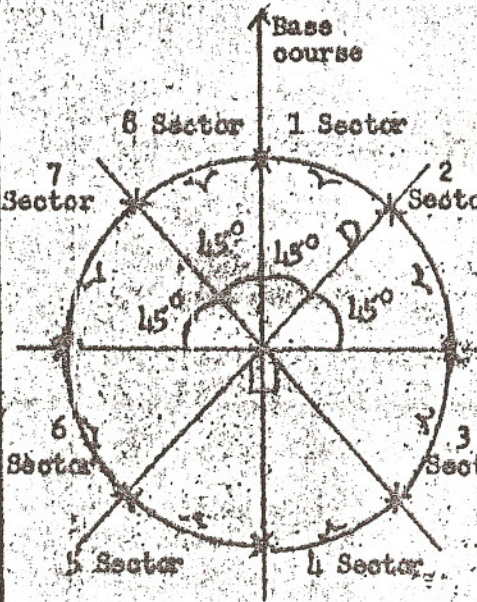
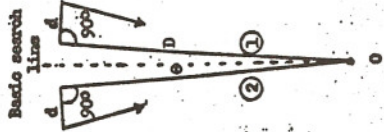
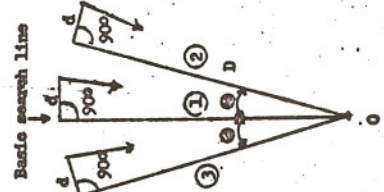
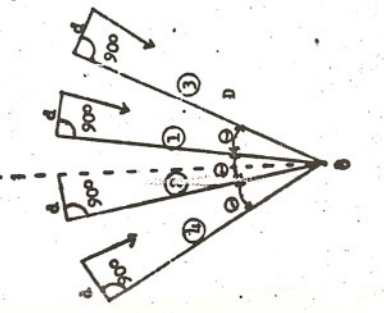
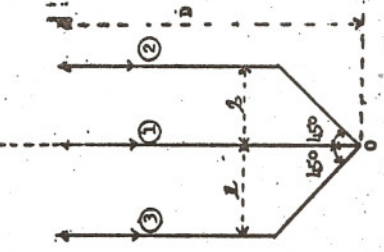
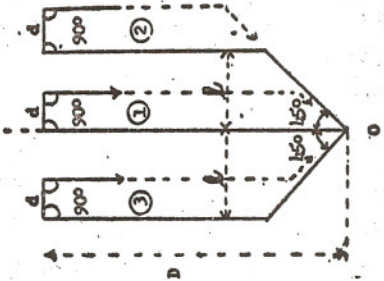


# 5. Antiaircraft patrol

In the orders to the antiaircraft patrol planes, the assigned areas, the take-off time of the airplanes, the duration of the patrol and the range of the patrol, D, will be specified.

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>DIAGRAM OF<br/>ASSIGNED<br/>AREAS</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| <p>PATROL OUTLINE</p>                    | <ol style="list-style-type: none"> <li>1. The patrol planes will move around the circumference of the assigned area, keeping a sharp watch for enemy airplanes and sending in patrol reports (warnings).</li> <li>2. As a basic rule, one plane will be assigned to each sector.</li> <li>3. Patrol altitude will be 3,000 - 4,000 m.</li> <li>4. In the absence of special orders, D will be 20 km.</li> <li>5. In going back and forth between assigned points, antisubmarine patrol also will be carried out.</li> </ol> |  |

NOTE: USF 74 (REVISED) MARCH 1941. §1-535 describes OUTER AIR PATROL 3 plane units fly along <sup>sub-area of</sup> circle of 20 n.m. circle  
"Only that part of the circle from which attack is expected <sup>20</sup> normally will be patrolled"

| SEARCH METHODS                  | Method 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Method 2.                                                                           | Method 3.                                                                          | Method 4.                                                                         | Method 5.                                                                         |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| DIAGRAM OF SEARCH MOVEMENTS     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |
| OUTLINE FOR EXECUTION OF SEARCH | <p>1. By special order the basic search line begins at the datum point (o), range is (D), lateral distance is (d), angle is (a), area is (1).</p> <p>2. Normally, one airplane is used on the search line. If two or more airplanes are assigned, a special order will be required.</p> <p>3. In the absence of special orders, each search plane will return to the datum point according to the outline of movements in the diagrams.</p> <p>4. When the number of search lines is greater than the number on the diagrams, each side may be added to successively, and, when less than the number on the diagrams, the lines in excess may be deleted successively.</p> | <p>Alternate method - search may be conducted to the left.</p>                      | <p>Alternate method - search may be conducted to the left.</p>                     | <p>Alternate method - search may be conducted to the left.</p>                    | <p>Alternate method - search may be conducted to the left.</p>                    |

USF 74 (Revised) OTC + D, US Fleet aircraft with CV aircraft (mainly 461)  
32-101 (1st reg. Carrier US Squadron)

B. An airplane on the search line which discovers the principal objective will track it and report the enemy situation. If necessary, an alternate tracking plane will be sent out to continue tracking. If the remaining airplanes on the search line receive the report that the principal objective has been discovered, they will return quickly and prepare to attack.

C. When enemy ships and airplanes other than the principal objective are discovered, the necessary reports for secret reconnaissance will be made, and the prearranged search duty will then be continued.

D. Tracking must be carried out secretly, utilizing to the utmost meteorological phenomena and such methods as high altitude tracking, long distance tracking, and tracking by closing in and drawing away.

E. As exactitude is expected in reporting positions of ships, navigation must be carried out very accurately.

#### IV. COMBAT

##### A. Combat Policy

1. The main object will be to destroy the enemy forces in a particular area immediately with all our power. To this end the greatest possible mobility will be employed, and the airplanes available will be used extensively and aggressively.

2. Friendly forces will be protected by keeping a strict alert against airplanes and submarines and by seizing the initiative and destroying those that are discovered. The particular vulnerability of aircraft carriers will be kept in mind.

3. The policy is that aircraft carriers will not engage in combat with surface ships except when especially necessary or under especially favorable conditions. While the aircraft carriers are escaping from surface ships, the latter will be destroyed by airplanes and destroyers. The destroyers will place themselves quickly between the aircraft carrier and the enemy, concealing the carrier, and at a favorable opportunity, will counterattack.

##### B. Air Combat

1. This command will order air combat.

2. Although the outline of organization, object of attack, weapons to be used and movements will be ordered by this command when an attack unit is sent out, the attack will be executed under the command of the attack unit commander.

3. In an air attack complete success may be attained by greatly shortening combat distance and using the time gained to make sudden, repeated attacks.

4. In an attack when resistance by airplanes is expected, the fundamental policy is to gain control of the air by use of fighter planes and to attack under their protection. Nevertheless, in certain cases, attack plane units only will attack on moonlit nights, at dawn and at dusk.

5. The principal object of the high altitude direct escort unit will be to engage raiding airplanes in combat outside the range of antiaircraft fire and before they attack. The attack must first be concentrated on the airplane of the enemy commanding officer (the guide airplane); after the enemy attack manoeuvres are disorganised, his airplanes will be destroyed one after the other. Our direct escort dispositions must not be weakened by over-concentration of strength on one objective or by sustained pursuit of airplanes after an attack.

6. The attack unit will be organized as follows:

| ORGANIZATION   | COMMANDER                                          | COMPONENT FORCES   |                                              | NOTES                                                                                                                                                                                               |
|----------------|----------------------------------------------------|--------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Organisation 1 | To be fixed by the captain of the aircraft carrier | Fighter plane unit | Carrier-borne fighter planes - full strength | 1. Full strength is the number of airplanes available at present but will not exceed the number normally used.<br>2. Organisation for cases other than those listed will be given by special order. |
| Organisation 2 |                                                    | Attack plane unit  | Carrier-borne attack planes - full strength  |                                                                                                                                                                                                     |
| Organisation 3 |                                                    | Fighter plane unit | Carrier-borne fighter planes - 9             |                                                                                                                                                                                                     |
| Organisation 4 |                                                    | Attack plane unit  | Carrier-borne attack planes - 3              |                                                                                                                                                                                                     |
| Organisation 5 |                                                    | Attack plane unit  | Carrier-borne attack planes - 6              |                                                                                                                                                                                                     |





|                      |                                                     |
|----------------------|-----------------------------------------------------|
| Battle Speed 1       | 18 knots                                            |
| Battle Speed 2       | 20 knots                                            |
| Battle Speed 3       | 22 knots                                            |
| Battle Speed 4       | 24 knots                                            |
| Battle Speed 5       | 26 knots                                            |
| Maximum Battle Speed | Maximum speed of which each ship (unit) is capable. |

### B. Smoke Screens

1. Normally smoke screens will be laid by destroyers. Sometimes they will be laid by the carriers themselves.

2. The laying of smoke screens by destroyers will be left to the discretion of the commanding officer of the destroyer division. Normally the laying of a smoke screen by a carrier will require special orders.

### C. Methods of Airplane Stand-by

The methods to be followed by airplanes standing by are established as follows:

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| TYPE OF STAND-BY | ESSENTIALS                                                                                    | OUTLINE OF STAND-BY                                                                                                                                                                                                                  |
|------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Immediate Alert  | Preparations will be completed for an immediate take-off.                                     | 1. All personnel aboard the airplane; engines warmed up.<br>2. Airplane crew at their assigned posts.                                                                                                                                |
| Alert 1          | Preparations will be completed for a take-off within one minute after receiving orders.       | 1. All personnel aboard the airplane; engines stopped but kept in warmed-up condition.                                                                                                                                               |
| Alert 2          | Preparations will be completed for a take-off within 10 minutes after receiving orders.       | 1. All personnel gathered together standing by in a convenient spot for receiving orders.<br>2. Airplane crew standing by in the vicinity of the airplane.<br>3. Trial warmup completed; airplane ready to start moving immediately. |
| Alert 3          | Preparations will be completed for a take-off within about 30 minutes after receiving orders. | 1. Passengers standing by in a convenient spot.<br>2. Trial warmup of airplane begins; depending on circumstances, may be made ready in the hangar.<br>3. Airplane crew standing by in a convenient spot.                            |
| Alert 4          | Preparations will be completed for a take-off within two hours after receiving orders.        |                                                                                                                                                                                                                                      |

Note USF 77 (Revised) CTO CV's US fleet 3-41  
3302 airplanes may be ordered to assume a combat or  
readiness perspective that under which they operate  
(a) Condition 1 Airplanes kept warmed up flight personnel  
flight clothing, in possession of latest available information  
of the tactical situation. Personnel & equipment ready  
to permit launch in 10 minute notice

D. Panel Signals From Aboard Ship to Direct Escort Planes  
Overhead

| NO | SIGNAL PANEL                                                                        | MESSAGE                                              | NOTES                                                                                                                                                                                                                |
|----|-------------------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  |    | Enemy airplanes in this direction                    | 1. Panels will be made of sailcloth or thin boards, white in color and will be divided into two kinds, long and short, and standardized as follows:<br>Long - Width 1 m, length 4 m<br>Short - Width 1 m, length 2 m |
| 2  |    | Increase altitude; enemy airplanes in this direction | 2. Position for stretching signal panels.                                                                                                                                                                            |
| 3  |    | Decrease altitude; enemy airplanes in this direction | Aircraft carrier -<br>Flight deck<br>Other ships and boats - On the deck forward of the forward bridge or on a gun turret                                                                                            |
| 4  |   | Breakdown in radio (telephone) apparatus aboard ship | 3. With signal panels which indicate the direction of enemy airplanes, the head of the letter T will be pointed in the direction of the enemy airplanes.                                                             |
| 5  |  | Land on the carrier (at base)                        |                                                                                                                                                                                                                      |