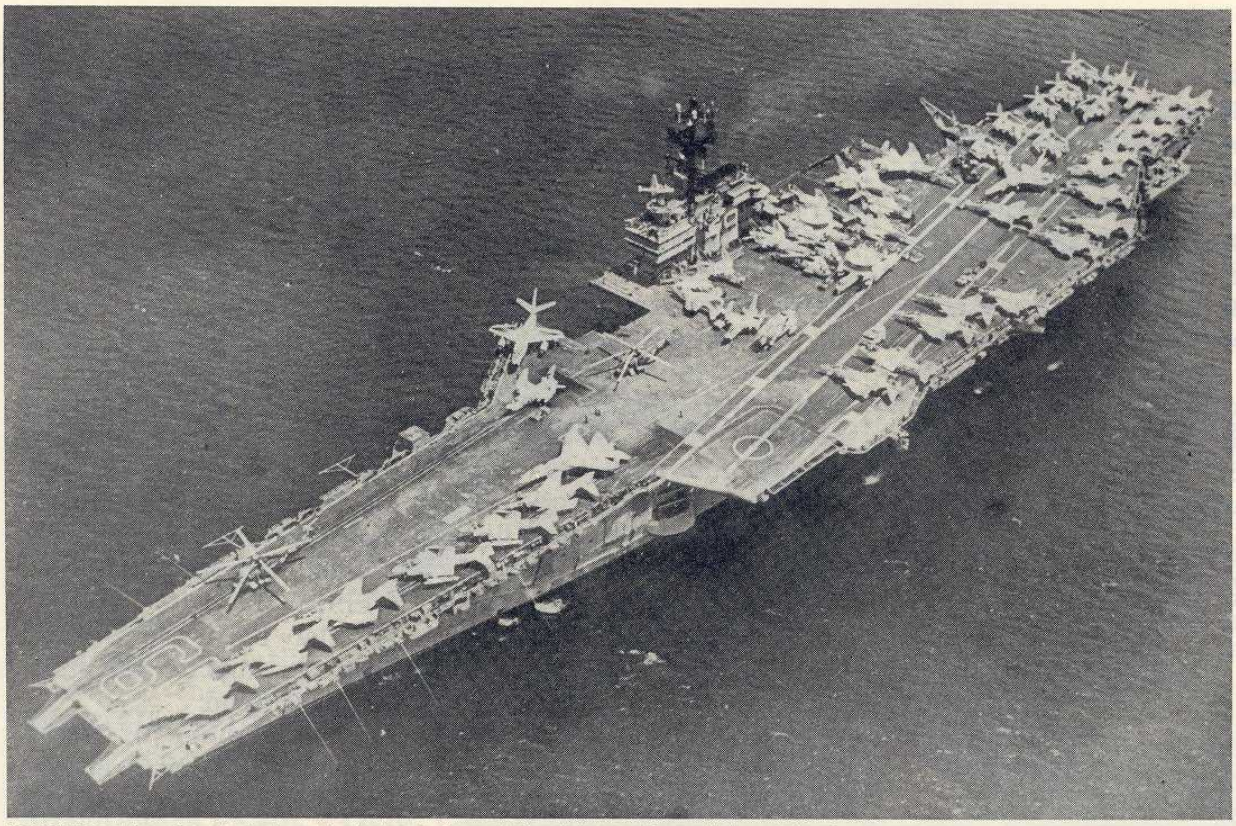


Forrestal's *port bow view clearly shows the deck extension and altered deck markings which must be incorporated into the model. Another interesting feature of this photograph is the different forward pattern of the number 59.*

Update the 'Forrestal'

'Refit' your model to the latest appearance following these detailed instructions by **Anthony J. Ambrose**

The recent appearance of the Airfix USS *Forrestal* in their range of scale ship kits, must, to all 1:600 scale modellers, be a very welcome addition indeed. In addition to assembling into an excellent original *Forrestal*, the kit acts as a basis for numerous conversions, enabling any one of the big US flat-tops to be constructed. This possibility comes about as a result of the fact that all the US Navy's carriers (since *Forrestal*) were in fact based on the original *Forrestal* hull, with the various modifications and design changes being incorporated into each subsequent build. However, although all were 'based' on the *Forrestal*, there have been some radical alterations to subsequent ships, such as to make each prototype an interesting subject for a model, in its own right.

The series of alterations, stretches, and extras incorporated into the *Forrestals* start basically with *Forrestal* herself and become progressively more complicated with each successive build, ranging from the *Forrestal's* sister ships *Saratoga*, *Ranger*, and *Independence*, through the *Kittyhawks*, *John F. Kennedy*, and the *Enterprise*, to the latest *Nimitz*, *Dwight D. Eisenhower*, and *Carl Vinson*. When I established these facts, I felt that it was therefore prudent to commence conversions by attempting the simplest first, namely, the modernisation of the Airfix kit, to bring it up to present day standards.

The *Forrestal* story began in the closing months of World War 2, when Admiral Mark Mitscher (then commanding officer of the Carrier Task Force, South Pacific) suggested that a large carrier with the general characteristics of the *Forrestal* class be built. However, when the war ended, these far-sighted suggestions were strongly opposed by the Strategic Air Command who thought that they alone should be the bearers of air-borne strategic weapons. Consequently, the first large carrier to be commenced, the USS *United States* (CVA58), was cancelled in 1949 just after work had started on it, and it was not until 1951 that the results of the lessons of Korea, and the subsequent pressure by the US Navy, initiated the construction of the USS *Forrestal* CVA-59. And so, on July 14, 1952, the keel was laid down at Newport News SB & DD Co.

Less than 30 months later, Mrs James V. Forrestal, widow of the late Secretary of Defense, launched the ship, and, on October 1, 1955, the USS *Forrestal* was commissioned at Norfolk Navy Yard in Virginia.

Following a ten-week shakedown cruise to Guantanamo Bay, Cuba, and summer operations off the Atlantic coast, with the US 2nd Fleet, *Forrestal* was ordered to the Mediterranean, to bolster the US 6th Fleet during the Suez crisis of 1956. The carrier returned to Norfolk for the Christmas of 1956, but on January 23, 1957, she was again ordered to sea, and back into the Mediterranean, this time because of the Lebanon crisis. When it ended she again returned to Norfolk, where her forward 5 inch gun sponsons were removed, as they tended to cause the ship problems in a rough seaway.

The years between 1958 and 1966 saw *Forrestal* alternating between the 6th Fleet in the Mediterranean and the 2nd Fleet in the Atlantic. However, in June 1967 she departed Norfolk Navy Yard for her first wartime deployment, as a member of the US 7th Fleet operating in the Western Pacific. On July 23, *Forrestal* deployed to 'Yankee Station' 100 miles off the coast of North Vietnam, in the Gulf of Tonkin, and went into action, flying low level ground attack missions, with her aircraft flying through a veritable 'Iron Curtain' of shrapnel from North Vietnamese anti-aircraft guns and the Soviet-supplied SAM installations. However, on July 29, 1967, disaster struck the *Forrestal*. Whilst her aircraft were making ready for the second launch of the day, fire broke out on the after deck, and with exploding bombs and blazing jet fuel, 134 men tragically met their death and *Forrestal's* part in the war came to an abrupt end.

Forrestal left Yankee Station and headed East, docking in Subic Bay Naval Base to effect repairs. However, it was found that the damage was extensive, and so *Forrestal* left the Philippines and returned to the Atlantic and Norfolk Navy Yard for repair and renovation. It was during this period that the majority of the alterations detailed later in the text were carried out. These included the removal of the remaining 5 inch guns, the rear mast, and various other minor parts. Additional items fitted at this time were the BPDMS Sea Sparrow missile system, new radars, and the NTDS Tactical Data system.

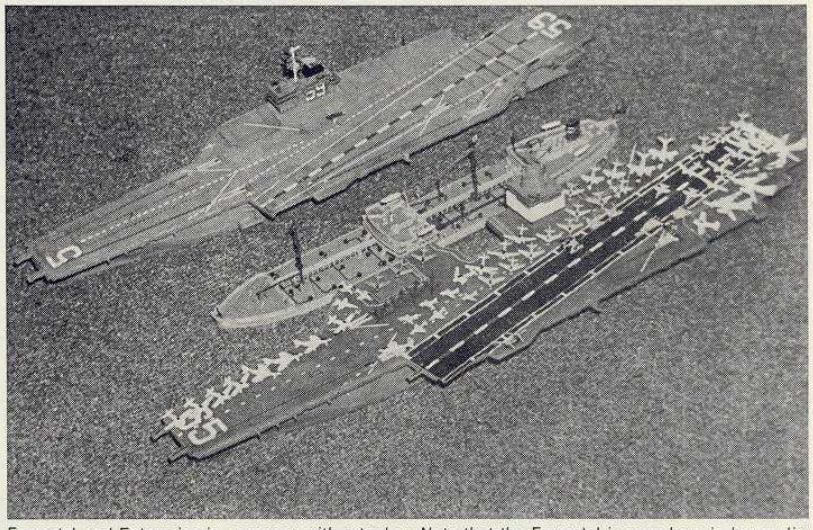
Following the refit, she returned to the Mediterranean in July 1968, with Air Wing 17 embarked, returning to Norfolk again in April 1969, where she underwent another three-month overhaul, this time for engineering renovation. This was followed by a six-week refresher training course at Guantanamo Bay.

On December 2, 1969, *Forrestal* again deployed to the Mediterranean for her eighth 6th Fleet deployment, returning to the United States four days too late to celebrate Independence Day 1970. Following a period of minor overhaul, the ship put to sea again, and celebrated her 15th birthday undergoing trials at sea. She then took part in operations off the Virginia Capes area, after which she again took up deployment with the 6th Fleet. She returned from the Mediterranean on July 2, 1971, and entered Portsmouth Navy Yard on July 16 for another period of overhaul.

After ten months in dock, she embarked Air Wing 17 once more, and began training and operational evaluation, as an attack carrier, off the East Coast of the United States. However, a fire broke out on O3 deck, and considerable damage resulted, forcing *Forrestal* to put into Norfolk Navy Yard again for repairs. She put to sea again on August 18 and resumed preparation for her tenth deployment, on September 22, 1972, once again with the 6th Fleet.

On March 28, 1973, *Forrestal* made for Tunisia at high speed, to participate in rescue operations in the flooded Medjerda River Valley, near Tunis, where her helicopters airlifted in tons of food, fresh water and medical supplies, in addition to saving many lives in the actual rescue operations. She returned to the US again in July 1973.

On March 11, 1974, *Forrestal* again departed for the Mediterranean, operating in the vicinity of Cyprus, returning to the US in mid-September. Following yet another 6th Fleet deployment from March 1975 to September 1975, she entered the yards again for another period of overhaul, which lasted until January 1976.



Forrestal *and* Enterprise *in company with a tanker. Note that the* Forrestal *is seen here in her earlier colour scheme, whereas the* Enterprise *sports the now standard deck markings.*

In July 1976, *Forrestal* exceeded even the brightest speculations when she appeared as 'host ship' at the International Naval Review in New York City Harbor, and on July 4, *Forrestal* gained international publicity when she hosted over 100 VIPs and highly respected members of the press, reviewing the arrival of the Tall Ships participating in the Review.

On September 13, *Forrestal* underwent a deliberate 'Shock-Test', which involved the explosion of a massive high-explosive charge near the hull, to test whether or not a ship of capital size could withstand the strain of full close-quarters combat and still remain operational.

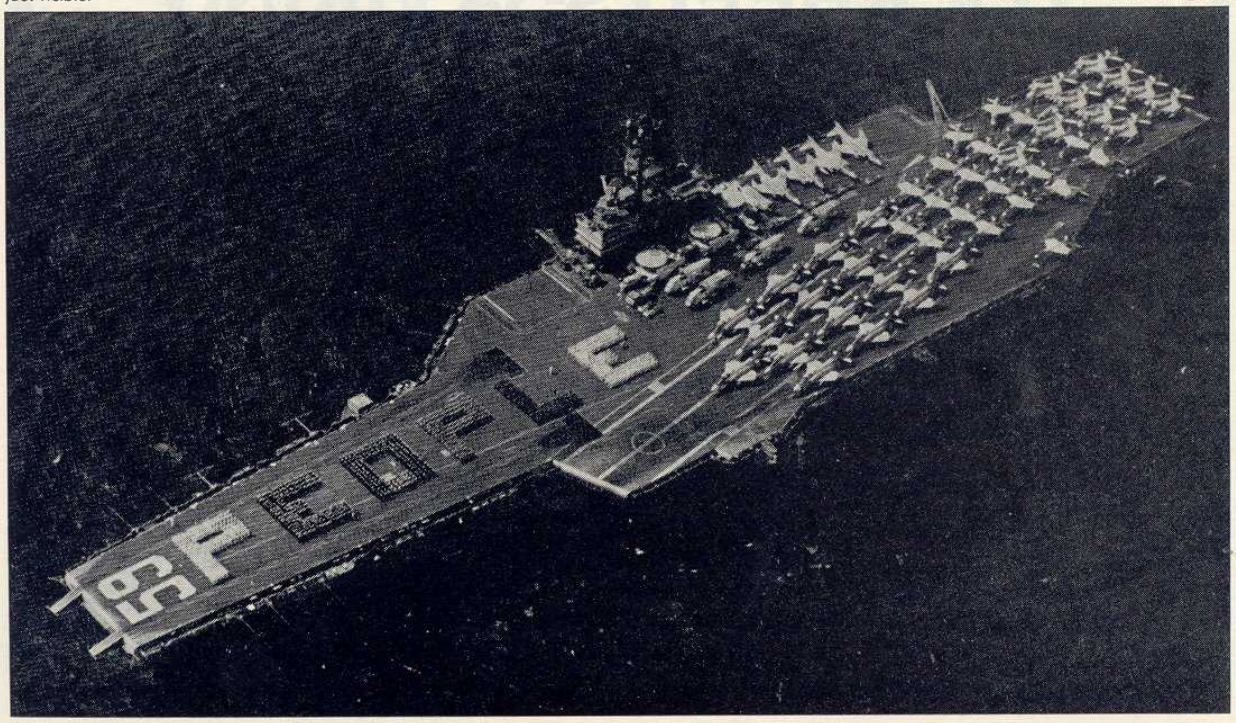
After a successful culmination to the shock test, the *Forrestal* returned to Norfolk, and on October 1, 1976, began yet another extensive overhaul, which would normally take between sixteen and eighteen months. However, June 14, 1977 saw *Forrestal* leaving the yards again, having successfully completed her overhaul in less than nine months.

The *Forrestal* today is not so much a ship, or even an aircraft carrier; it is more like a mobile Pentagon, Edwards Air Force Base, and Norfolk Navy Yard, all rolled into one! In fact, she can deploy more power than any of the 1,000 bomber raids of World War 2!

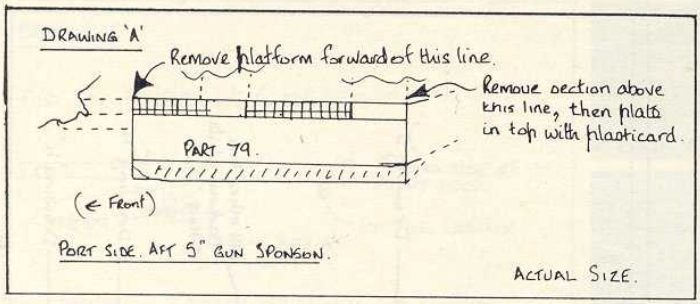
The Airfix model

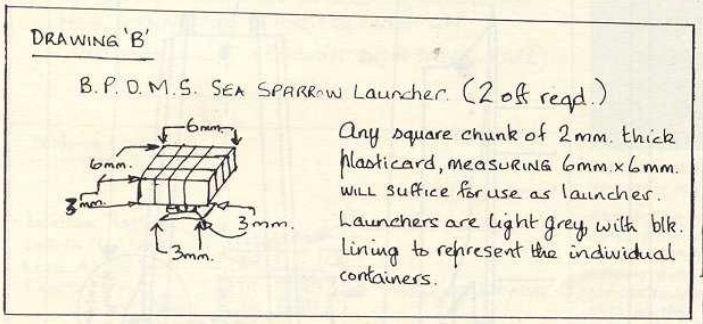
The simplest manner of adapting the Airfix model is to commence with an unassembled kit, and so instructions are given following this process.

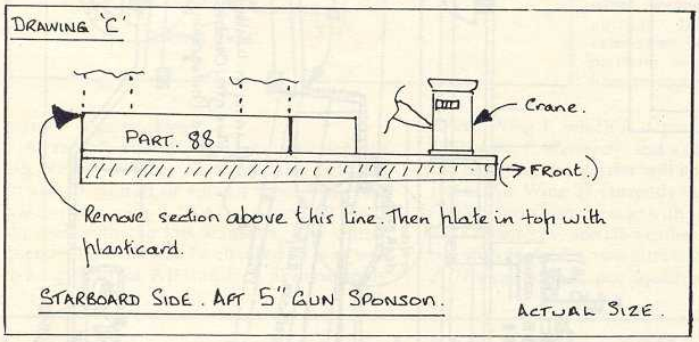
Following the instructions provided with the kit, complete sections 1-4 inclusive, omitting section 7 if a waterline model is required. Sections 5, 6 and 8 are omitted from the build, and the respective parts are consigned to the spares box with the exception of part 78 — the anchor — which is affixed in the normal posi-

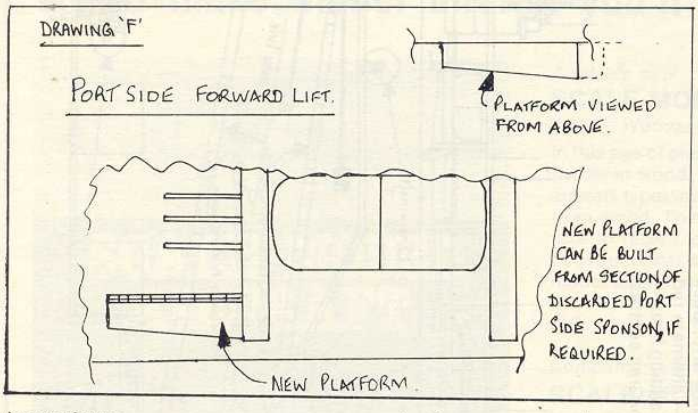


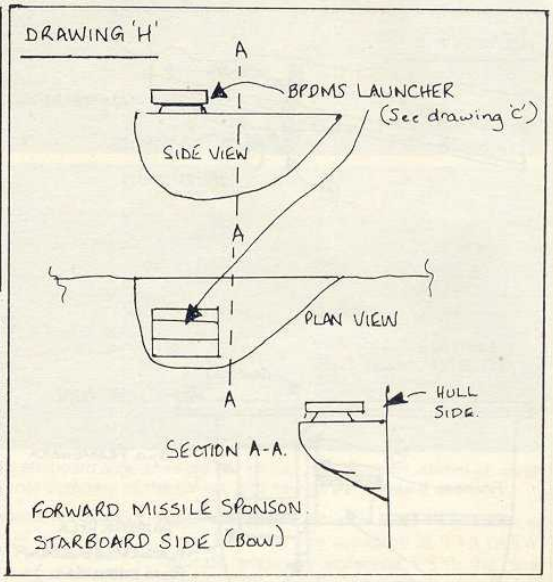
No matter how big the ship, the most important parts are the men who man the vessel. Here some of them can be seen 'ranged' forward on the flight deck, forming the word PEOPLE. Deck markings are also just visible.

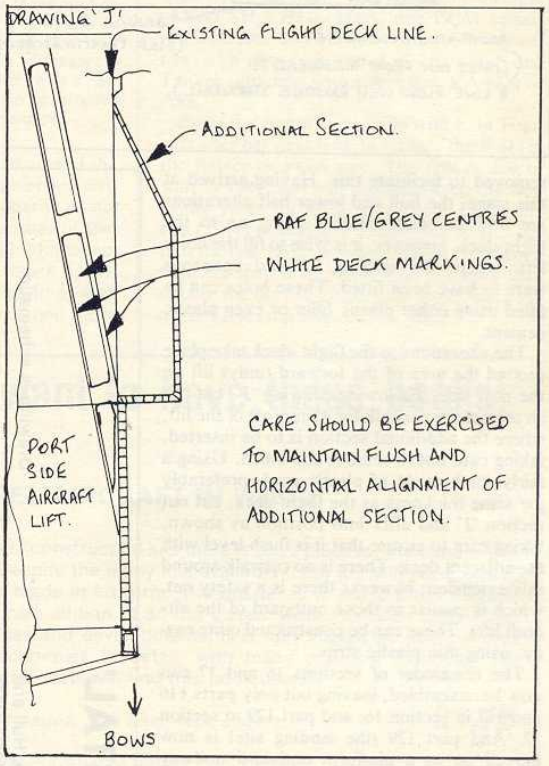












Drawings by author are keyed to text references.

tion as shown.

Complete section 7 of the instructions, and put aside one of these for later use. Moving on to section 9, the sponson, part 79, is used, but must be adapted to mount the new BPDMS launcher. The other two parts in this section (parts 80, 81) are disposed of. The sponson is adapted by cutting down to the dimensions as shown in drawing 'A', and then plating in the remainder with thin plastic card. The assembly can now be fitted to the hull as shown in section 10. The fire control radar and platform (parts 83 and '7') can now also be affixed.

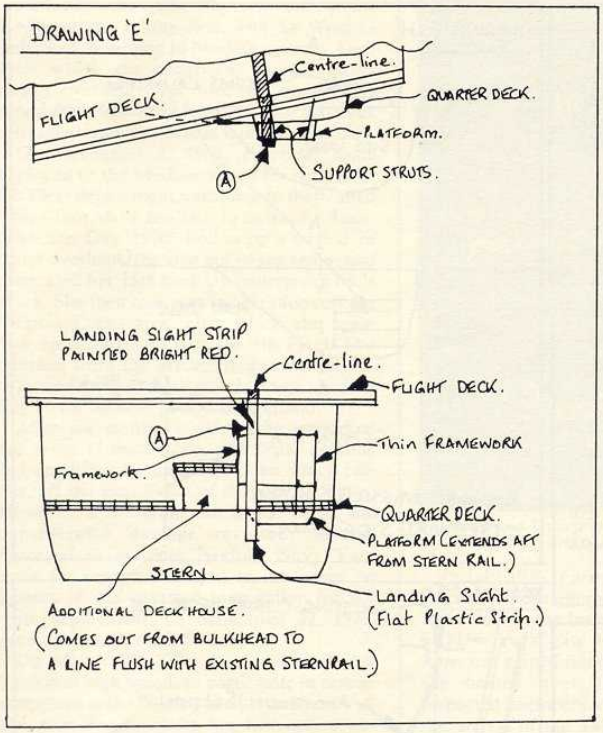
Following drawing 'B', construct two of the BPDMS launchers from plastic card and affix one in position, as shown, on the sponson. The other is retained for use on the starboard bow sponson. Section 11 of the instructions can be completed as shown, but in section 12 the rear sponson is once again altered. Following drawing 'C', cut down part 88 as shown and affix parts 93 and 94 into part 88, then plate in the top with plastic card and affix the whole assembly into position as shown. Parts 89, 90 and 91 are not used.

Of section 13, only part 95 remains to be fitted, part number 92 being discarded, as indeed are all the parts in section 14. Consequently, only the anchor (part 103) is used in section 15.

Before moving on to section 16, various additions to the stern and additional small sponsons are required. Starting with the sternmost alterations, the guardrail on the starboard side should be cut down to deck level with a sharp knife. Then, following drawing 'E', the extra structures forming the base for the new landing sights should be made up using plastic card once again. Note that the flat bar-like protrusion extends upwards to flight-deck level, so should not be fitted until after the flight-deck has been positioned. The small platform which extends aft from the stern (see drawing 'E') can also be made from plastic card, and affixed in position at this stage.

Moving forward to the bow lift on the port side, there is a small platform directly forward of the lift, which is once again made from plastic card, following drawing 'F'.

Moving to the starboard side, another small platform/sponson appears, upon which is mounted the second BPDMS launcher. This platform is assembled following drawing 'H', and when completed the second missile launcher is mounted thereon. Note that a small section of the catwalk will need to be

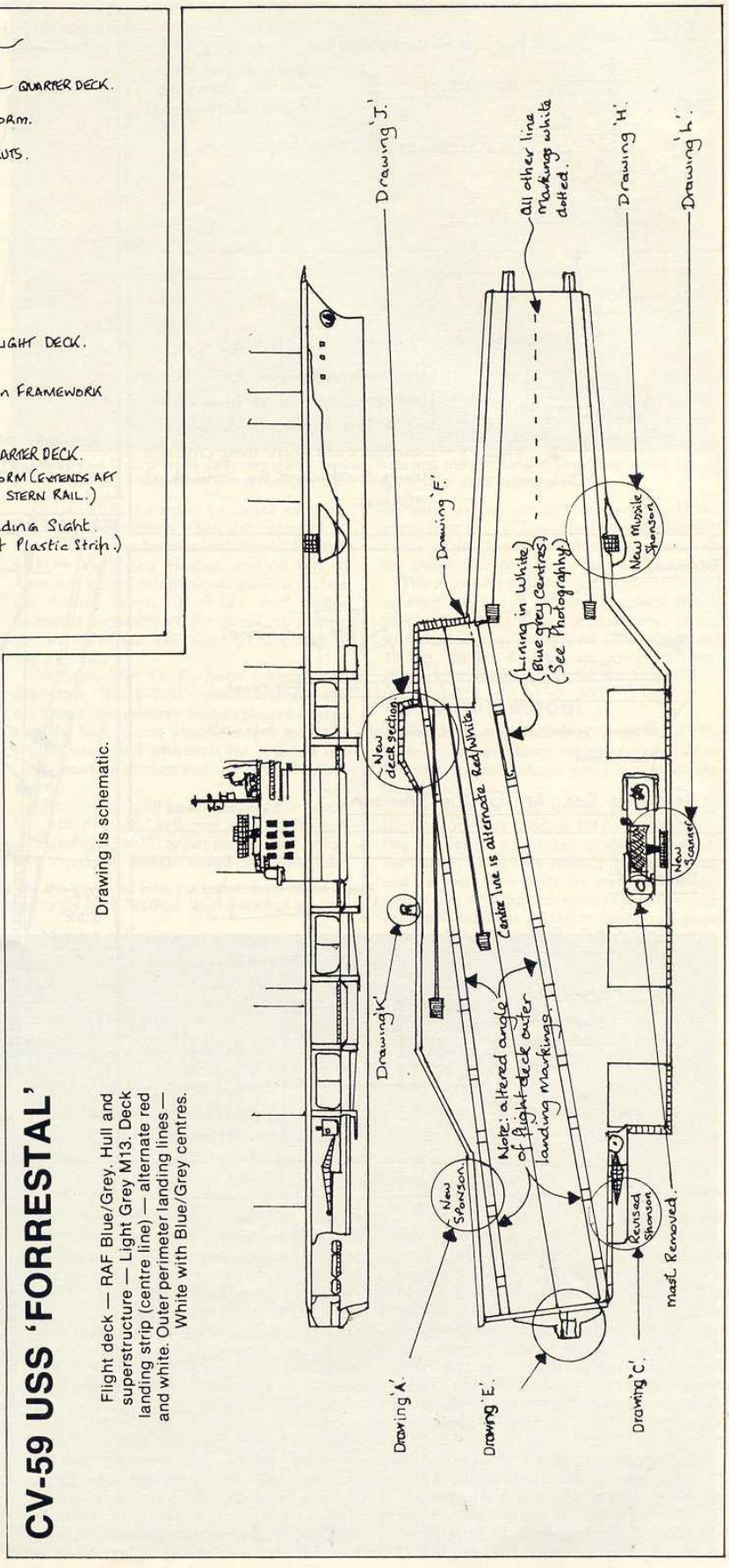


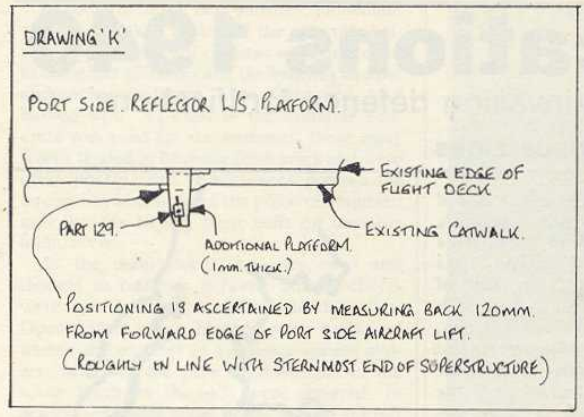
removed to facilitate this. Having arrived at this stage, the hull and lower half alterations are now complete. Before going on to the flight-deck, however, it is wise to fill the holes left, where the original forward sponsons were to have been fitted. These holes can be filled using either plastic filler or even plastic cement.

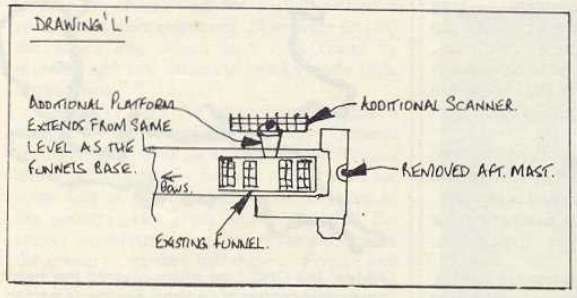
The alterations to the flight -deck take place around the area of the forward (only) lift on the port side. Following drawing 'J', cut out an area of the catwalk for 45 mm aft of the lift, where the additional section is to be inserted, taking care not to remove too much. Using a fairly thick grade of plastic card, preferably the same thickness as the flight-deck, cut out section 'J' and affix into position as shown, taking care to ensure that it is flush level with the adjacent deck. There is no catwalk around this extension; however there is a safety net, which is similar to those outboard of the aircraft lifts. These can be constructed quite easily, using thin plastic strip.

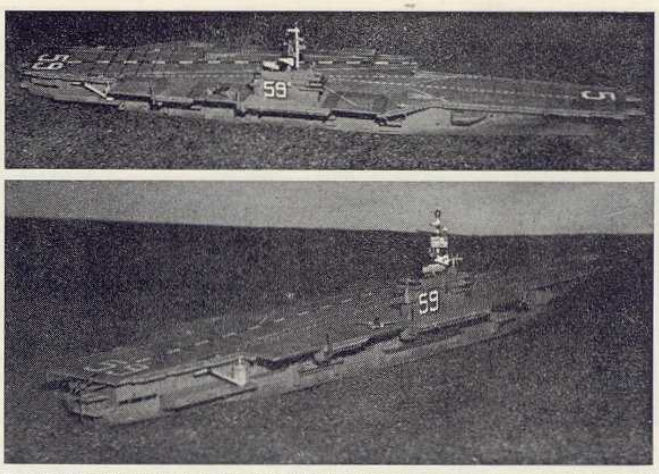
The remainder of sections 16 and 17 can now be assembled, leaving out only parts 116 and 117 in section 16, and part 129 in section 17. And part 129 (the landing site) is now moved on to a platform outboard midway down the port side of the ship (see drawing 'K'). Section 18 of the instructions is carried out as suggested, so also is section 19; however, parts 147, and 149 to 151 inclusive, are not used, and part 148 is cut off where the circular section starts, so removing the aft mast. In addition, from the centre of the funnel, a platform-cum-bracket extends outboard to starboard, upon which is fitted (as shown in drawing 'L') a new radar scanner. Plastic card is used for the structure, and a Type 965 scanner is used, which can be obtained from a number of Airfix models, such as the *Leander* or 'County' kits. Sections 20 and 21 are now completed as suggested.

The overall colour scheme of the *Forrestal* has not changed; however, the deck markings are altered, to those as shown on the small 1:2000 scale drawings. The main alteration being the straightening out of the landing strip markings, and the adoption of the later 'box









Top: Forrestal's *starboard side, showing the altered rear sponson, absent aft aerial, new radar scanner outboard of the funnel, and new forward missile sponson.*

Above: *The stern view highlights another of her alterations, namely the revised landing aids, which extend the centre line of the landing strip so that it is visible to pilots landing on from low altitude. This framework extends aft, and on to a new platform which protrudes from the quarterdeck.*

pattern' edge markings.

As regards aircraft, *Forrestal* now deploys US Navy Air Wing 17, comprising between 70 and 95 aircraft of various types. The tail-code of this wing is 'AA' and not 'AB' as is supplied with the kits transfers, and consequently these must all be changed. It is as well to hang on to the AB transfers, as these apply to Air Wing 1, which is deployed aboard the USS *John F. Kennedy*, and a conversion article featuring this carrier will appear in a later issue. Air Wing 17 currently consists of two fighter squadrons, each with 12 McDonnel F-4J Phantoms, one all-weather attack squadron with 16 A-6Es, two attack squadrons with A-7Es (usually 12 per squadron), one recce squadron with three RA-5C Vigilantes or three RF-8Gs, one squadron of S-3A (ASW) aircraft (presently squadron VS30, the 'Sea-Tigers', 10 aircraft), one squadron of eight (ASW) SH-3 Helicopters, one ECM squadron with four Skywarriors, one AEW squadron with four Lockheed E-2Bs, and one Tanker squadron with either four KA-6Ds or A3s.

Forrestal is due to re-equip with F-14 Tomcats after her next refit, to replace the F-4Js in the fighter or FGA role. The refit is due to start in 1981, and will probably keep the ship in the yards for up to two years. However, this refit is intended to extend her service life into the late 1990s, which will give *Forrestal* a total life span of 45 years, which is more than double the normal 20-year life expectancy for a front line, top rate, capital ship.