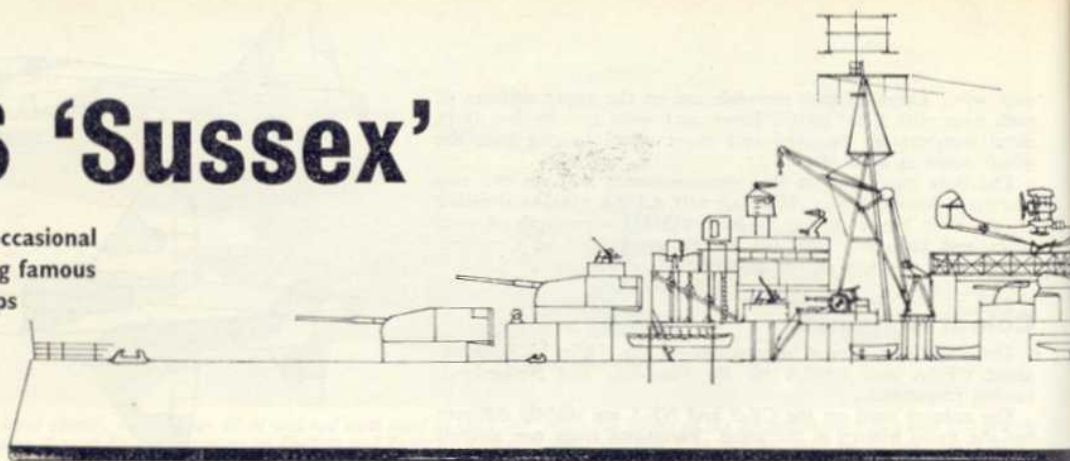


# HMS 'Sussex'

Second of an occasional series featuring famous warships

1:600 scale



HMS *Sussex* was one of the four 'London' class heavy cruisers built under the 1925-26 Estimates, as the second group of 'County' Washington Treaty cruisers. They were designed by Sir William Berry as improved editions of the first *Kent* design by Sir Eustace Tennyson d'Eyncourt.

Like the other 'Counties' the 'Londons' were handsome ships, with high freeboard and three tall funnels. Their chief weakness was their lack of side armour, and even after reworking the *Kent* design there was little that Sir William Berry could add to the sparse deck armour. The chief improvement was effected by giving them internal torpedo-protection in place of the bulges in the 'Kents'. Looking back, it is hard to believe that the DNC could make no economies of weight to allow for vertical protection, but the fact remains that British heavy cruiser design did not achieve any balance between armament, protection and endurance until the *Exeter* and *York*.

On the credit side the 'Counties' had the invaluable assets of endurance (10,000 miles at 11 knots), a strongly built and seaworthy hull, and a well-arranged main armament. Whatever they lacked in a paper comparison with foreign 8 inch gunned cruisers, they proved tough opponents in battle. In all 13 were built for the RN and RAN, of which all saw hard service and three were sunk.

## Modernisation

From 1936, as money became available for re-armament, the 'Counties' were taken in hand for modernisation. The 'Kents' were given an armour belt, enhanced anti-aircraft armament and more elaborate equipment for handling reconnaissance aircraft. Unfortunately the outbreak of war in 1939 meant that only *London* out of the six later 'Counties' could be spared for an even larger reconstruction. She emerged in 1941 as the most radically altered of all, looking like a flush-decked 'Colony' class cruiser. The *Sussex*, on the other hand, owed her modernisation to heavy damage from enemy action. While being refitted by Fairfields in York Hill Basin on the Clyde,

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she was hit by a German bomb on November 22, 1940, when the refit was almost complete. Being unmanned and filled with inflammable stores she was very soon gutted by fire and wrecked by an explosion. In order to avoid a major catastrophe the order was given to flood her, and the *Sussex* capsized and sank with hundreds of tons of water on board.

Repairs to damage were carried out by Alexander Stephens & Co, and assisted by John Brown, and lasted until August 9, 1942, a total of over twenty months. When she recommissioned she had substantially the same appearance as before, but her pole masts had been replaced by tripod and her secondary armament was entirely new. A large number of internal alterations were also made, but no armour was added as had been in the 'Kent' class and *London*

## Armament Notes

The 8 inch guns elevated to 70°, and gave trouble when first installed. Despite references in *Janes' Fighting Ships* to the contrary, the height of the quadruple torpedo-tubes above the waterline caused so much trouble that at one stage it was threatened to remove them.

In 1937 two four-barrelled pom-poms were added abaft the catapult position, port and starboard (the port pom-pom being slightly further aft). This remedied a long-standing deficiency in close-range anti-aircraft firepower. Four additional 4 inch guns were added during this refit, but during the big 1940-42 refit the entire secondary armament was replaced by twin 4 inch and 8-barrelled pom-poms in new positions. In 1944-45 'X' turret was re-

**Note:** The 1:600 scale drawing is a reduction adapted from a very complete set of drawings of *Sussex* available from A & A Associates. The originals are to a 1/16 inch to 1 foot scale and show full hull and fittings. The enlarged views are reproductions from the full size drawings. The complete set of drawings cost 47s (including postage) and is available from A & A Associates, 102 Mattison Road, London, N.4.

moved to offset the weight of four more pom-poms and other gear.

## Service

1st Cruiser Squadron, Mediterranean Fleet 1929-39; South Atlantic 1939; East Indies 1940; refit and bomb damage repairs at Alexander Stephen's yard, Glasgow 1940-42 before joining Home Fleet to 1943, Eastern Fleet 1943-44; refit June 1944-March 1945; 5th Cruiser Squadron 1945-46; Reserve 1946 and arrived at Dalmeir for breaking up on February 23, 1950 (completed January 20, 1955).

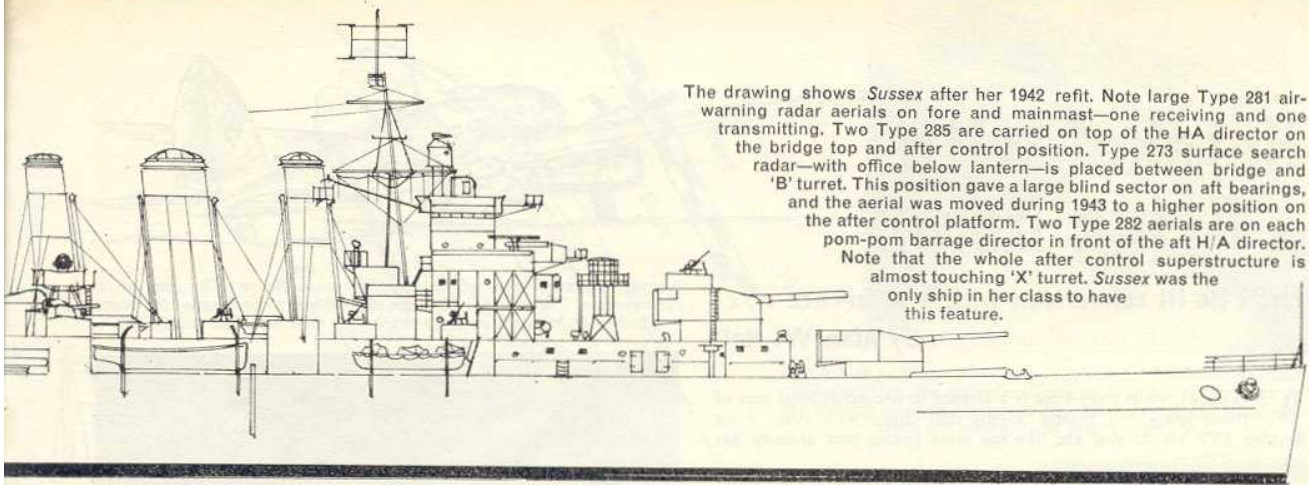
## Miscellaneous Notes

In 1942 the following radar sets were fitted: 273, 281, 282 and 285, as well as MF/DF. As completed she carried a Fairey IIIIF aircraft, but by 1939 this had been replaced by a Walrus. All aircraft and catapult equipment was removed in 1944-45.

*Article continues on page 133 on the other side of the advertising section; unstaple centre pages to work from drawing.*

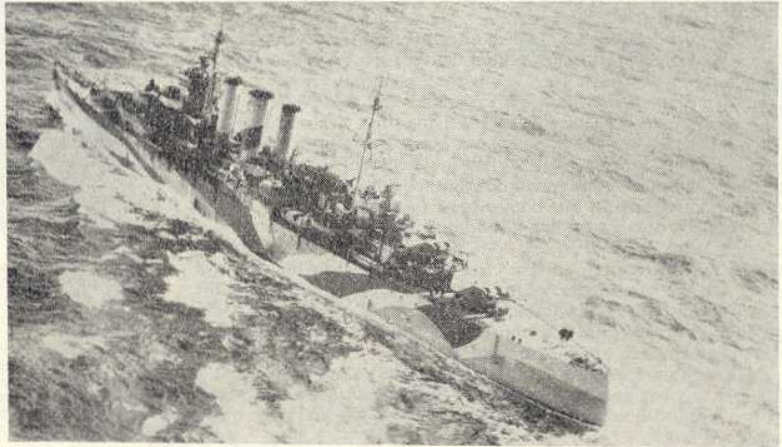
HMS *Sussex* at the period depicted in the drawing.





The drawing shows *Sussex* after her 1942 refit. Note large Type 281 air-warning radar aerials on fore and mainmast—one receiving and one transmitting. Two Type 285 are carried on top of the HA director on the bridge top and after control position. Type 273 surface search radar—with office below lantern—is placed between bridge and 'B' turret. This position gave a large blind sector on aft bearings, and the aerial was moved during 1943 to a higher position on the after control platform. Two Type 282 aerials are on each pom-pom barrage director in front of the aft H/A director. Note that the whole after control superstructure is almost touching 'X' turret. *Sussex* was the only ship in her class to have this feature.

**Laid down:** Feb 7, 1926; launched Feb 22, 1928; completed March 19, 1929; built by Hawthorn Leslie, Hebburn-on-Tyne.  
**Displacement:** 9,730 tons (standard), 13,220 tons (full load).  
**Dimensions:** 595 ft (pp) × 66 ft × 21 ft 3 ins max; 693 ft (oa).  
**Armament (as built):** 8 × 8 inch (4 × 2); 4 × 4 inch (4 × 1); 16 × .303 inch MGs (16 × 1); 8 × 21 inch torpedo-tubes (2 × 4); 4 × 3 pdrs (4 × 1)  
 (1937) 8 × 8 inch; 8 × 4 inch (8 × 1); 8 × 2 pdrs (2 × 4); 8 × .5 inch MGs (2 × 4); 8 × 21 inch TT  
 (1942) 8 × 8 inch; 8 × 4 inch (4 × 2); 16 × 2 pdrs (2 × 8); 10 × 20 mm (10 × 1); 8 × 21 inch TT  
 (1945) 6 × 8 inch (3 × 2); 8 × 4 inch; 48 × 2 pdrs (6 × 8); 14 × 20 mm (4 × 2, 6 × 1); no TT  
**Armour:** 4 inch-1½ inch deck; 2 inch-1½ inch turrets; 3 inch director; plus internal bulges.  
**Machinery:** 4-shaft geared turbines, 80,000 shp—32½ knots; 8 Admiralty 3-drum boilers.  
**Complement:** 664 (peace) 695 (war).  
**Fuel:** 3,210 tons oil.



Model of *Sussex* could be made from Airfix HMS Dorsetshire kit, though many structural and detail changes are needed.

### Flying Jeep—continued

the rotors and rotor head assembly to such a small scale, certain minor amendments have been incorporated in the component parts but this will not spoil the overall effect.

From the plan view drawing trace the outline shape of the rotor blades and transfer this on to a strip of plastic card of the scale thickness of the blades and then carefully cut out the shape from the plastic card—note that the blades are cut as one continuous piece of card from the tip of one blade to the tip of the other. Sand each blade to an aerofoil shape noting while doing so that the leading edge of each blade is the edge which appears straight on the plan view drawing and not that which tapers towards the rotor pivot point.

On to the upper and lower faces of each blade cement small triangles of very thin card—the location of these on the upper surfaces can clearly be seen on the plan view drawing.

Provide the droop in the blades by warming these slightly over a suitable source of heat, firstly experimenting with a scrap strip of plastic of the same overall dimensions as the blades, and while the blades are pliable bend to the shape shown on the side view drawing. As far as the modelling of the rotor head assembly is concerned, Sketch B adequately shows this without any other instructions being necessary except to say that the approximate dimensions of the parts should be measured from the drawings and that the pivot pin should pass through the cabin roof and, if possible, to steady the pivoting of the rotor, it should also pass through the floor of the Jeep.

Care must be taken when locating the holes for the pin to ensure that the tilt of the blades will be as shown on the side view drawing.

**STAGE 5** To complete the model fill any defects not already attended to, with body putty, and after this is set sand the filled parts. The drawing shows the manner in which the prototype was camouflaged and also the positioning of the roundels and prototype markings.

November, 1970

**Below:** One of the 89 single seat CF-5As being flown by CAF acceptance pilot Captain Frank Gilland on a routine test flight over the Laurentians North of Montreal. **Bottom:** One of the 75 NF-5As being built by Canadair for the Netherlands awaits delivery outside Canadair's Montreal plant. Aircraft are flown over the Atlantic to Twenthe, Holland, being escorted en route by a HC-130 Hercules.

