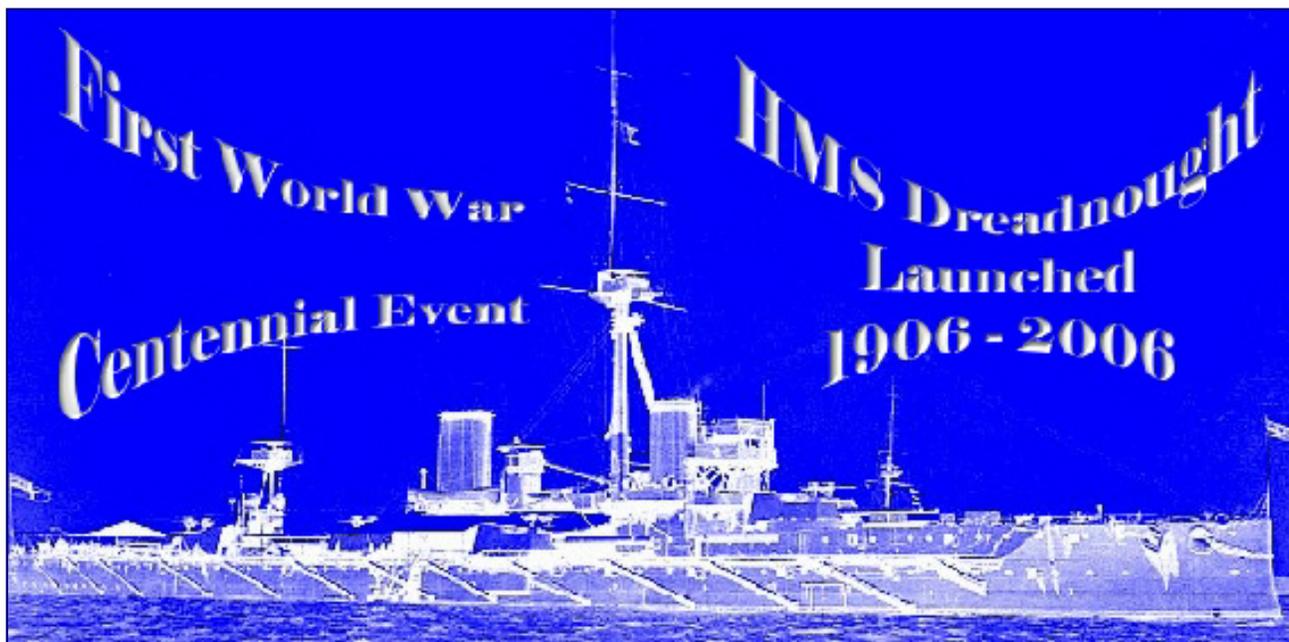


HMS Dreadnought

1906 - 2006



Model by Max Yang



The *Dreadnought* Centennial

Stephen McLaughlin

This year marks the centenary of the launch of HMS *Dreadnought*, brainchild of Admiral Sir John Fisher and the ship whose name soon became synonymous with a new breed of battleships. Soon all the major naval powers - and some minor ones, too - were building or buying dreadnoughts, and the dreadnought race between Britain and Germany contributed to the growing tensions between these two nations.

So what was it about *Dreadnought* that was so different? It wasn't her turbine engines; although these were considered a daring technical leap forward, several ships considered dreadnoughts would be powered by the older-style reciprocating engines. Nor was it her armor protection, which was actually slightly inferior to that of her immediate predecessors, the Lord Nelson class. The one thing that set *Dreadnought* apart was her battery of ten 12-inch guns, of which eight could be fired on either broadside. Previous battleships had featured a battery of four 12-inch guns supplemented by a number of smaller guns -- anything from 7-inch to 10-inch in caliber.

HMS *Dreadnought* (1906)

- Period in service: 1906 - 1918
- Displacement: 18,110 tons
- Length: 160.6m / 527ft
- Beam: 25m / 82ft
- Complement: 773
- Speed: 21kts
- Armament: 10 x 12 inch (305mm) guns; 27 x 12 pounder guns; 5 x 18 inch (457mm) torpedo tubes
- Armour: 4 - 11 inch belt; 4 inch deck; 4 - 11 inch barbettes; 11 inch turrets

As gunnery ranges grew longer, it became difficult to control these mixed batteries, since the guns differed in ballistic performance; moreover, it was hard for the officers controlling gunfire to distinguish the splash of, say, a 9.2-inch shell from a 12-inch shell, so making corrections could become confusing.

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Dreadnought Centennial cont.

Thus HMS *Dreadnought* was the first battleship that could really take advantage of the long-range capabilities of her big guns, something that was important not only because it gave her the possibility of hitting an enemy before she could be hit in return but also because it meant she could fight outside the range of torpedoes. Advances in propulsion had dramatically increased the effective range of torpedoes from less than 1,000 yards at the turn of the century to about 3,000 yards or more by the time *Dreadnought* was laid down. By 1914, the British and German fleets would be equipped with torpedoes that had 10,000-yard ranges.

Although *Dreadnought* did not initiate the naval race between Britain and Germany, it did intensify matters. First, by making all previous battleships obsolete it wiped out Britain's existing lead in capital ships - both nations were starting the new battleship race from scratch.

Perhaps even more significant, *Dreadnought* initiated a race in which each nation sought to build ever-larger battleships.

Dreadnought herself displaced 18,120 tons and cost about £1.8 million, whereas the "R" class battleships of 1913 with larger 15-inch guns and heavier armor displaced 30,400 tons and cost £2.5 million. German battleships showed a similar increase in size and cost.

Both nations found the enormous cost of the naval race increasingly difficult to bear. Britain, however, had two key advantages - her shipyards could build ships more cheaply, and she didn't have to maintain a massive standing army.

By 1914 Germany was clearly losing the race - five "R" class battleships were laid down under the British 1913 program, whereas the corresponding German program included only two battleships and one battlecruiser. Mention of battlecruisers raises another aspect of Fisher's building policies - the large, fast, weakly armored super-cruisers. But that's a story for another time. Today it is enough to remember HMS *Dreadnought* and her descendents, the big battleships that dominated naval and even national policies for more than three decades.

HMS Dreadnought at War

When the great struggle finally came *Dreadnought* was a bit "long in the tooth." By May 1916 she had been transferred out of the Grand Fleet to a squadron of pre-dreadnoughts based in the Thames Estuary. Earlier, however, she accomplished a singular feat. On March 18, 1915 she rammed and sank U-29 [below] in the North Sea. HMS *Dreadnought* holds the distinction of being the only battleship to sink a submarine in combat.



Shadow Over Dreadnought[s]

Paul Kennedy

[In addition to Jutland] there was another epic First World War naval battle that should have cast more doubt upon the long-term future of the large-gunned warship. It was that initial attempt to force the Dardanelles on March 18th, 1915 by an Anglo-French battlefleet alone, with disastrous results. A rather modest row of mines laid by the diminutive Turkish minelayer *Nousret* inflicted more damage to Allied seapower than any other single measure; three battleships (the *Ocean* and *Irresistable*, and the French battleship *Bouvet*) were sunk and the battlecruiser *Inflexible* badly damaged. Meanwhile, Turkish coastal artillery severely wounded one French battleship and caused another to be beached. Thus, six heavy ships had been put out of action in one encounter. . . Even more to the point is the uncomfortable fact that the severe damage inflicted, especially at the Dardanelles, pointed to the dreadnought's vulnerabilities right at the presumed zenith of its power and influence. It is an irony worth exploring.

Students of the history of military technology so often point out that every great "leap forward" in weapons systems will sooner or later provoke others to devise alternative systems which thus readjust the balances - the balances between big and small, and between offensive and defensive warfare. This is surely true. The bomber did not always "get through", and German Blitzkrieg warfare died in the western outskirts of Moscow in late 1941.

Yet it is worth arguing that there was something special about the military-technology scene in the Edwardian era because there was being developed not merely one, but at least five new weapons that affected control of the sea. The first was, of course, the all-big-gun ship. But consider also another four:

(a) The Naval Mine - a sneaky, invisible, defensive weapon to be sure, but one that denied battlefleets the freedom to steam where they wished. . .

(b) Then there was the torpedo, which was already being developed years before the *Dreadnought* was launched. The point about this weapon was not its increasing speed, range, and explosive force, although those features were frightening enough. It was, rather, the awful fact that it could be launched against heavy warships from multiple platforms - torpedo-boats, destroyers, submarines, and aircraft, rather like today's cruise-missiles. . .

(c) The submarine itself offered, surely, a military revolution even greater than that produced by the *Dreadnought*. . . It was not surprising that during the postwar Washington naval limitations talks the British sought to get the submarine abolished altogether! . . .

(d) The fourth military-technological innovation to challenge the dominance of the dreadnought was the coming of the airplane. . . It is simply worth noting that the air challenge came in two forms, and in separate but related questions: first, would the new carriers replace the battleship as the queen of the sea; and, secondly, had warships become too vulnerable to aerial attack to be viable in future wars? . . .

In describing [the 1945 sinking of the Japanese super-dreadnought *Yamato* by American carrier aircraft], the great American naval historian Samuel Eliot Morison commented, "When she went down, five centuries of naval warfare ended". Morison's reference, clearly, went all the way back to those early years of the long-range, gun-carrying vessels of the late-fifteenth and early-sixteenth centuries. But the same could be said, even more emphatically, of the dreadnought era.

HMS Dreadnought Photo Album



1. Adm. Sir John Fisher

2. Dreadnought at Sea

3. Aft Turrets

4. Side View Model
by Max Yang

This Special Supplement was conceived by Editor Michael Hanlon and produced with the great help of our contributors including: Battleship authority Steve McLaughlin, whose latest work *Russian and Soviet Battleships* is available at Amazon.com; Professor Paul Kennedy of Yale University, whose selection is from his 2006 presentation, *HMS Dreadnought and the Tides of History*; Max Yang and Tony Lovell of the *Dreadnoughtproject.com* contributed the model photos; Tony Langley helped with photos & Kimball Worcester with editing; and the websites of the US Navy and Royal Navy were drawn upon for illustrations and details. Presented originally with the November 2006 *St. Mihiel Trip-Wire*.