



The *Mississippi* as completed (A. D. Baker III)

after commissioning. Two ships would be laid down each year, building up to a fleet of thirty-six first-class battleships in 1927. By this time the board assumed that the two most likely future naval enemies were Germany and Japan, an assumption that would remain constant until the end of World War One. Although other European powers could find themselves in conflict with the United States, the General Board tended to reason that public opinion in such democracies as France and England would prevent war. In Germany and Japan, on the other hand, public opinion could easily be controlled by the ruling government, which was known to be militaristic.

In theory, then, the United States would have to maintain both Atlantic and Pacific fleets, each equal to the possible enemy in that ocean. Matters were further complicated by German possession of many South Pacific islands, which could serve her as fleet bases in wartime. Germany could, therefore, in theory attack in either the Atlantic or the Pacific. In practice, the board seems to have assumed that Germany and Japan would not act together. If the U.S. fleet could deal quickly and decisively with the stronger of the two enemy fleets, it thought that the other would be deterred. If, however, the fleet were only barely equal to, or slightly superior to, one of the two enemies, then, as a War College report suggested, "it is likely that, in the event of hostilities, the other, without declaring war against the United States, will try to filch from us, as did France during our civil war." The basis for U.S. fleet size was therefore the projected size of the German fleet.

On 21 September 1903, the secretary of the navy asked the General Board to design a long-range building program, to begin with the next session of Congress. The board now called once more for two new ships per year, from 1904 through 1915. That would give the United States forty-eight battleships

in 1919. No figures were given for programs beyond 1915, and the board no longer assumed that ships would be reduced to second rank after eighteen years. If downgrading were taken into account, nine of the forty-eight ships in service in 1919 would be counted as second-class.

The origins of the forty-eight-ship figure are by no means clear. In September 1904, for example, the Newport Summer Conference called for a total of fifty modern battleships (excluding the three *Indians*) by 1914. Such figures were generally based on the estimated future German strength on the basis of the Navy Law. The Atlantic fleet would match the German fleet; another fleet, 50 percent as large, would have to be maintained in the Pacific, so that the total U.S. force had to be one-and-one-half times as large as the German fleet. The fifty-ship program, for example, called for six ships in FY06, four each in FY06-FY09, and three each in FY10 and FY11, for a total of twenty-eight new ships. It seems likely that the rather more conservative figures produced by the General Board reflected a more realistic view of what Congress would provide.

Later reports by the Newport Summer Conference indicate the reasoning involved. In 1904, with both Russia and Japan about to be made prostrate by the Russo-Japanese War, Germany was the most probable future enemy. She planned to have thirty-eight first-class battleships by 1920. With the Panama Canal in U.S. hands, the 50 percent superiority would no longer be needed, and the Summer Conference called for a battle line strength of thirty-eight ships by 1914. Ships would pass to the second-class twenty years after launching.

In 1909, the Summer Conference reported that the German program called for a total of forty-two battleships and twenty-one armored cruisers in service by 1917. Japan would have twenty battleships and

twenty armored cruisers in 1915. The U.S. Navy, then, should base its strength on the forty-two German battleships; using the Panama Canal, it could bring the same ships into action against Japan. It was assumed, too, that about 25 percent of all U.S. ships would be refitting at any given time, hence that the United States would need at least a 25 percent superiority over Germany. Battleships would be organized in squadrons of nine ships (in three divisions), the fleet consisting of six such squadrons, fifty-four ships.

Another calculation, also dated 1909, called for an active fleet equal to the combined *existing* fleets of Germany and Japan. At this time the German High Seas Fleet consisted of seventeen battleships; and the Japanese were expected to have fourteen by 1911. If U.S. ships operated in squadrons of nine, the 2nd and 4th Committees of the Summer Conference called for two active squadrons and two reserve divisions in the Atlantic (twenty-four ships) supported by a squadron of armored cruisers and a squadron of scouts; and two squadrons (eighteen) in the Pacific, supported by at least one squadron of armored cruisers. That made for forty-two battleships, not counting future construction by either potential enemy.

On 17 October 1903 the General Board reported its forty-eight-ship program, each battleship to be armed with four 12-inch and eight 8-inch guns and "as many 6 inch and lighter calibres as practicable, depending upon displacement." The board also wanted at least one, preferably two, underwater torpedo tubes on each side. It appears that the board had in mind an upgraded *Maine* rather than a repeat *Connecticut*. Armor protection equal to that of the earlier ship was specified, and freeboard was to be high forward. Key characteristics were a sustained sea speed of 16 knots to Culebra (Panama) and back, and a maximum steaming radius of 6,000nm.

The General Board appears to have been unaware

of just how expensive sustained speed and long range could be. It hoped to achieve its requirements on a *full load* displacement of 16,000 tons, which was very different from the *normal load* of 16,000 tons assigned the *Connecticuts*. The *Connecticuts* were limited to a sustained sea speed of about 15 knots, and their radius was about 5,500 miles, yet their full load displacement was 17,665 tons. The weight saving due to reversion to the 6-inch gun would be more than balanced by the cost of underwater torpedo tubes. As recounted in the companion book in this series on U.S. cruisers, the board encountered similar difficulties in its attempt to specify cruiser characteristics.

The exercise illustrated the tension between the strategic problems appreciated by the General Board and the technology and resources of the time. It is also characteristic that the seagoing officers of the General Board did not at all appreciate the considerable displacement and cost increases associated with what they regarded as relatively small demands for additional speed and range. For example, the board did not at first realize that "sustained sea speed" was a most exacting criterion. In December, it retreated to specifying trial speed (18 knots). However, the board then reiterated its demand for minimum displacement, thinking its battleship would displace no more than 14,500 tons (normal displacement).

A conference committee of the Board on Construction and the General Board fixed on a 16,000-ton battleship armored like the *Vermont*, but with 6-inch guns (23 January 1904). Two battleships and two armored cruisers were requested, but Congress authorized only one of the battleships, which actually duplicated the *Vermont*.

Perhaps the most important effect of the exercise was to inject the General Board into the process of drawing up the annual program and, as importantly, the characteristics to be required of its ships.