

Note to Prince of Wales 1941.05 Review:

As this kit is very similar to the previously released Prince of Wales 1941.12 kit, much of this review is similar as well to the review of that kit. Those interested in just the differences between the two kits will find them detailed under the heading 'Differences between Prince of Wales 1941.12 and Prince of Wales 1941.05' near the end of this review. All the photos in this review are of the Prince of Wales 1941.05 Deluxe Edition kit.

Background – the 'King George V' class:

The detailed design work for what would become the *King George V* class battleships began in 1934. At the time, new battleship construction was restricted by various naval treaties to a maximum of 35,000 tons and a main armament of 14" guns. An escalation clause to a 16" main armament was included in the 1936 London Naval Treaty if any of the various nations who were party to the agreement failed to ratify it. As orders for the main armament had to be placed in 1935 in order to be ready for the projected completion dates in 1940, the decision was made to go ahead with the 14". The US *North Carolina* class were also originally designed with a 14" main armament for the same reason.

The 14"/45 Mk VII was an excellent gun, its performance only marred by problems with the quadruple turrets which were the first of their type to be fitted to Royal Navy vessels. In keeping with Royal Navy practice, the gun fired a heavy shell at a low muzzle velocity which made for more accurate shooting. To compensate for the lighter weight of the 14" shell in comparison with a 15" or 16" shell, three quadruple turrets were to be fitted.

The secondary armament was the 5.25" dual purpose mount being developed for the *Dido* class cruisers and eight of these mounts were fitted. This was not an ideal AA gun as the associated twin mounting was complex and heavy with a slow training speed and low rate of fire. It would however, prove to be a very good gun in its low angle role.

The light AA armament as designed was four octuple pom-poms and four quad 0.5" mounts; the 0.5" were never fitted.

Prince of Wales completed with three UP mounts; one on 'B' turret and two on 'X'. These were removed by mid-1941. By December 1941, she was fitted with six pom-poms, seven 20mm, and a single 40mm Bofors.

Weight was critical and some compromises had to be accepted in order to provide an adequate level of protection. Rather than increase the height of 'A' barbette to allow it to fire straight ahead at zero degrees elevation, the sheer of the forecastle deck was reduced instead. This allowed a reduction in height of both 'B' barbette and the bridge, saving valuable weight. However the reduction in sheer meant that the ships were very wet forward. Deck heights were also reduced. 'B' turret was reduced to a twin mount in order to save even more weight.

The weight savings meant that a considerable amount of armour protection could be worked in; 12,500 tons or 35.5% of total weight, making the ship proof against 14" shell fire. The side belt was 15" thick abreast the magazines and 14" abreast the machinery, thinning at the lower edge to 5.5" abreast of the magazines and 4.5" abreast of the machinery. The main deck was the armour deck and it was 6" thick from 'A' barbette to 'X' barbette, thinning to 5" over the machinery spaces. All fire control communications were below this deck.

In contrast, the *Bismarck* had two armoured decks of 2" and 3.1" which made her much more vulnerable to plunging fire; her side belt was 2.4" thinner.

The anti-torpedo defence consisted of 2 watertight compartments with an oil tank space between outboard of a 2" torpedo bulkhead. This was a sound system developed through much experience, but it was not adequate to defend against a torpedo hit on a rapidly spinning propeller shaft as was suffered by the *Prince of Wales*.

The machinery was arranged on the unit system principal, with alternating boiler and engine rooms capable of being cross-connected in the event of damage. Four boiler rooms each contained two Admiralty type 3 drum boilers; each engine room contained a turbine driving a single propeller shaft. The resulting quadruple screw arrangement gave a speed of 27.5 knots at 110,000 SHP; 29.5 knots at an overload 125,000 SHP could be attained.

The ships retained the large bridge and flush deck of the *Nelson* class. They came out slightly overweight at 35,990 tons designed displacement.

Her final radar fit in December 1941 was: Type 271 lantern between the forward HACS directors, Type 281 on the masts, Type 282 on the pom-poms, Type 284 on main armament director, and Type 285 on the HACS.

As completed the *King George V* class had several unique design features for British dreadnoughts:

- The only ones to be fitted with the 14" gun, apart from the ex-Chilean HMS Canada.
- The first to have a combined HA/LA secondary armament
- The first to complete without torpedo tubes
- The first designed to carry aircraft
- The first to complete without a heavily armoured conning tower
- The first to complete with radar

It is a Royal Navy tradition to name the first new capital ship of a monarch's reign after that monarch. King George VI was adamant that the new battleship was to be named for his father instead, so the first ship became the *King George V*, the second of that name in the Royal Navy. In a nod to George VI, the third ship of the class was named *Duke of York*, his former title.

Prince of Wales was built by Cammell Laird at Birkenhead. She was laid down on January 1, 1937, launched on February 21, 1939, and completed on March 31, 1941 taking 51 months to complete.

While fitting out, *Prince of Wales* was near missed by a bomb on August 31, 1940 which fell between the dock and her port side causing considerable flooding and a 10° port list; the repairs delayed her completion. It is possible that the damage from this hit was not completely repaired in the rush to get the ship into service and this could have contributed to the failure of the side protection system when this same area was struck by torpedo in December 1941.

Accepted into service on March 31, 1941 she ran her trials on May 8 and was at Scapa Flow for gunnery practice on May 10. The new 14" gun mountings were subject to frequent interlock failures and a civilian technician was assigned to each turret; workers from Cammell Laird were also aboard to assist with compartment air testing. When she sailed in company with *HMS Hood* on May 22 to intercept the *Bismarck*, the civilian technicians were still aboard.

In action against *Bismarck* and *Prinz Eugen* in the Denmark Strait on May 24, *Prince of Wales* acquitted herself well. Her first salvoes were 1,000 yards over, but she was straddling *Bismarck* by her third salvo. She scored two hits on *Bismarck*; one in the bows which contaminated 1,000 tons of fuel, the other was a diving shell that flooded the boiler auxiliary machinery room and caused the shutdown of 2 boilers. The two hits played a considerable part in the decision by the German Admiral Lutjens to abandon his sortie and make for a French port.

One gun barrel in 'A' turret broke down after the first salvo; the entire turret jammed after the hits on the *Bismarck*. 'X' turret also jammed after firing 20 salvos when a shell fell against the revolving tray

while it was locked to the central rotating trunk; this buckled the tray and jammed the rotating mechanism.

Prince of Wales was hit by four 15" and three 8" shells during the battle. Al the hits were on the unarmoured part of the ship's side; neither the side belt nor armoured deck was penetrated. Nevertheless, the damage was substantial. All personnel on the bridge were killed or wounded except for Captain Leach; 600 tons of water was taken on due to a hit below the side belt; both forward HACS directors and the after starboard HACS director were put out of action by splinters; the after port HACS director was out of action due to concussion suffered by the crew from the firing of 'X' turret; the starboard boat crane was damaged; and the wings of the Walrus about to be catapulted were so riddled with splinters that it was jettisoned over the side. Splinter damage was suffered in varying degrees throughout the ship.

After only 12 minutes of action with both main turrets out of action and *HMS Hood* blown up, *Prince of Wales* broke off the battle and retired under cover of a smoke screen. It is interesting to note that only one of the 15" hits detonated and that only partially.

After repairs at Rosyth, *Prince of Wales* took Churchill and the Chiefs of Staff to Argentia in Newfoundland to meet with President Roosevelt. The meetings took place from August 10 to 12 and the Atlantic Charter was signed at the completion of the meetings.

In September the ship was assigned to Operation Halberd, a Malta convoy operation. *Prince of Wales* shot down several attacking aircraft with her 5.25" guns and was detached with *Rodney* to pursue elements of the Italian fleet that were in close proximity; no interception was made. During the pursuit, *Prince of Wales* signalled to *Rodney* for 28 knots; this was greeted with much amusement aboard *Rodney* with her maximum speed of 22 knots.

On October 25, *Prince of Wales* sailed for the Far East, arriving at Singapore on December 2 in company with *HMS Repulse*. On December 8 she sailed with *Repulse* and destroyers *Express, Electra, Vampire,* and *Tenedos* to intercept Japanese landings at Kota Bharu on the Malayan peninsula, the ships being designated Force Z. The essential element of surprise was lost when the ships were spotted the next day; the sortie was broken off and the force headed back for Singapore.

Dawn on December 10 found Force Z off the small town of Kuantan investigating a reported Japanese landing. At 1100, radar detected large groups of aircraft approaching; Japanese aircraft had spotted Force Z and were homing in to attack.

No doubt the British crews were both concerned and confident as they closed up to Anti-Aircraft stations. The Royal Navy had considerable experience with air attack off Norway and in the Mediterranean and to date only one RN capital ship had been hit by an air-launched torpedo, *HMS Nelson* in September 1941, and she had survived. Any optimism quickly vanished as the Japanese aircraft pressed home their attacks from a higher height and at much higher speeds than the ship's crews had ever practiced for; the directors and 5.25" gun mounts were not able to train fast enough to keep the aircraft under fire.

At 1144 the ship was hit by one torpedo on the port side aft, in the vicinity of the 'A' bracket for the port outer propeller. The propeller shaft was knocked out of alignment and began rotating out of true, damaging bulkheads all along the shaft tunnel – the turbine was stopped due to the vibration.

Before the full extent of the damage was known, the turbine was restarted and the already damaged propeller shaft rapidly tore itself apart. All of the bolts in the connecting flanges along its entire length were sheared off, rupturing bulkheads in the shaft tunnel and allowing water into 'B' engine room which flooded completely within 18 minutes. The after portion of the propeller shaft pulled right out of the ship, damaging the port inner propeller shaft as it went, causing the shut-down of 'Y' engine and boiler rooms which also began to flood. Flooding occurred all along the shaft tunnel and in the amidships compartments, the action machinery space, and port diesel generator room. The 5.25" magazine spaces were abandoned without the watertight doors being closed.

The ship was left with a heavy port list and trimmed down at the stern. To what extent this damage was exacerbated by inadequate repairs to the bomb hit in August 1940 is unknown. It is a terrible irony that both *Bismarck* and *Prince of Wales*, among the most modern and powerful battleships in service, were both left crippled and unable to manoeuvre due to torpedo hits on their propeller shafts outside of the main torpedo defense system.

Making matters worse, five of the eight electrical generators failed leaving the after part of the ship without power for the pumps or for lights. All four after 5.25" gun mounts were out of action due to loss of power and the forward port side 5.25" mount jammed. None of these guns were restored to service before the ship sank. Flooding continued rapidly through the ventilation systems and water-tight doors left open as the crew were forced from their posts.

By 1150 the ship was listing 11.5° to port and speed was down to 16 knots. By 1215 counter flooding had reduced the list to 1° , but flooding continued mostly unchecked despite the best efforts of the damage control teams. No longer able to effectively maneuver or to defend herself, the ship was hit at 1223 by three more torpedoes on the starboard side. This jammed the starboard outer propeller shaft and reduced the ship's speed to 8 knots on the sole remaining shaft. It is a measure of the severity of the first hit and the effectiveness of the side protection system that the list to port began to increase again after this attack.

Repulse sank at 1233 after being hit by five torpedoes.

At 1241, *Prince of Wales* was hit by a bomb on the catapult deck. With the ship dead in the water and the list to port steadily increasing, the word was passed to abandon ship at 1315. At 1320, the list to port suddenly increased rapidly and the ship capsized and sank, nearly taking *HMS Express* with her as the destroyer momentarily was hung up on the battleship's bilge keel.

HMS Prince of Wales was in service for nine months and won two Battle Honours

It is sad to note that illegal salvage operations are slowly destroying the wrecks of both *Prince of Wales* and *Repulse*.

The Kit:

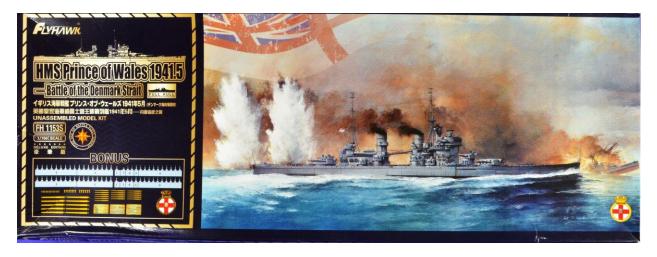
This features *Prince of Wales* as she appeared in May 1941 during the *Bismarck* chase.

Packaging:

The kit comes in a large well-constructed box featuring a painting of *Prince of Wales* in action in the Denmark Strait on May 24, 1941 with *HMS Hood* in her death throes behind. On the side of the box are pictures of the upcoming kits of *Konigsberg* and *Bismarck*. It is not a re-boxing of the existing Prince of Wales 1941.12 kit; it contains parts appropriate to the May 1941 time frame with the instructions modified accordingly.

The sprues are sealed in plastic bags. There is also a large full colour card featuring the box art on one side with the ship's history with general characteristics on the reverse and a large metal ship's badge. There is no photo-etch.

The kit comprises 587 parts on 42 sprues with all parts moulded in medium grey; the upper hull, lower hull, waterline plate, main deck, and aft superstructure boat deck are separate pieces not attached to any sprue. The deluxe edition adds 26 machined gun barrels, 27 brass ventilators, 64 resin ventilators, and 208 etch parts on three photo-etch sheets. The deluxe edition brass and resin parts are in their own plastic box.





----- Box Art -----





----- Box Contents -----





----- Front and Rear of included card -----

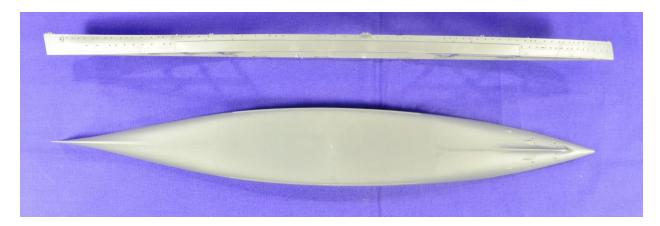


⁻⁻⁻⁻⁻ Metal Ship's Badge -----

Hull:

The one piece hull is 322mm long which scales out perfectly to the actual waterline length of 740 feet. A lower hull and a waterline base plate and weight are supplied giving the modeller the option to build either a full hull or a waterline version. There are no stands included so those wishing to build the full hull version will need to come up with some arrangement to display the completed model.

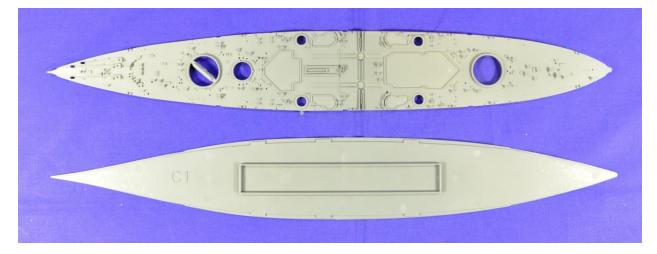
The lower hull itself has finely molded bilge keels and just the very bottom of the side armour belt. Rudder, propellers, and propeller shafts are included as separate pieces. Raised tabs will ensure a precise fit to the upper hull. The upper hull has the very small upward sheer of the bows forward of 'A' turret and the outwards flare of the bow. The side armour belt and the anchor hawse openings are crisply defined and there are raised strakes running from the bow to the stern. The portholes all have rigols ('*eyebrows*') and the hull incorporates fairleads and the catapult extensions.



----- Upper and lower hulls -----

Main Deck:

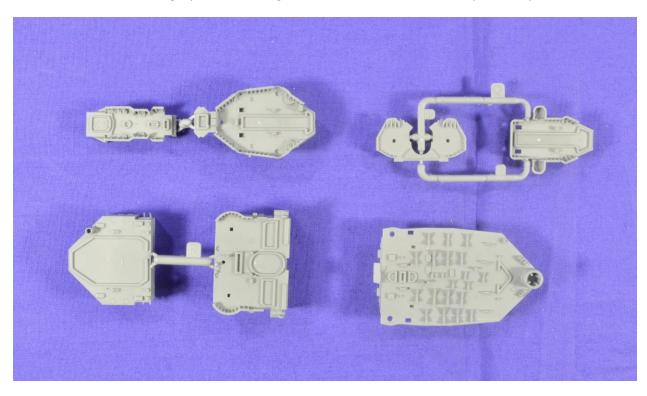
The main deck is one large piece and incorporates amazing levels of detail with individual deck planks, catapult tracks, cable reels, boat skids, anchor chains, and hatches. The many ventilators are separate pieces as are the breakwaters. The deck drops right into place on the main hull in a good display of precision fitting.



----- Main deck and waterline hull plate -----

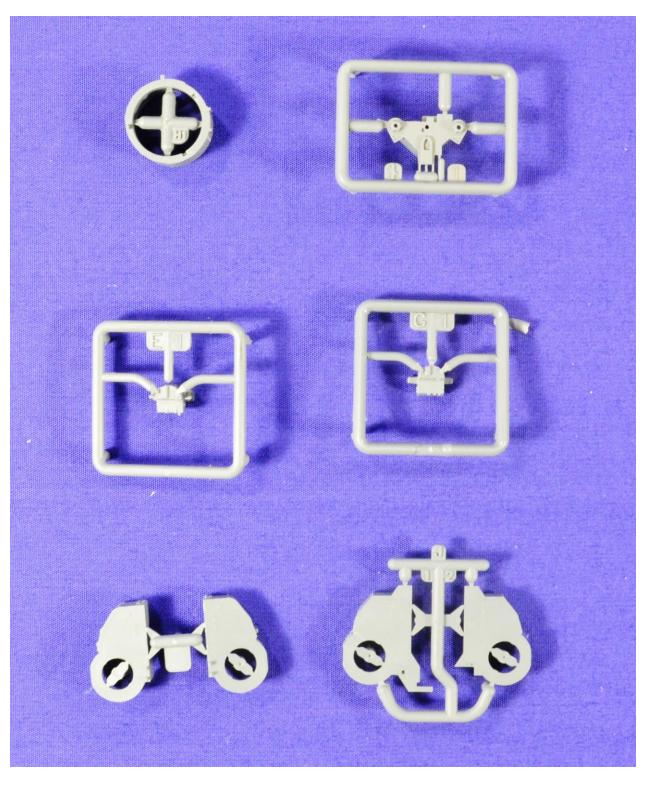
Superstructure:

There are seven main superstructure parts: after superstructure, hangars, four pieces for the bridge, and the pom-pom platforms that go around the forward funnel. There are also four pieces for the raised 5.25" guns. They are all attached to separate sprues with minimal attach points which minimizes the chances of any damage from sprue cutters and the like. They all feature immense detail on every face: hatches, handrails, portholes, deck fittings, detailed bulwarks, slots for fitting other pieces. Each of the four bridge pieces have many smaller detail parts; the main gun director has separate pieces for the Type 284 radar, the HACS directors are open at the top and have separate Type 285 aerials.

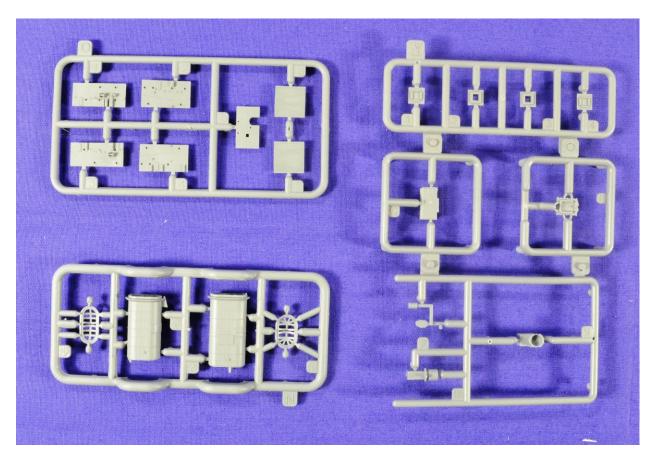


The funnels are hollow single pieces with engraved lines, raised rivets, and separate caps.

----- Main superstructure pieces -----



----- Gun directors, twin 14" barbette, and raised decks for 5.25" mounts -----



----- Funnels and other fittings -----

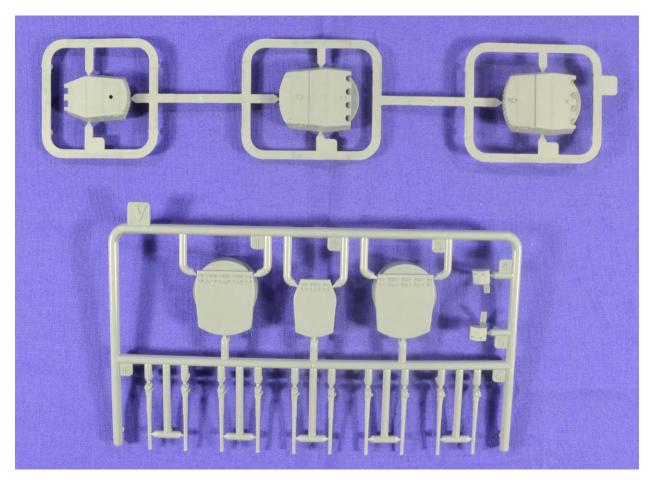
Weapons:

Each 14" turret consists of four pieces: floor, gun-house, and rangefinder extensions. 'B' turret also has a separate raised barbette. Each turret has raised rivets, ladders, and ports on the rear faces. 'B' has a single UP mount on the roof; 'X' has two UP mounts. Each 14" gun barrel is a separate piece, tapered with raised steps towards the breech, and hollowed out muzzles.

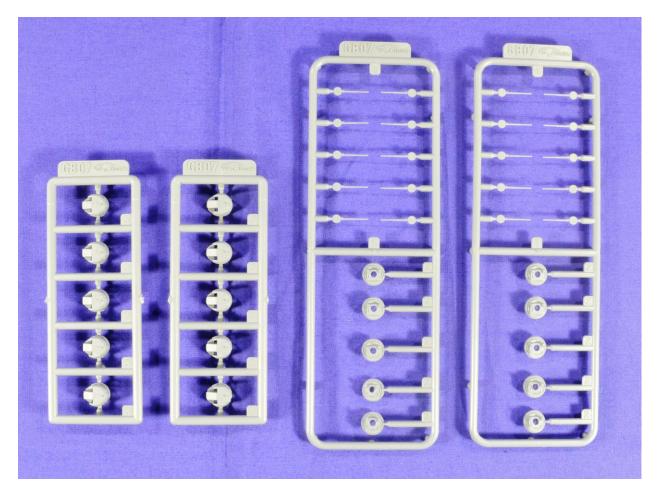
The main 5.25" gun turrets are the same ones supplied with the *Naiad* kit and consist of two pieces, with separate gun barrels. The turrets are outstanding, correctly shaped with plenty of roof and side details.

The octuple pompoms consist of three pieces and have plenty of detail on the actual gun platforms.

The 40mm mount on the quarterdeck consists of two pieces, and there four single 3pdr saluting guns. They all feature raised detail.



----- 14" turrets and barrels -----

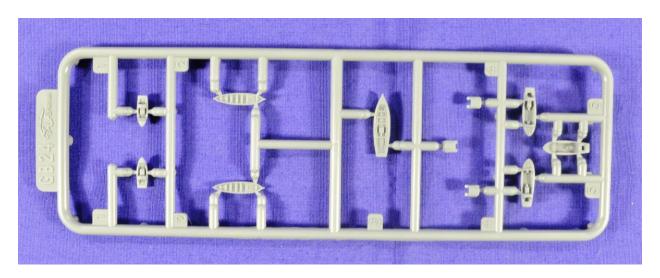


----- 5.25" turrets and gun barrels -----

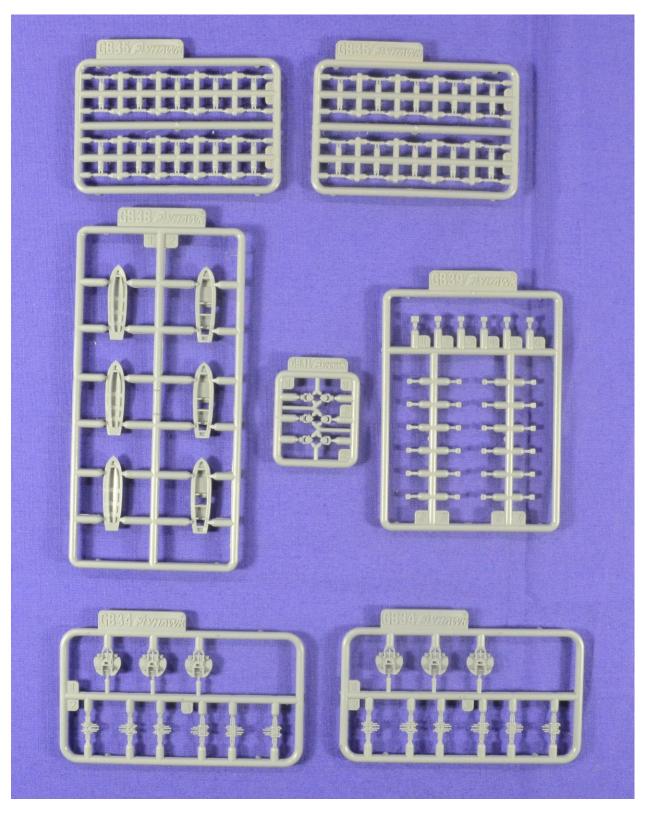
Boats and fittings:

There are seven open boats and seven motor launches, each one features deck planks. The large motor launches consist of two pieces.

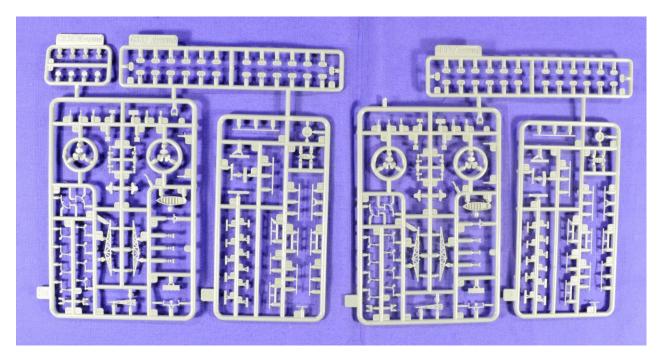
There are many smaller fittings, every piece of which is incredibly detailed. The main air intakes have grills, the deck winches have detailed motors, the life rafts are detailed both top and bottom, the davits are extremely thin, the paravanes are accurately shaped, ammunition lockers have doors and hinges, boat booms are tapered, the cranes have open lattice work. There are Type 282 aerials for the pompom directors.



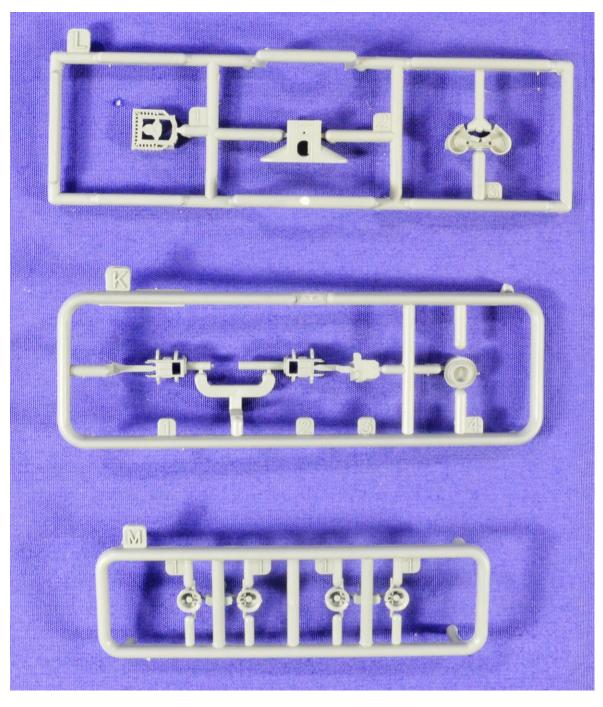
----- Boats -----



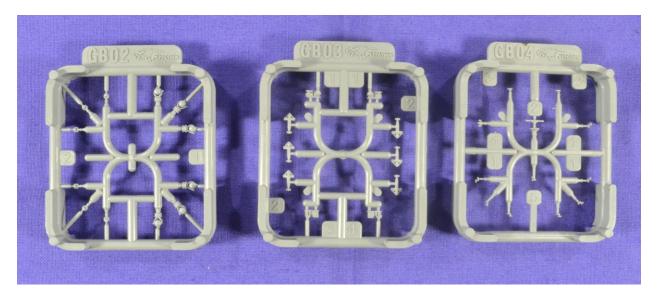
----- Boats, life raft parts, and pom-poms -----



----- Life rafts, propellers, cranes, davits, booms -----



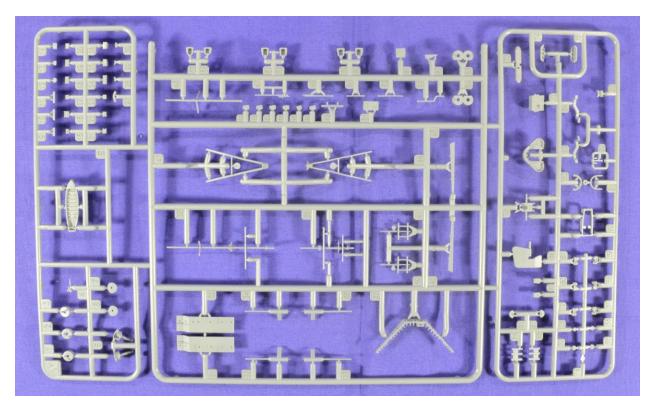
----- Bridge pieces and HACS positions -----



----- Searchlights and paravanes -----

Masts:

The foremast consists of four parts; the mainmast of three parts. The yards are moulded in place on the masts. They are extremely thin and can be used as is without resorting to replacements built from rod. Aerials for the Type 281 radar are supplied for the tops of both masts.

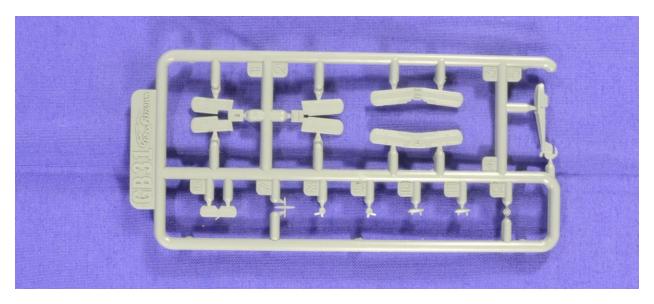


----- Masts, breakwaters, and other fittings -----

Aircraft:

A Walrus is included for fitting on the catapult, and can be assembled with wings folded or unfolded.

It consists of ten parts: fuselage, upper and lower wing, tailplane, engine, propeller, wing floats, and landing gear. There are raised ribs on the tops of the wings, and recessed panel lines on the top and bottom of the wing and on the fuselage. The fuselage features clearly defined windows for the cockpit, ribbing on the rudder, and a moulded-in tail wheel. The landing gear has detailed wheels and tires. The propeller is very finely moulded and includes the nose spinner. The underside of the lower wing has wheel wells in case the modeller prefers to show the aircraft with wheels retracted. The engine has raised detail and recessed attach points for each wing.



----- Walrus -----

Decals:

As Royal Navy battleships did not carry pennant numbers as a rule, the decals are very minimal consisting solely of two White Ensigns and markings for the aircraft.



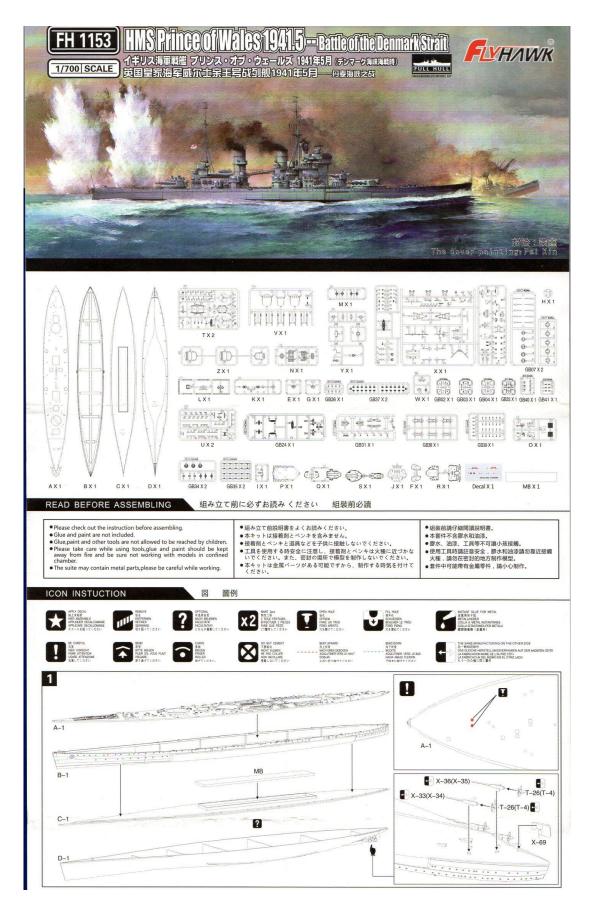
----- Weight and Decals -----

Instructions:

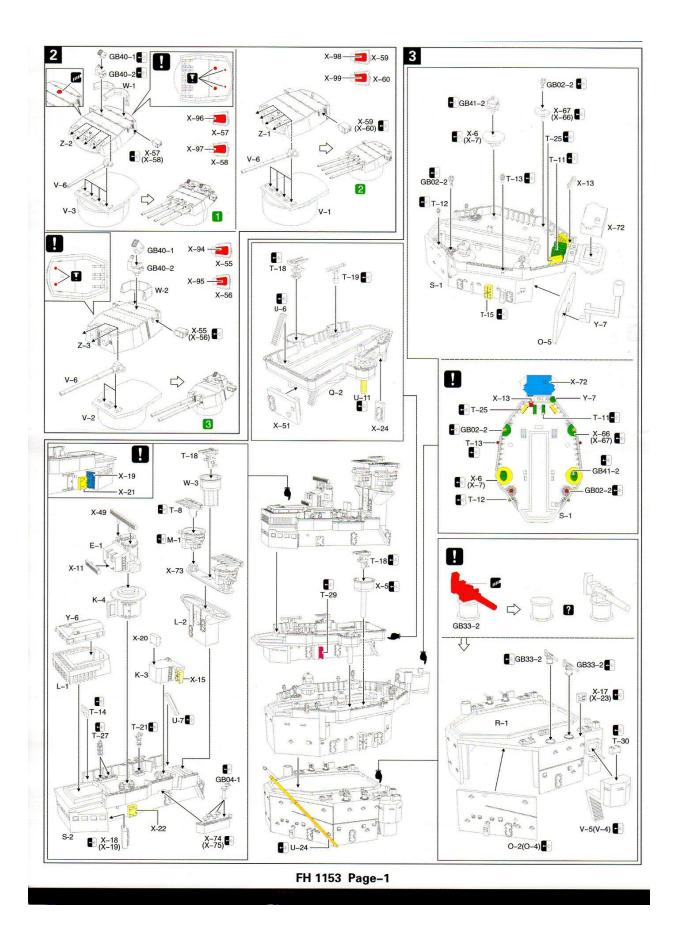
The instructions come on two large, double sided full colour pages. There are 15 assembly steps with 29 sub-assemblies. Steps 11 through 15 are devoted solely to showing where the life-rafts are positioned. The assembly steps for the Walrus are shown separately along with pictures of the wood deck and deck mask for *Prince of Wales*, and the box art for the kits of *Legion* and the upcoming *Kelly*.

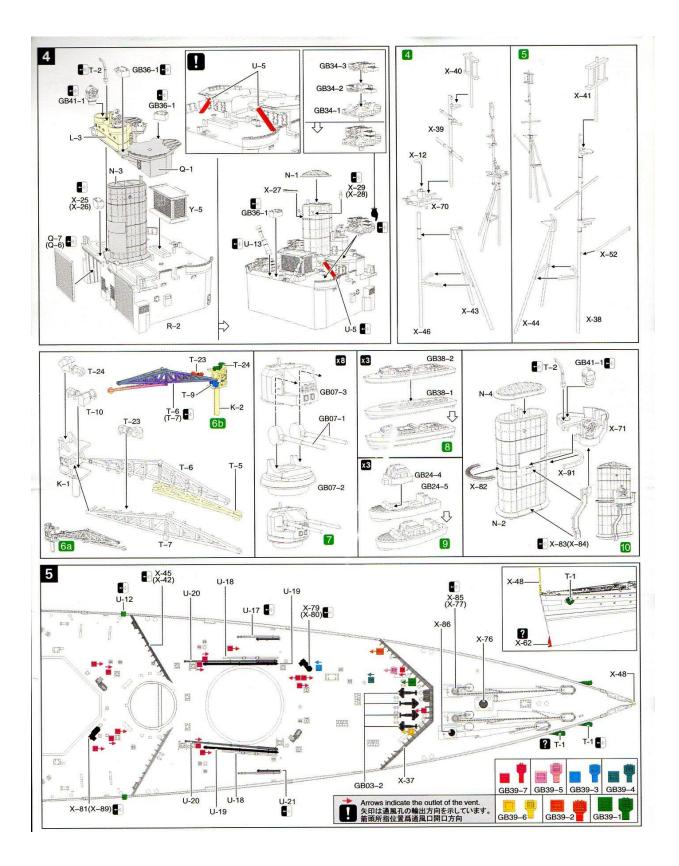
Some care will need to be taken at each step as many of the larger parts are shown already in place.

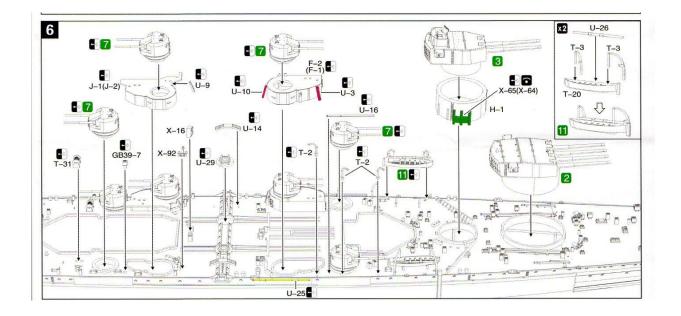
The instructions are very clear and comprehensive and also feature a drawing showing all the sprues and parts included. Flyhawk uses colour coding to assist with placement of smaller parts; this is a very good feature which takes out a lot of guess work.

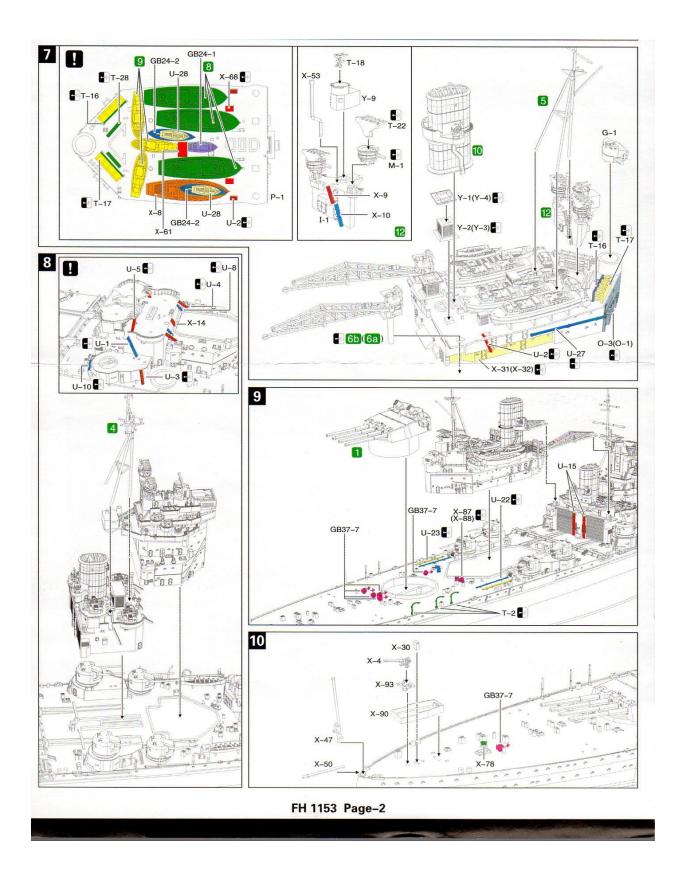


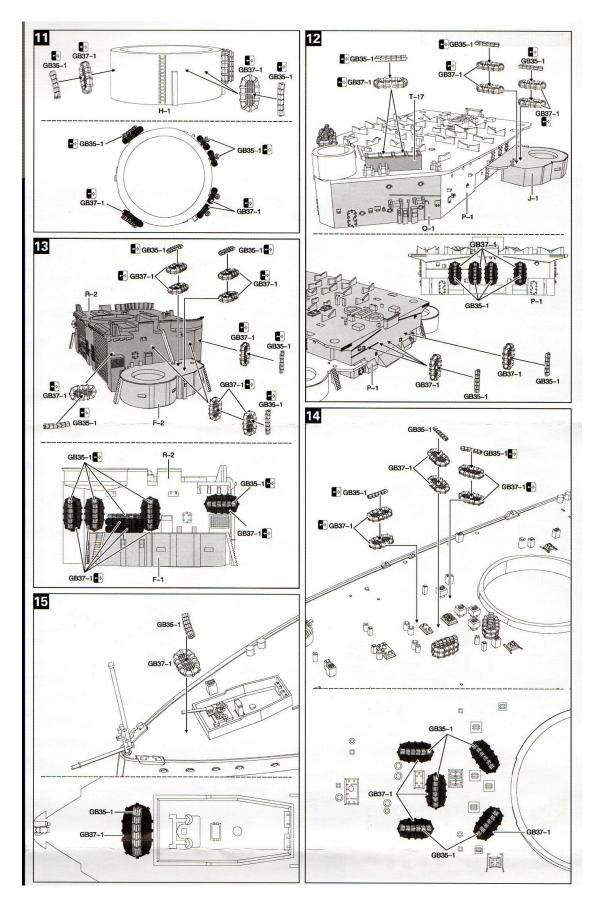
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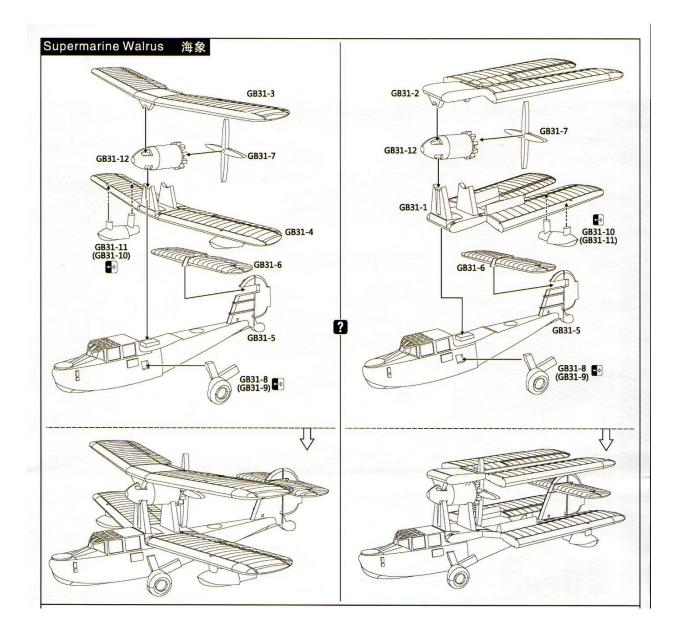








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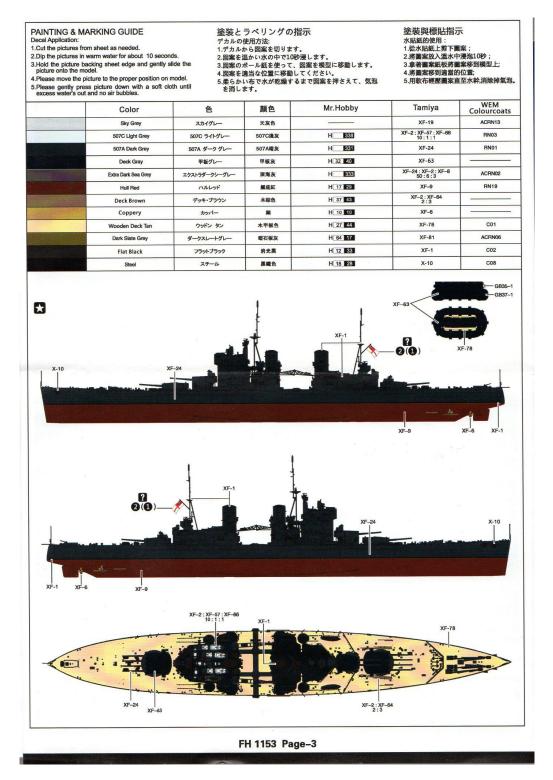


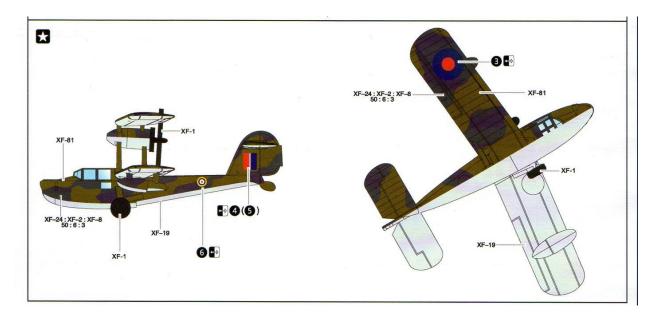


----- Instructions -----

Colour scheme:

There is a full colour diagram of the overall 507A scheme carried by *Prince of Wales* in May 1941 with references to the Mr. Hobby, Tamiya, and WEM Colourcoats paint ranges. There is also a full colour diagram for the Walrus.





----- Colour schemes -----

Deluxe Edition Parts:

The deluxe edition comes with 53 machined metal pieces, 64 resin pieces, and three photo-etch sheets of 208 parts.

The metal parts consist of machined 14" and 5.25" barrels, and 27 ventilation vents. The resin pieces are ventilation vents; the brass and resin vents are to replace the ones supplied with the kit. Some of the replacement vents require cutting away some vents that are moulded directly onto the deck. They will add considerable detail, but care will need to be taken due to their small size; I suspect that most modellers will find the basic vents supplied with the kit to be perfectly adequate.

The three photo-etch sheets contain (among other things) replacement cranes, Type 281 masthead aerials, Type 282 aerials for the pom-pom directors, Type 285 aerials for the HACS, funnel platforms, grills and sirens, rigging for the masts, pom-pom details, ladders, struts for the Walrus, anchor chain, and pre-cut railings.

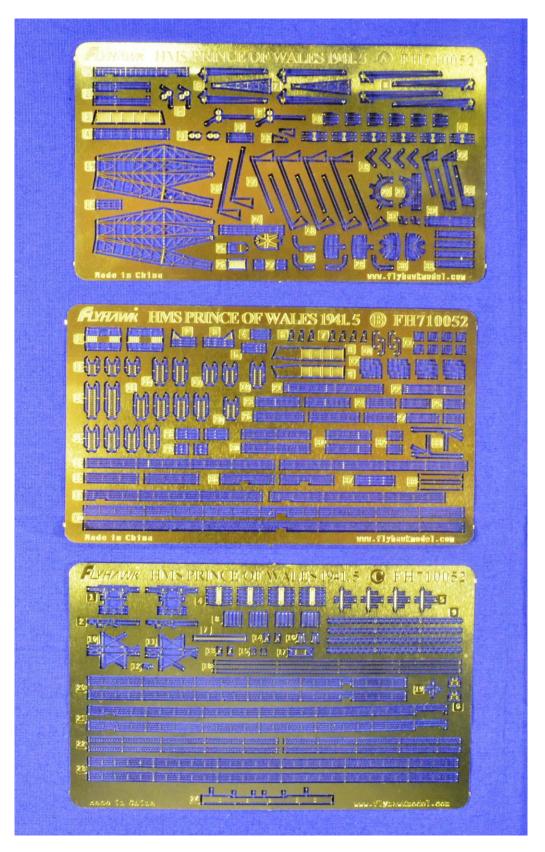
A double sided instruction sheet in full colour indicates how the photo-etch pieces are to be folded and attached. Another double sided full colour instruction sheet is specifically for the placement of the replacement vents. The railing placement diagram is on the etch sheet instructions.



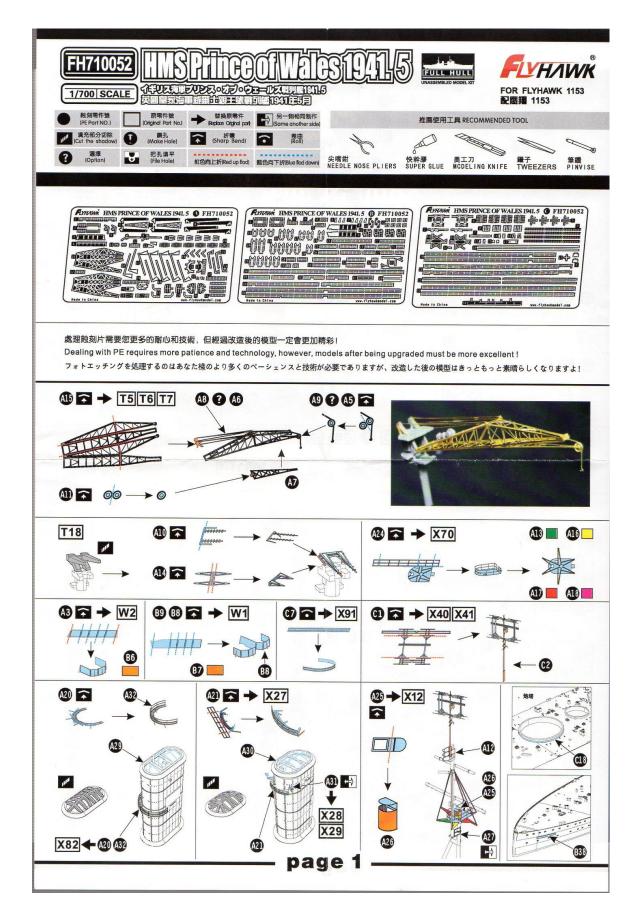
----- Deluxe edition components -----

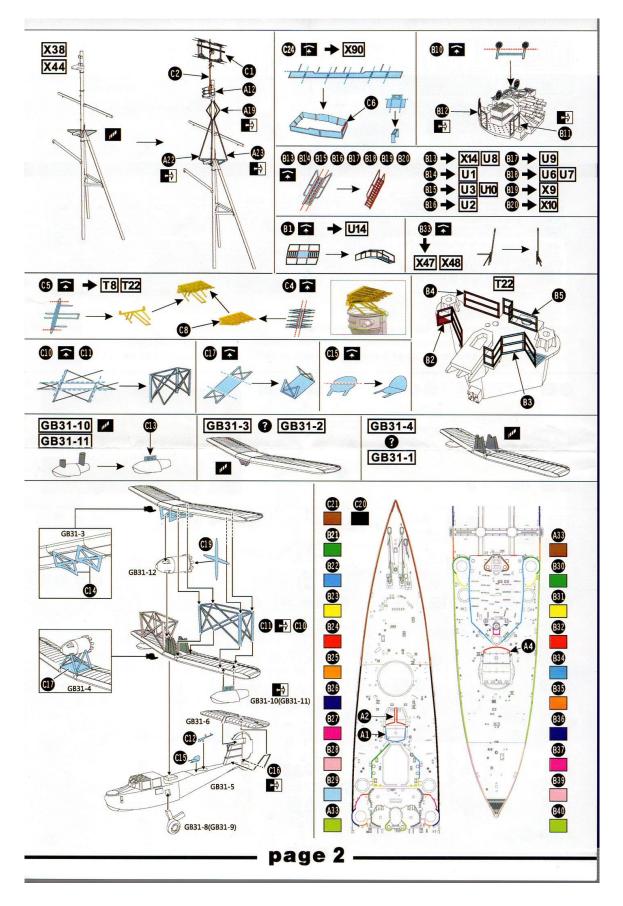


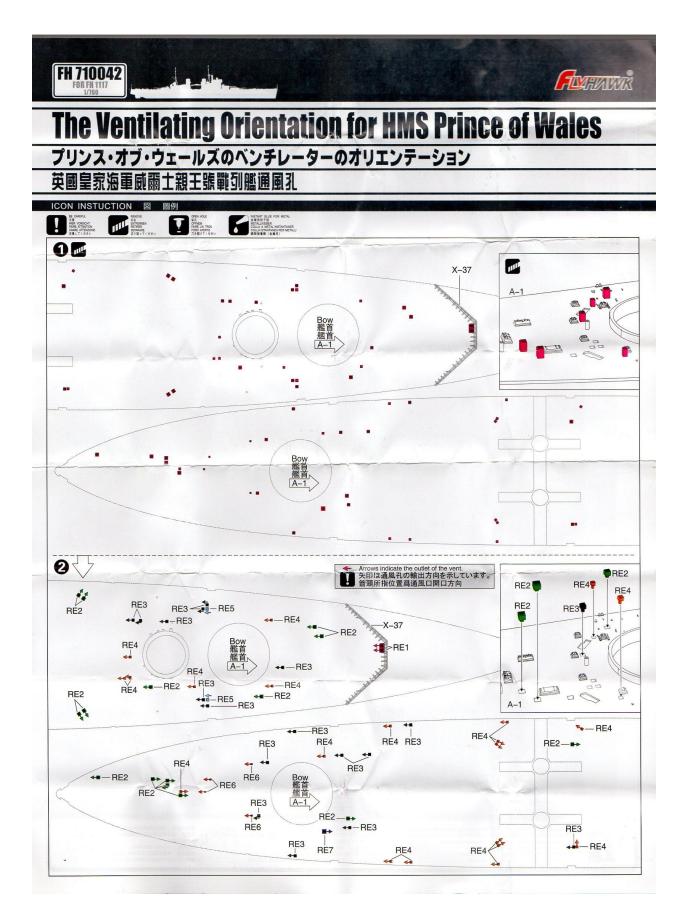
----- Deluxe edition metal and resin parts -----



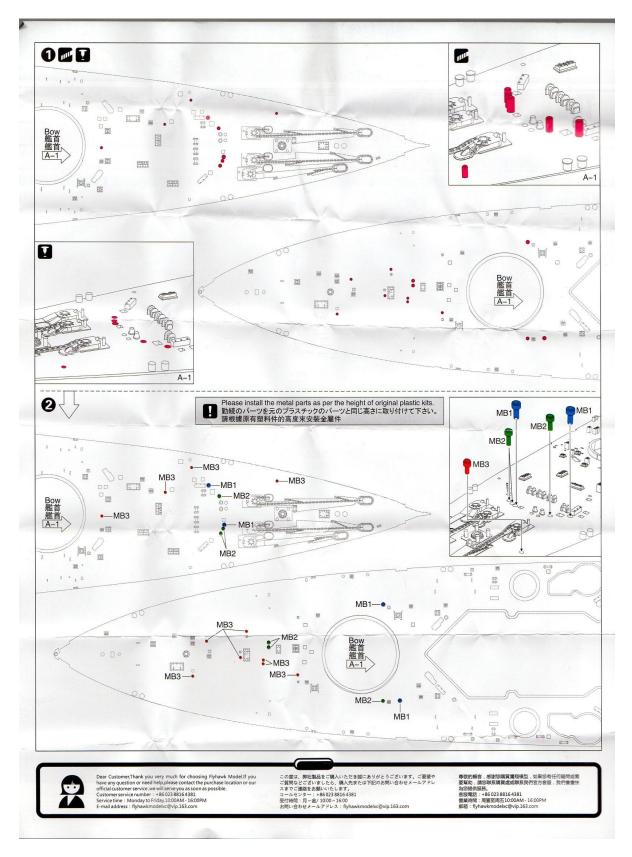
----- Deluxe edition photo-etch sheets -----







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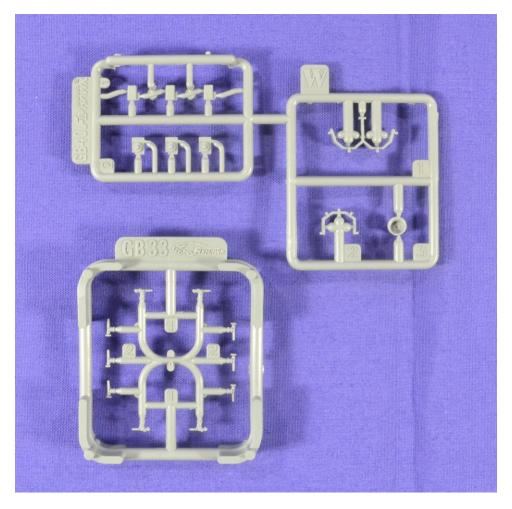


-----Deluxe edition instructions -----

Differences between Prince of Wales 1941.12 and Prince of Wales 1941.05:

The mix of parts is mostly the same for both kits, but there are some detail differences with the appropriate parts and changes to the instructions, this kit has the following features:

- An additional pom-pom director with Type 282 radar aerials is fitted between the HA directors above the bridge in place of the Type 271 radar.
- 3pdr saluting guns are on the lower level of the bridge in place of the 20mm guns.
- A single UP mount is on the roof of 'B' turret, and two UP mounts on the roof of 'X' turret in place of the pompoms. Bulwarks are supplied for the UP mounts.
- A metal ship's badge measuring 2in by 2.5in is included in its own box, with the red cross and emblem over a white background with the edges done with gold trim.
- The included etch is also different with bulwarks for the UP mounts and the 40mm gun aft, and a replacement etch piece for the platform on the after funnel.



-----UP mounts and saluting guns -----

Overall Impression:

Flyhawk now produces two different kits of *HMS Prince of Wales* – this kit depicts the ship at the beginning of her operational life, the previously released December 1941 version depicts the ship at the end of her operational life.

As both kits share most of the same parts it is no surprise that this kit is as equally impressive as the December 1941 version. The model is just over 12.5in long and it is packed with detail featuring precision moulded parts with no flash. The fineness of detail does not imply fragile pieces; the pieces stand up to rough handling. The main superstructure parts will easily detach from their sprues, limiting the possibilities of damage. The instructions are very comprehensive and the use of colour coding will ease the assembly of the smaller parts.

Flyhawk spends the time to do extensive research – this kit is very accurate down to the UP mounts and saluting guns, matching up well with the drawings and photos in my various reference books.

There are a lot of pieces but modellers will have no problems assembling this kit. It is very wellengineered and the parts will fit together very easily. I note that there has been some comment about the large part counts in Flyhawk kits and how that discourages some modellers from purchasing their kits. The large part count is mainly due to the number of small fittings that are not moulded in place. They can easily be left off and their locating holes filled; the amount of moulded in detail will still produce an exceptional model. So don't let the box full of parts dissuade you.

The Deluxe Edition parts add another level of detail to this already incredible kit. Experienced modellers will appreciate the opportunity for super-detailing, and even those not particularly fond of photo-etch will find the cranes and funnel platforms very easy to assemble and attach. The only other item that modellers may consider would be anchor chain.

This is a highly recommended kit; modellers can now choose to build *Prince of Wales* in either fit without having to resort to conversion work. Perhaps we will see other members of the *King George V* class in future.

Congratulations again to Flyhawk for providing such a well-researched and well-engineered kit.

References:

- Battleship by Martin Middlebrook and Patrick Mahoney. Charles Scribner's Sons, 1979
- Battleships: Allied Battleships in World War II by William H. Garzke and Robert O. Dulin. Naval Institute Press 1980
- British Battleships by Oscar Parkes. Seeley Service & Co. 1973
- British Battleships 1919-1945 by R.A. Burt. Seaforth Publishing 2012
- British Battleships of World War Two by Alan Raven and John Roberts. Naval Institute Press 1981
- Ensign 1: King George the Fifth Class Battleships by Alan Raven. Bivouac Books 1972
- Force Z Shipwrecks of the South China Sea by Rod Macdonald. Whittles Publishing 2013

Review kit courtesy of Flyhawk Models