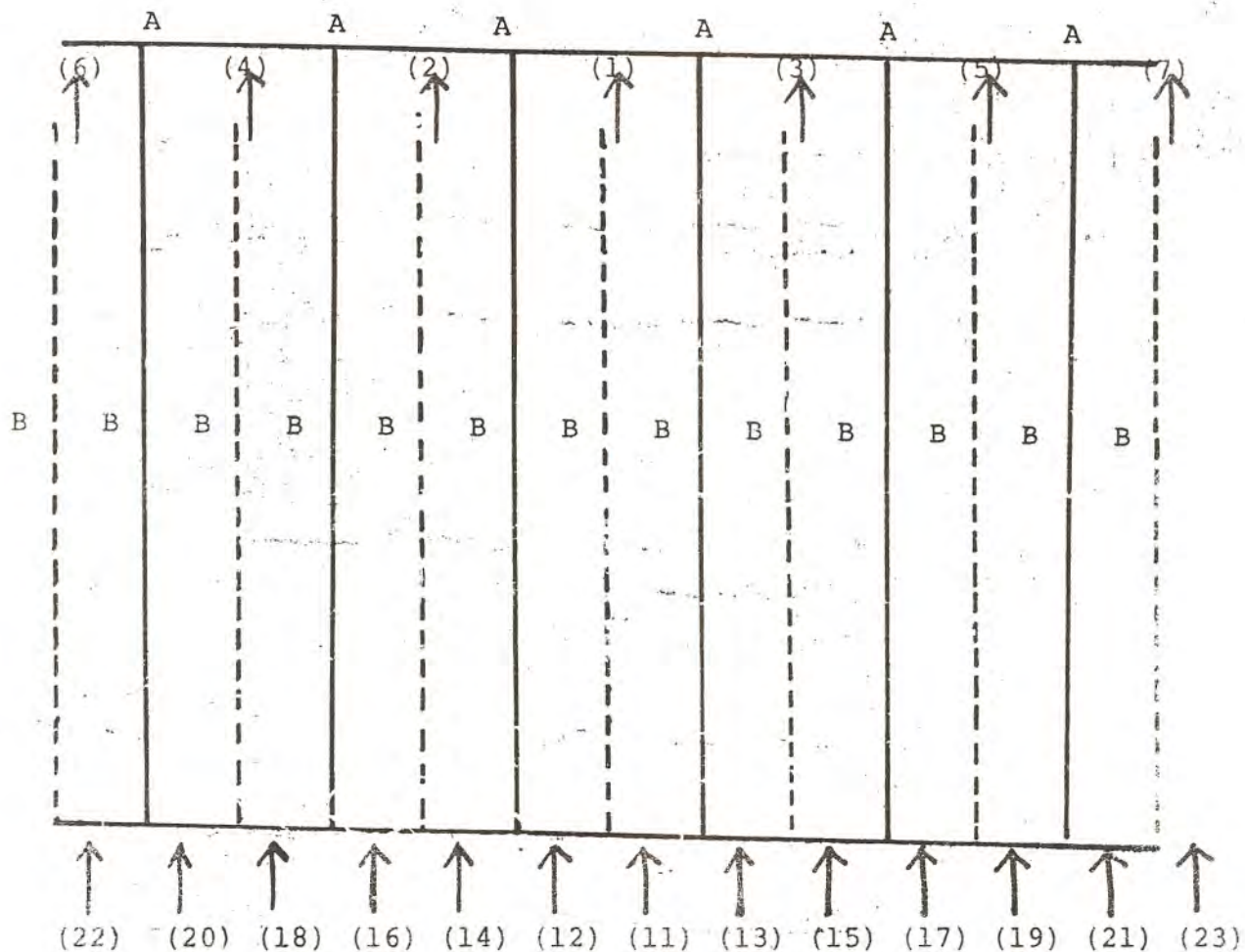
D. TRACKING-Cruisers are the principal tracking surface warships. The basic method for tracking is as follows:

1. Enemy followed from station close to limit of rearward vision field (effective radar range) from astern or on his quarter.
2. Engagement with the enemy should be avoided if at all possible.
3. If attacked maneuver radically and make smoke and in proper circumstances counterattack.
4. If enemy lost in tracking resume scouting.

E. ATTACK-GENERAL-Disposition should be completed outside enemy vision based on reports of tracking units (aircraft and cruisers). Use of O HASSHA and progress of advance of destroyer squadrons should be reported. Generally the attack order should be given by the commander though all attack opportunities should be seized without awaiting signals. Fierce action at close quarters is recommended and units are advised to clear the battle area after they have delivered their blows returning only when the opportunity presents itself.

F. NIGHT ACTION IN NARROW WATERS-Governed by the same rules of engagement as in Diversion Attack Force Doctrine.

STANDARD SCOUTING DISPOSITION (To be called SCOUTING DISPOSITION 0)



When scouting dispositions other than those designated in doctrine are ordered, the position and station of each unit will be indicated by the numbers within parenthesis.

REMARKS:

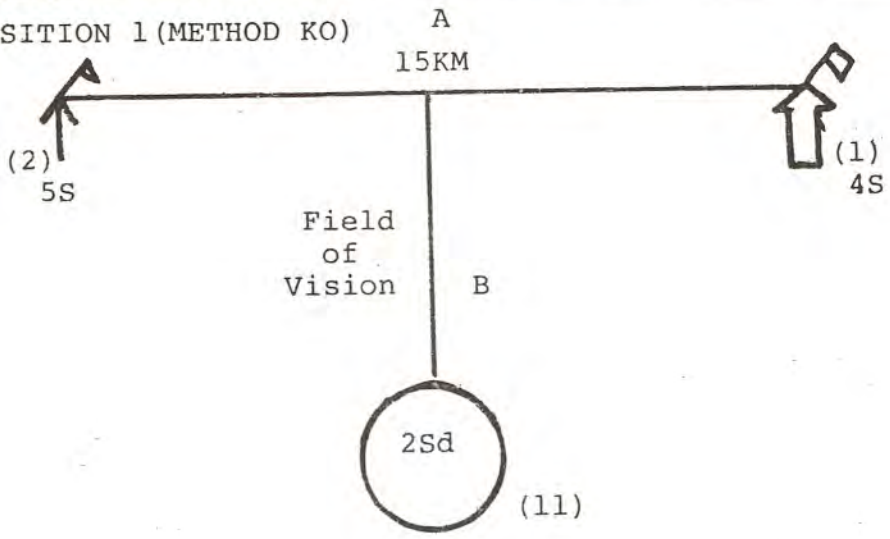
1. The interchanging of dispositions left and right (indicated within parenthesis) will be designated as Method OTSU. As an alternate method, destroyer divisions may be attached to cruiser (battleship) squadrons in the first line of search (standard station about 5 km in front). This will be designated by adding a 5-flag and number flag (code) to the specified signals. Destroyer divisions which are to be attached to cruiser (battleship) squadrons will usually be dispatched from 10 Sd for 7S and 3S, and from 2 Sd for 4S and 5S. They will be designated by each force commander.

In the absence of special orders, A will be 15 km and B will be a suitable distance within the field of vision. However, units which find it difficult to come abreast of the guide unit will operate on the designated course and at the designated interval.

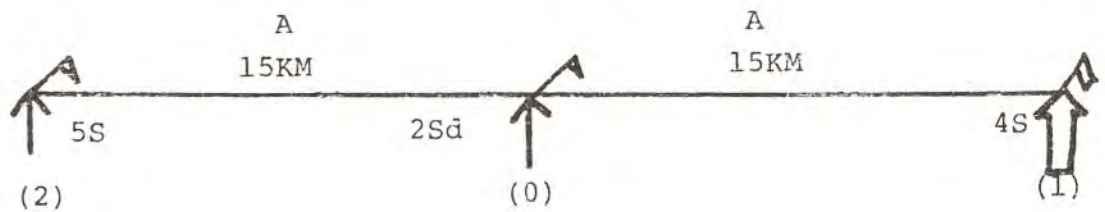
3. The line of search will be at right angles to the basic course.

4. Parenthesis in the scouting dispositions indicate alternate possibilities.

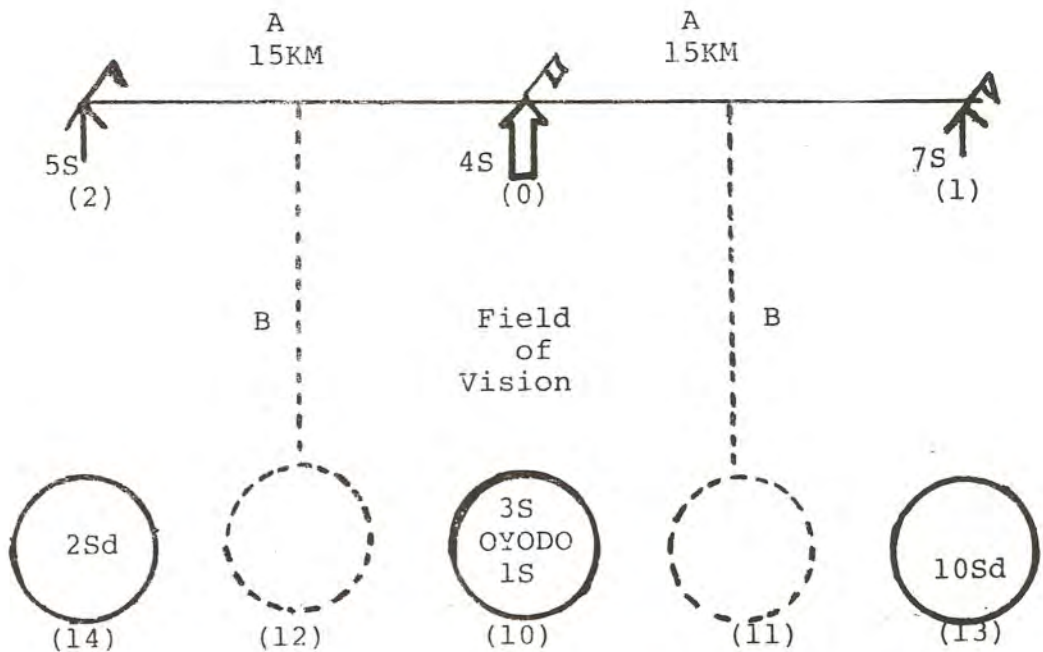
SCOUTING DISPOSITION 1 (METHOD KO)



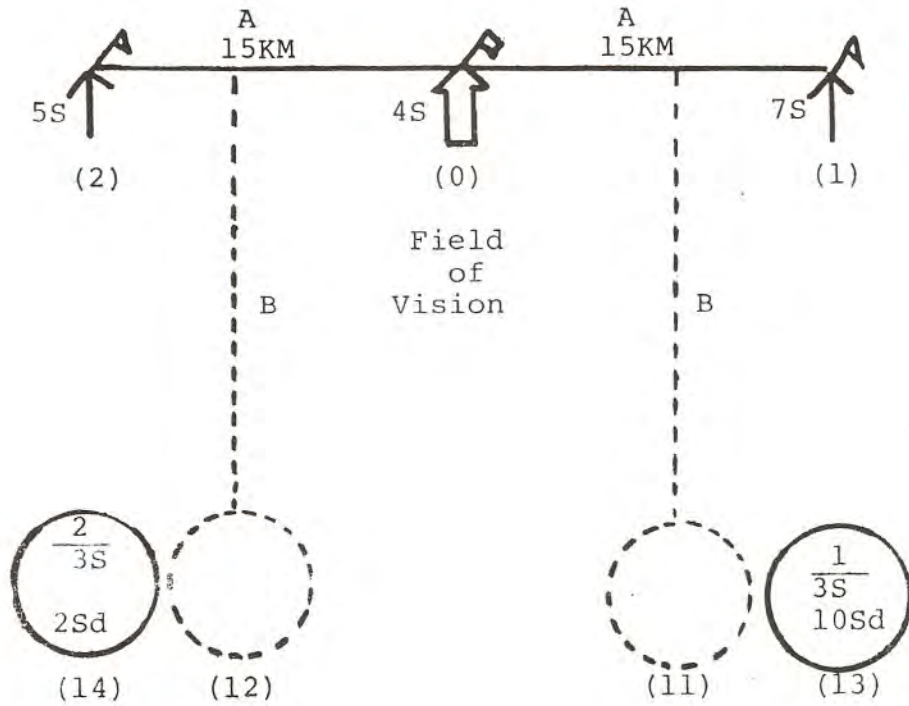
SCOUTING DISPOSITION 2 (METHOD KO) - Method Otsu reverse stations in all Dispositions.



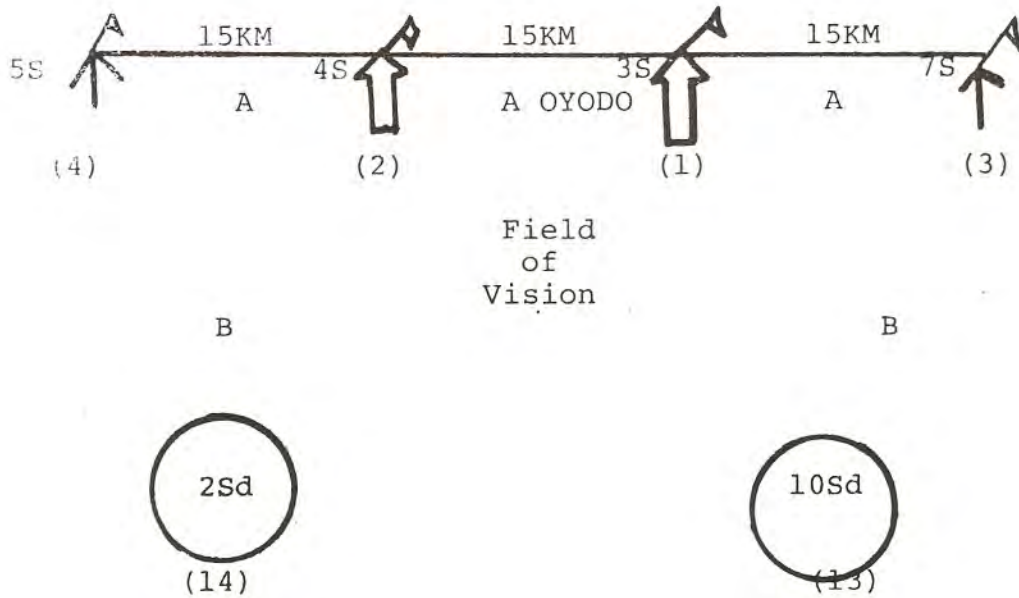
SCOUTING DISPOSITION 3 (METHOD KO)



SCOUTING DISPOSITION 4 (METHOD KO)

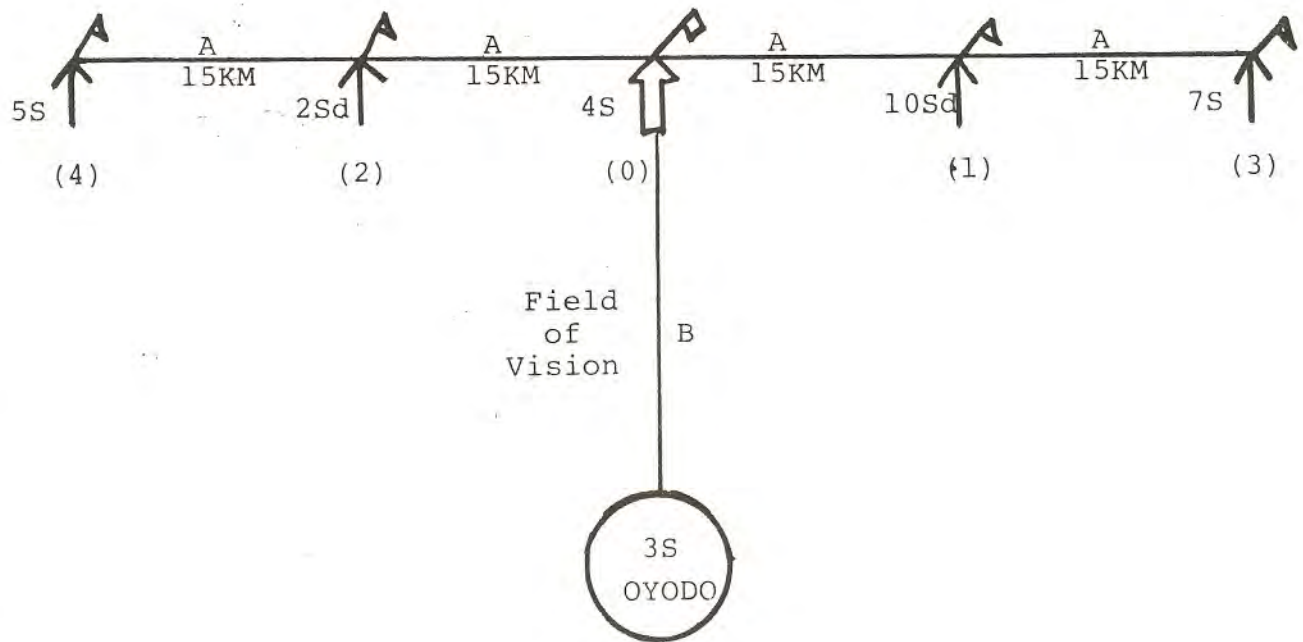


SCOUTING DISPOSTION 5 (METHOD KO)

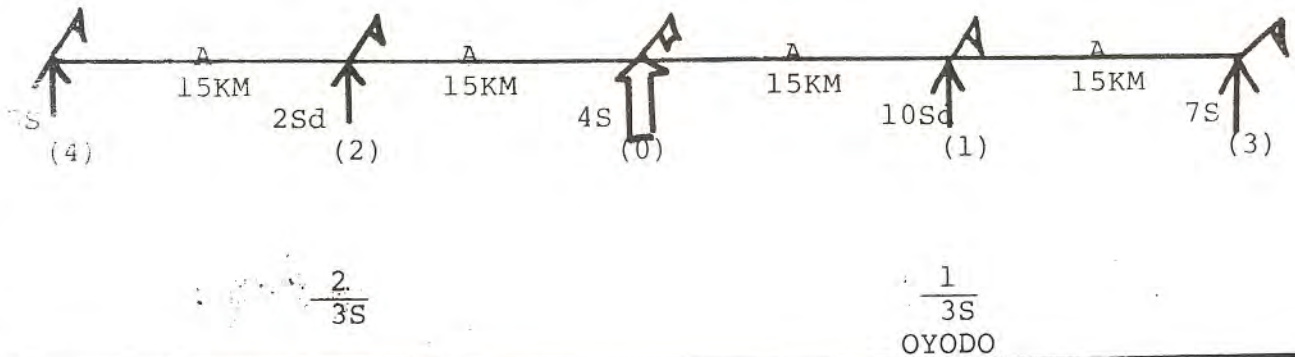




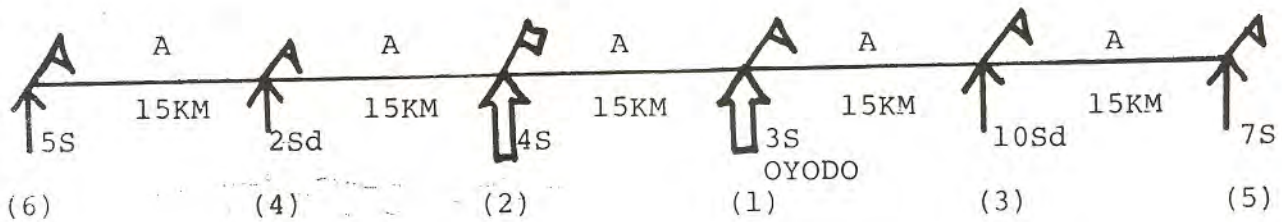
SCOUTING DISPOSITION 6 (METHOD KO)



SCOUTING DISPOSITION 7 (METHOD KO)

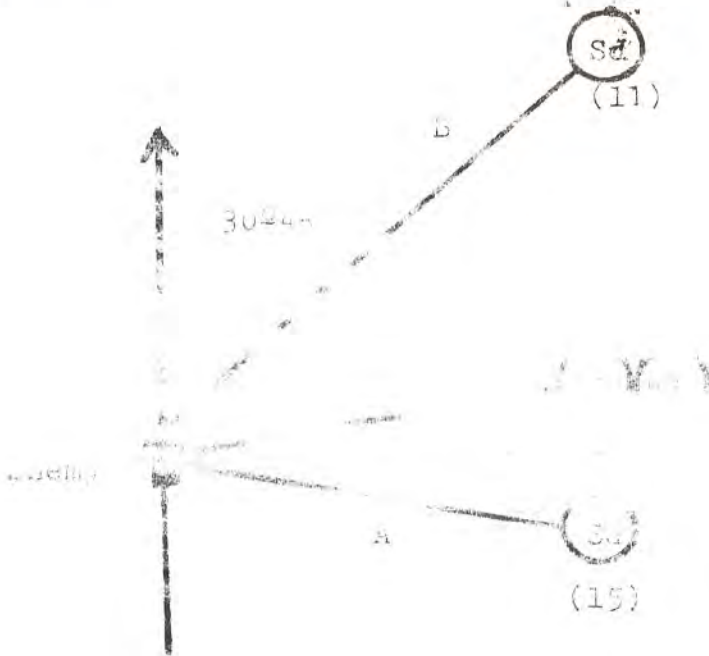


SCOUTING DISPOSTION 8 (METHOD KO)



# Night Operations Dispositions

Type  
Night  
Operations  
Disposition  
I



A=Limit of visibility or  
effective limit of radar  
search

B=A+3 to 7 miles.

B= Battleship  
BS=Battleship Squadron  
CS=Cruiser Squadron  
dg=Destroyer Group  
Sd=Destroyer Squadron(Flotilla)

↑=Naval force(enemy) including capital ships

## Station of Each Unit

1. In Organization 4  
(11)=2 Night  
Operations Unit  
(13)=1 Night  
Operations Unit
2. In Organization 3  
(11)=Night  
Operations Unit  
and depending on  
the situation(15).

(15)=1 Unit

## Outline of Combat

1. Cruiser divisions will concentrate their strength as much as possible. When they have proceeded close to the desired disposition point of the tracking destroyer squadron located near the limit of visibility (beyond effective radar range), they will O HASSHA. Then, closing in (They must be careful not to come too soon within the enemy's effective range to allow firing near-... they carry out a...

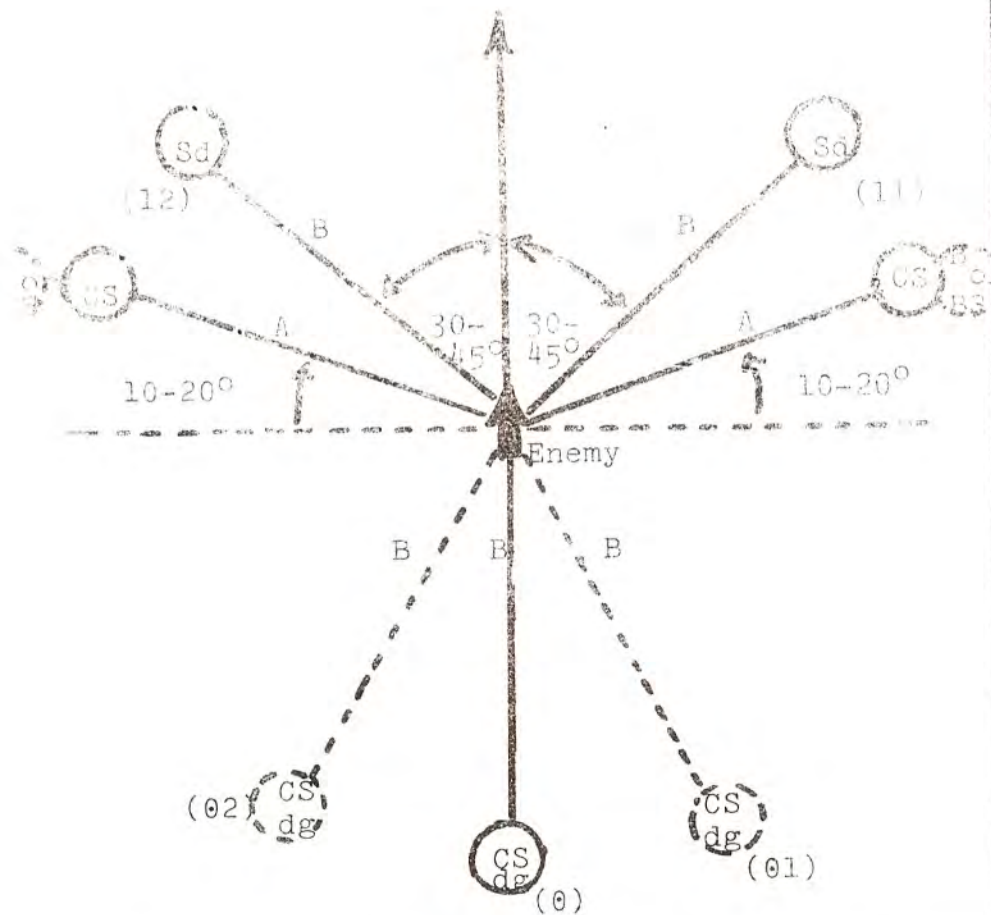
the... divisions, or at some other suitable stations. Co-ordinating their attack with that of the cruiser divisions, they will fire upon the enemy with the aid of searchlight illumination and star-shell fire of their own and other ships

3. The destroyer squadron will proceed with the utmost secrecy to a point off the enemy's bow and will endeavor to carry out a surprise attack, taking advantage of the effects of O HASSHA by the cruiser division and the effect of the bombardment by the battleships and cruiser division. Generally the unit stationed to the rear will attack in concert with the units stationed to the fore.

Type	Disposition	Station of Each Unit	Outline of Combat
Night Operations Disposition 1(continued)			<p>4. In accordance with orders, the enemy will be destroyed at one blow by an all out attack.</p> <p>5. When the full scale attack begins, tracking planes will endeavor to drop flare continuously over the enemy and will promptly report enemy movements.</p>

Night Operations Disposition 2		<p>In Organization 5</p> <p>(11)=2 Night Operations Unit and dependion on the situation, at (15).</p> <p>(13)=1 Night Operations Unit.</p> <p>(0) or(0z)=3 Night Operations Unit.</p> <p>(21)=Support Unit.</p>	<p>1. One part will track at the enemy's rear or off his bow and will report the enemy situation.</p> <p>2. Same as outline for combat for Night Operations Disposition 1.</p> <p>3. When tracking units see friendly units going over to the attack, they will fire star shells and play searchlights, and will promptly report enemy movements.</p>
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Organization  
Disposition  
3



In Organization 2  
(12)(14)=2 Night  
Operations Unit

In Organization 4  
(11)(13)=1 Night  
Operations Unit.  
(12)(14)=2 Night  
Operations Unit.  
(21) or (22)= Support  
Unit.

In Organization 6  
(11)(13)=1 Night  
Operations Unit.  
(12)(14)=2 Night  
Operations Unit.  
(0)=3 Night Operations  
Unit.

The greater part of the  
force will attempt to en-  
circle the enemy from both  
sides. One part of the force  
will track to the rear or  
off the quarter.

2. In accordance with orders  
the units on both sides will  
carry out a simultaneous at-  
tack. If a good opportunity  
presents, the tracking unit  
will attack with those units

3. The outline for combat  
for each unit will conform  
to Night Operations Dispo-  
sitions 1 and 2.

Night  
Operations  
Disposition  
4



Scouting dispositions or other disposition at the time.

When encountering the en-  
emy, units in the scouting  
disposition or other dispo-  
sitions will attack quickly  
and then become tracking  
units. Other units will at-  
tack in conformity with Out-  
line for combat in Night Op-  
erations 2 or 3.