Shall We Make Junk or the World's Finest Plane Carriers out of Our Battle Cruisers?

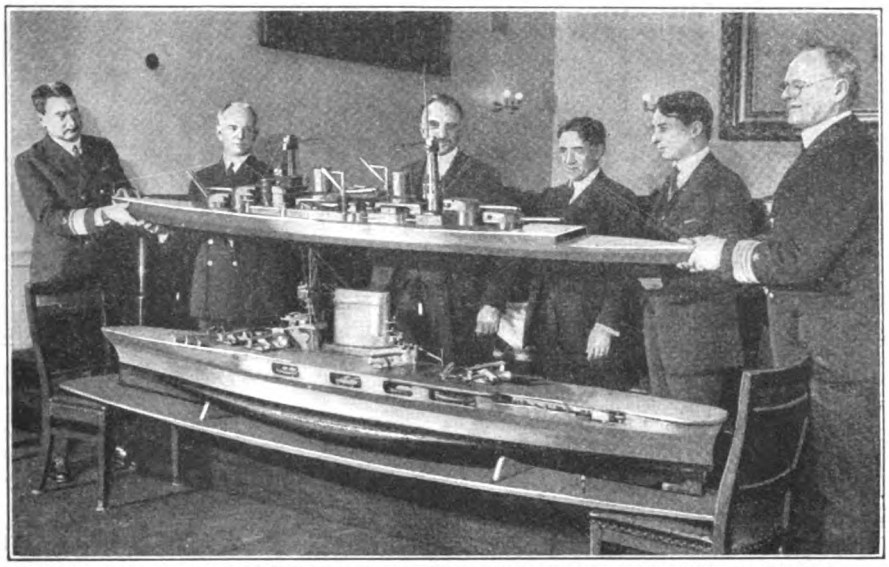
Proposal to Convert Two Doomed Ships Urged in Washington

By Graser Schornstheimer

UNCLE SAM'S is the only great navy in the world unequipped with modern aircraft carriers. The navy roster contains the names of the Wright and Langley as mother ships for navy planes, but the speed of these vessels is so inadequate when compared with the maneuvering speed of capital ships that the framers of the recent naval treaty did not consider them of sufficient importance to mention.

Plans to make up this deficiency have already been set in motion by Assistant Secretary of the Navy Theodore Roosevelt, who lent his authority some time ago to the proposal that two of the six battle cruisers that must be scrapped under the treaty be converted into aircraft carriers. This simple move would transfer us from the rear to the head of the procession in the development of naval aviation.

Two entirely new carriers would cost us $80,000,000, but if two of the battle cruisers on their way to the junkyard are altered in design at a cost of $40,000,000, Uncle Sam will have gained a pair of vessels that will distance any fighting ship of their size now floating the seven seas.



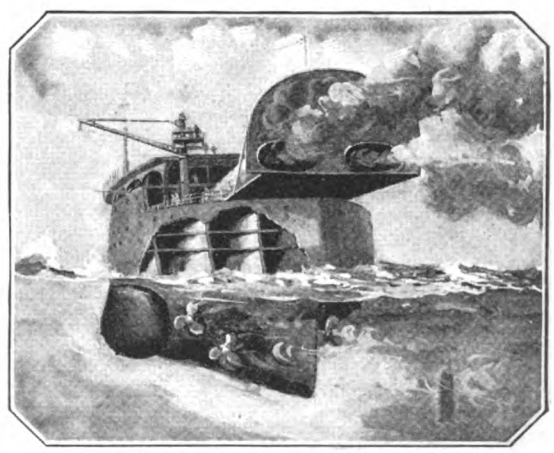
United States naval officials and members of the Congressional Committee on Naval Affairs examining a model that shows how battle cruisers may be converted into airplane carriers by utilizing the original hull and altering the superstructure as indicated by the illustrations

In the event that Congress grants the appropriation asked by the Navy Department, a special board already formed will decide which two of the six battle cruisers now awaiting the junkman's blowtorch are best suited for conversion into aircraft carriers. It is probable that the Saratoga will be one of them, since she is furthest along of the group. The Lexington will be the other.

The plan of conversion is entirely feasible, since the battle cruisers possess both size and speed. As designed, they are 850 feet in length.

Although the original displacement of 43,500 tons will be greatly reduced without guns and armor, the new displacement of 33,000 tons, coupled with the speed of 35 knots—2¼ knots faster than the British battle cruiser Furious, which is the fastest capital ship afloat — will make them in every respect the finest aircraft carriers in the world.

Whichever two ships are selected for carriers, it is certain that they will be electrically driven, since the six cruisers were to have followed in the wake of the first electric ships, the New Mexico and Maryland. Four large steam turbines will drive the huge electric generators which, in turn, will drive the motors fastened rigidly to the propeller shafts. The boilers will be oil fired.

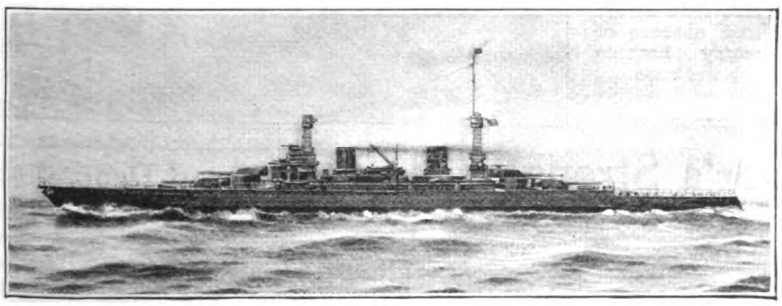


Proposed plane carrier with anti-torpedo blister, three protective bulkheads, and flared horizontal funnels to save crew from sucked-back smoke and fumes

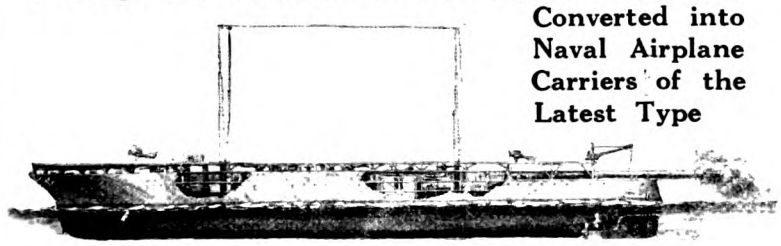
The problem of reducing these 43,500-ton vessels to 33,000-ton aircraft carriers is by no means a small one. All armament except the deck protection must be eliminated. Then, top-side equipment—such as funnels, masts, and other capital ship necessities—must be removed to make the decks flat and unencumbered for the movement of planes.

The proposed design calls for a flat launching and landing deck for aircraft, running the entire length of the ship and pierced only by plane elevators, telescoping masts, and disappearing pilot and chart house. Funnels probably will have to be carried aft to discharge smoke over the stern. Harmful effects from fumes can be overcome, it is believed, by carrying the funnels in this manner.

A 33,000-ton carrier should be able to house at least 40 planes of ordinary size. Although stripped of defensive armor, the converted ships will be provided with guns for defense against surface ships.



Above: How Our Battle Cruisers Would Have Looked if Completed, and, below, How They Will Appear if Converted into Naval Airplane Carriers of the Latest Type



An Unobstructed Flying Deck 900 Feet Long

If our unfinished battle cruisers, designed to appear as in the upper photograph, are converted into aircraft carriers, planes will have an unobstructed 900-foot deck for taking off and landing. In the illustration above, the telescoping masts are indicated by dotted lines. The derrick at the right lifts hydro-airplanes from the sea surface to the deck