

ESSEX**WATER LINE SERIES KIT NO.102**
U.S.Aircraft Carrier**WATER LINE SERIES****HISTORY**

Essex-class carrier is the enlarged and remodeled type of the treaty-type Yorktown-class carrier. The Essex was newly designed, though it still used the basic idea of the former class carrier in many respects. For example, the large upper flight deck was consequently reinforced to protect the hangar---open hangar. In addition, the flight deck became much longer and wider (almost the same area as the Japanese carrier Shinano) and was surrounded by the corridors on which anti-air guns were equipped. There were three elevators, one of which was the deck-edge elevator at the center of the port side. This elevator was provided with an open hangar and proved its effectiveness on damage control. To reinforce its armor for the defensive, the U.S. Navy's unique multi-layer underwater protection system was employed; certain portion of the bilge was protected with plates in triple layers. The armor plate for the flight deck was 1.5 inch in thickness, for the hangar deck, 3 inch, and for the top side of the engine room (equivalent to the fourth deck), 1.5 inch thick plating. Gallery deck provided between the flight deck and hangar, further reinforced the triple-layer armor plate. This was the major reason why the Japanese Kamikaze attackers were unable to pierce through the hangar deck. Even when considerable damage was caused to the superstructure, no carrier was sunk, because of the powerful interference of such damage control system. Furthermore, 5 inch 38 calibre cannons, 40 mm Beauforce machine guns and 20 mm Elicon machine guns were stationed on the ship, and the superb radar and TV fuse prevented the Japanese planes from approaching the carrier and consequently costed the Japanese attack planes tremendous loss. With its enlarged flight deck, this carrier was able to load additional planes. Besides the planes housed in the hangar some of the planes were parked on the flight deck so that it was able to carry 100 planes in total. For take-off, the flight deck was outfitted with two H-41 hydraulic catapults, which provided the carrier with a powerful capacity in the aircraft operation. To add to the 11 carriers of the Essex class ordered in 1940, 2 were to be built in 1941, 10 in 1942, 3 in 1943 and 6 in 1944. However, 6 were cancelled in March of 1945 and 2 in August of the same year due to the favorable turn of the war state. After all 24 carriers were completed and, of these, 17

carriers were completely ready for action by the end of the war. Other than the Bon Homme Richard CV-31, the Essex-class carriers built after 1943 were outfitted with 4 barrel anti-aircraft cannons. Because of this, it was necessary to enlarge the bow length by 3.7 m and the ships were classified into two models; short and long models. The Essex belonged to the short model.

At the outbreak of the Pacific War, the Essex was being built at Newport News Shipyard. Speedy construction was executed with the news of the war and it was completed 20 months after the keel was laid in July 3, 1940. As soon as the final testing was completed, it made its appearance at Pearl Harbor in June of 1943. Since the U.S. Navy had lost the Lexington at the Coral Sea, Yorktown at Midway, Wasp CV-7 at Guadalcanal and Hornet CV-8 in the South Pacific area, only the Enterprise CV-6 and the scarred Saratoga were left for the U.S. war operation in the Pacific. For such reason, the arrival of the Essex in Pearl Harbor was heartily welcomed by the Navy personnels and was symbolized by the words of "Resurrection of America". The first war action by the Essex was the attack on Marcus Island in August 31, 1943, with the 15th Task Force accompanied by the new Yorktown CV-10 and the light carrier Independence CV-22.

It was also the day that the carrier fighter Hellcat F6F made its maiden battle flight, and thenceforth down to the end of the war, the combination of the Essex class carrier and the Hellcat fighter had been the main force for the U.S. Navy. The Essex suffered damage four times during the war, which included the one caused by wrong take-off and landing by itself, or by an error attack by the friendly side. In the attack on Okinawa, on April 11, 1945, the Japanese dive bomber attack gave it a fatal damage on its fuel system but fortunately fire fighting was successful and the Essex was saved from sinking.

DATA

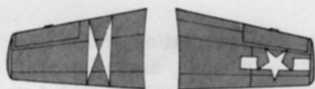
Displacement: 27,100 tons, 33,000 tons full load / Overall length: 265.77 m / Max. width: 28.35 m / Draught: 7.01 m / Flight deck: 268.0 m / Speed: 33.0 knots / Propulsion: 150,000 Hp / Aircrafts: over 80 / Catapult: 2

PAINTING

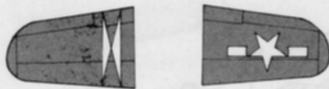
In general the U.S. Navy warships, are painted more brightly than the Japanese warships. For the section above the draught line, the hull and the superstructure are painted gray with slight bluish tone. The wooden flight deck is painted ① tan. Due to repeated repairs, the iron black on the catapult and the white line on the deck might have been faded and worn off. Paint the bottom side of the deck gray, the same color as the hull. Paint the upper area on the funnel black. Since cutter boats and launches were covered with canvas, paint their

top in mat white and their hulls in the same color as the ships hull or in gray somewhat darker. There was a black line, indicating the draught line, for the entire length of the ship, but it was dirty and scarred and was not clear. The hull below the draught line was painted dark red, so-called ship bottom color. The Essex class carriers were camouflaged in a cloud pattern, with 2 or 3 color-variation---dark gray, hull gray and light gray.

Hellcat



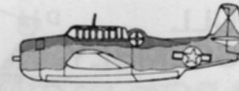
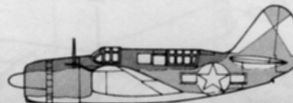
Corsair



Helldiver

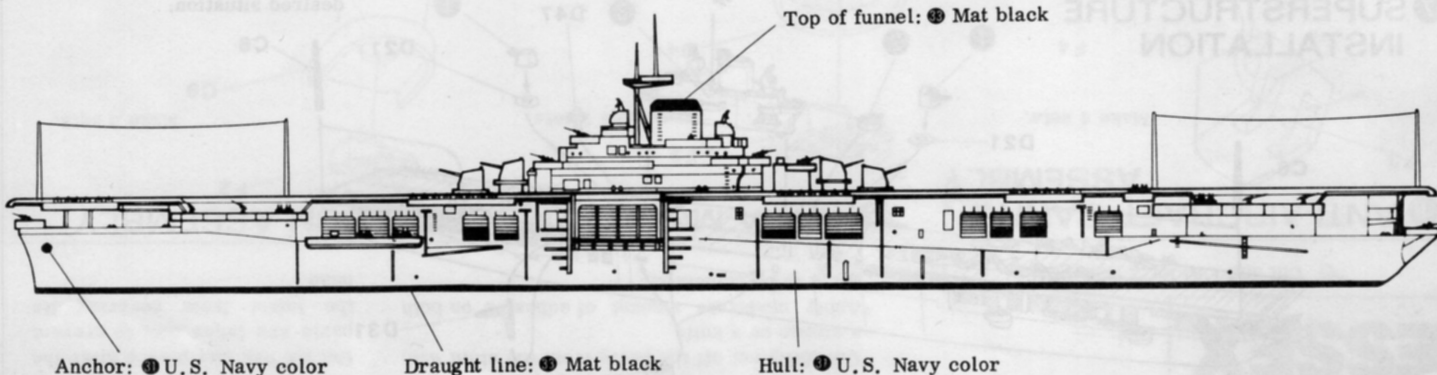
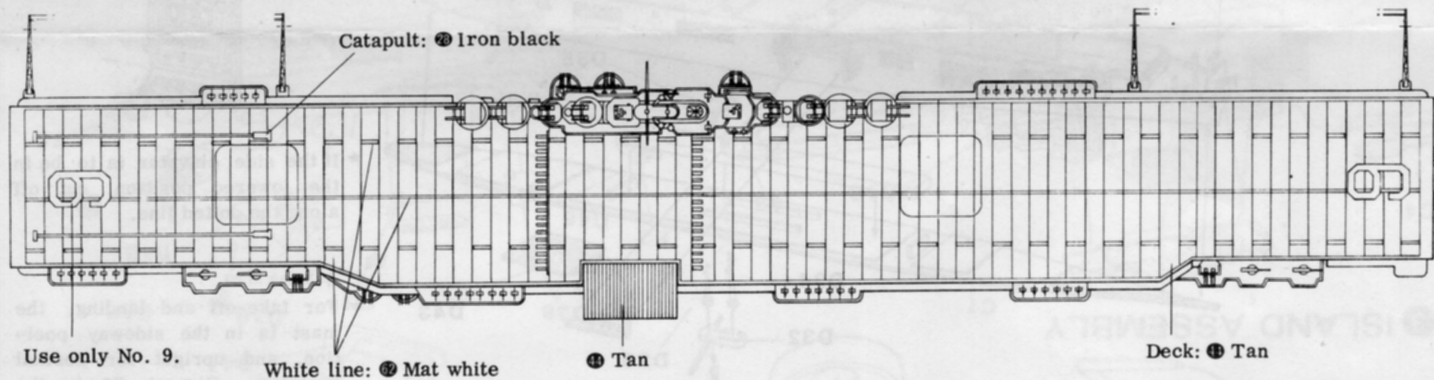


Avenger




Overall plane surface: ① Navy blue
Marks: ② Mat white

Top: ① Navy blue
Center: ② + ③ Intermediate blue
Bottom: ④ Mat white



ESSEX

 Cut and Use for a Name Plate

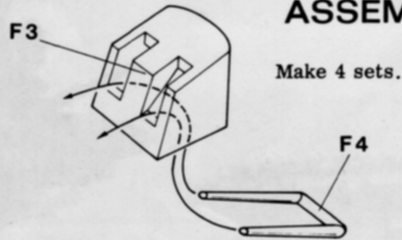
BEFORE ASSEMBLING

- *Carefully cut off the parts from the stem with a nipper or a knife.
- *Apply moderate amount of adhesive on both parts to be cemented.

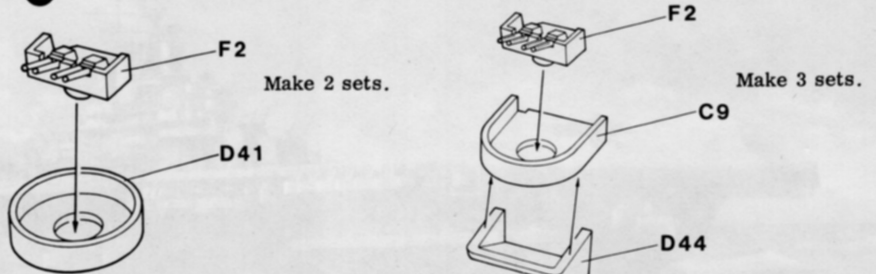
NOTE:

Cut the bag into pieces after the parts are taken out, to prevent the infant from covering its head.

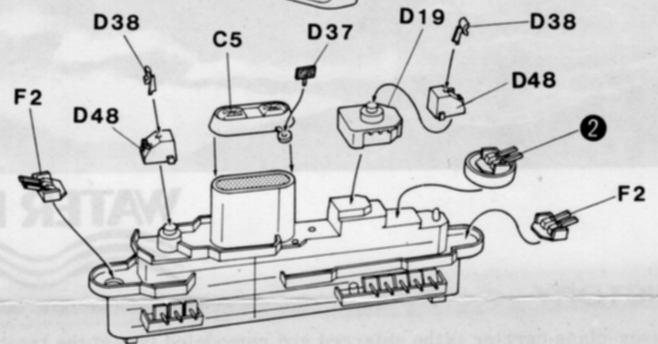
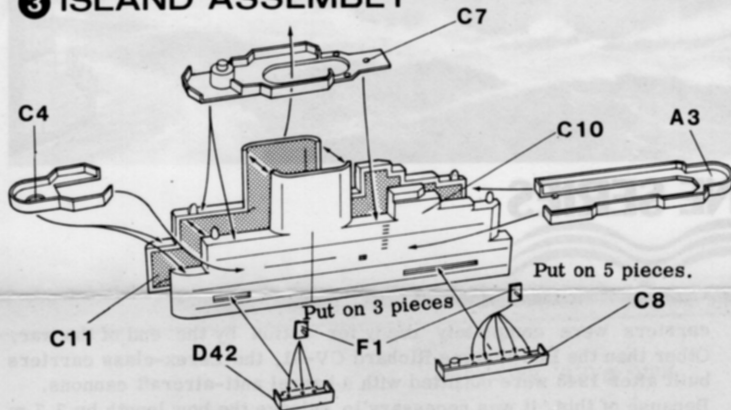
1 ANTI-AIRCRAFT CANNON ASSEMBLY



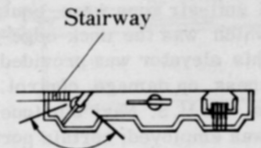
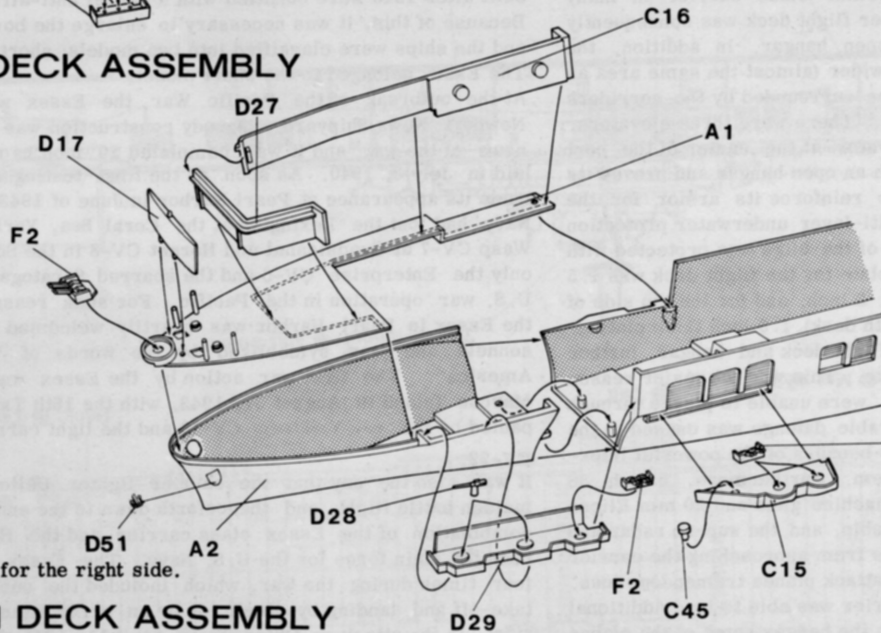
2 TETRA-MOUNT MACHINE GUN ASSEMBLY



3 ISLAND ASSEMBLY



4 BOW DECK ASSEMBLY



* When the single-mount machine guns are aligned parallel with the ship, they will cross the stairways. Therefore, fit them in such an angle as indicated on the drawing.

5 STERN DECK ASSEMBLY

