

would fire three bouquets of mixed colours and other ships two bouquets of ten.

Mr. Burton was not forgotten. He received a somewhat tardy reply to his letter of 4th March in which he was informed that his request would be referred to C-in-C Portsmouth from whom he should expect to hear directly. No such further letter having been received, on 14th June Mr. Burton, clearly no shrinking violet, pressed again. His committee was due to meet the week following and he wished to report on the outcome of his correspondence. A reply came two weeks later bringing an invitation for six representatives of the Royal Naval Division to attend. A cautionary note was added that representatives must make their own way to Portsmouth. It was arranged that all six would view the Jubilee Fleet Review from H.M.S. *Rodney*. Mr. Burton sent an immediate handwritten expression of appreciation. He followed this with a letter on 23rd July thanking Their Lordships and *Rodney* for the hospitality shown to the six R.N.D. representatives.



The Jubilee Fleet Review firework display – H.M.S. Rodney seen from H.M.S. Nelson. [Courtesy Historic England]

Elsewhere in this issue Professor Sir Bryan Thwaites relates his personal memories of the Silver Jubilee as a young boy.

*George and Betty Moon, my uncle and aunt, first met at the Jubilee celebrations in Tunbridge Wells, married five years later and celebrated their own golden jubilee in 1990.

- 1 – CinC Home Fleet: Admiral the Earl of Cork and Orrery.
- 2 – Director of Naval Intelligence: Rear-Admiral Gerald Dickens
- 3 – Director of Plans: Captain Edward King
- 4 Deputy Chief of the Naval Staff: Vice-Admiral Sir Charles Little

The Washington Conference *Hood's* above water torpedo tubes

By David Chessum

H.M.S. *Hood* was fitted with two submerged torpedo tubes as built. It was also intended to fit her with eight above-water torpedo tubes during construction – two pairs on each beam. One spare torpedo was to be stored in close proximity to each tube ready for rapid re-loading, and it was intended that a pair of above-water tubes could be reloaded in approximately 5 minutes.

The above-water tubes were to be fixed behind 5-inch armour, with additional 3-inch box protection for the warheads of the torpedoes in the tubes. The box protection was to protect the warhead from the blast of a 5.5-in gun firing in the immediate neighbourhood, or an explosion close by, but such protection would be of little value against a direct hit, and even if it were possible to provide sufficient protection to prevent penetration, a direct hit on the box containing the warhead would probably cause detonation to take place. The existence of these above-water tubes would involve a serious risk of total loss in the event of explosion of the torpedo, as the upper strength girder of the ship would be destroyed for a considerable distance from the point of explosion.

On 17 July 1919, while *Hood* was still under construction, it was decided to remove the above-water tubes, and the associated box protection, from the design in order to free up weight to allow for further additions to her armour. This was part of a package of removals that would enable the thickness of the main deck over the magazines aft to be increased to a total thickness of 6-inches, and the main deck over the magazines forward to be increased to a total thickness of 5-inches. But this additional protection was never fitted. Experiments showed that the extra thickness of plating required to ensure safety was considerably greater than had been anticipated, which would have resulted in schedule delays, increased expense, additional weight, and an increased draught that would render docking more difficult. In October 1920 orders were therefore issued that nothing further was to be done.

Notwithstanding the decision to remove the above-water tubes from the design, it was decided that four above-water torpedo tubes (without box protection) should be retained temporarily for experimental purposes to test the torpedo control system, but that these tubes would not be a war fitting. The decision that these residual tubes were not to be a war fitting was governed by the lack of protection, and consequent risk of damage to the ship through detonation of a warhead.

Notwithstanding this risk, in 1923 a proposal was raised within the Admiralty to (1) recategorise the four existing above-water tubes as permanent, and (2) fit the remaining four above-water tubes omitted during construction. But this proposal fell foul of the Washington Naval Treaty,

which specified that *“No retained capital ships or aircraft-carriers shall be reconstructed except for the purpose of providing means of defence against air and submarine attack.”* It was considered that fitting the additional torpedo tubes would involve alterations in the structure that would seem to come under the heading of reconstruction, and as the torpedo tubes were clearly not *“for the purpose of providing new means of defence against air and submarine attack”* they were not permitted.

It was therefore decided not to effect any changes in the torpedo armament pending the interpretation of the reconstruction clause adopted by other Powers (and in particular until the US had given a decision on the question of elevation of main armament guns). But in 1927, after the US had finally decided to proceed with increasing the main armament gun elevation of the battleships Nevada and Oklahoma to 30 degrees, the proposal was resurrected.

The value of the above-water tubes, and the desire for more than the four then fitted in *Hood*, had frequently been brought forward in reports from both Commanding Officers and Flag Officers commanding the Battle Cruiser Squadron. These views were supported by the Admiralty, as battle cruisers when attempting to dominate the enemy van would probably be in a very favourable position for a torpedo attack on an enemy battle fleet; furthermore such a position would often be attained early in an action. Above water tubes were seen as having great advantages over submerged tubes, due to the greater volume of fire, and proportionally increased chance of success.



*A 21-inch torpedo fired from one of the above water tubes
(Percival Collection, H.M.S. Hood Association)*

It was considered that if the 3-inch box protection could not be replaced for weight or other reasons, the slight risk associated with the warheads could be accepted in wartime. Furthermore, the risk would be even less if the other four tubes were replaced, but no spare torpedoes carried – and from an operational point of view, 4 tubes on

a broadside with no spares would be better than 2 tubes with spares.

It was therefore submitted for decision whether:

- The four above water tubes now in *Hood* should now be regarded as a war fitting;
- The four above water tubes omitted from *Hood* during construction should now be replaced;
- The box protection for tubes (either 4 or 8) be fitted, or the slight risk without be accepted; or
- If no box protection was to be fitted, whether no spare torpedoes should be carried.

Installing the four additional above-water tubes, and fitting box protection to all of the above-water tubes would involve an increase of weight of about 110 tons, to which no objection was seen by DNC.

In reviewing these proposals, the Admiralty again came to the conclusion that fitting additional above-water torpedo tubes would be an infringement of the Washington Naval Treaty reconstruction clause, and the decision made that it wasn't considered desirable *“to give the U.S.A. further excuse for abusing us.”*

But with regards to the existing torpedo tubes, the decision was made that the four tubes should now be recategorised as a war fitting, and the box protection be fitted. Fitting of the box protection was therefore planned for *Hood's* large repair scheduled for 1929-31.

Hood's submerged torpedo tubes were removed in 1937. Removal of the above water torpedo tubes was included in the proposals for the large repairs that were considered for *Hood's* reconstruction in the early 1940s, however *Hood* was lost before this could be implemented. This obviously begs the question as to whether the existence of these torpedoes contributed to the *Hood's* loss. This possibility was considered by the Board of Enquiry, which concluded as follows:

As regards the Torpedo Warheads we put ourselves the following questions:

- (a) *Could one or more have been caused to explode during the action?*
- (b) *Does the evidence of eyewitnesses correspond to what one might expect to see or hear if one or more warheads had detonated or exploded?*
- (c) *Would the explosion or detonation of one or more warheads have caused the ship to sink so rapidly?*

With reference to (a). Evidence of eye-witnesses, Prince of Wales and an officer who had recently serviced in Hood leaves little room for doubt that the mantlet doors were closed. A warhead could still, however, have been detonated or exploded by a direct hit from Bismarck's shell.

There is no direct evidence that such a hit occurred, but it may have done so on either side of the ship. If a single warhead had gone off, one other, but probably not more than one, warhead would also have gone off.

With reference to (b). Expert opinion suggested that the explosion of two warheads would produce an all-round almost instantaneous flash. It would not have produced the very high column of flame of appreciable duration, which was seen by so many witnesses. Nor was the noise, reported as being heard, compatible with that of TNT detonation or explosion. The consensus of expert opinion was definitely against the characteristics of the explosion as given in evidence by eye-witnesses being that of TNT.

With reference to (c). Mr Offord, our adviser in construction, was of the opinion that this could be the case. Other witnesses, experts in explosions but not in construction, were of the opposite view and the Board is not convinced that such a very rapid sinking could follow from the damage which Mr Offord considered would result from the explosion of two warheads. Further, there is strong evidence that the widespread and immediate damage actually caused to the after part of the ship was considerably greater than that which Mr Offord considered would result from two warheads exploding.

We have therefore come to the conclusion that, although the explosion or detonation of two warheads cannot be entirely excluded, this was not the direct cause of the sinking of the ship.

Sources:

Naval Historical Branch: Washington Treaty File, Admiralty Library Ships Cover 367 (H.M.S. *Hood*), National Maritime Museum Brass Foundry
ADM 116/4351: Loss of H.M.S. *Hood* in action with German Battleship *Bismarck*, The National Archives.

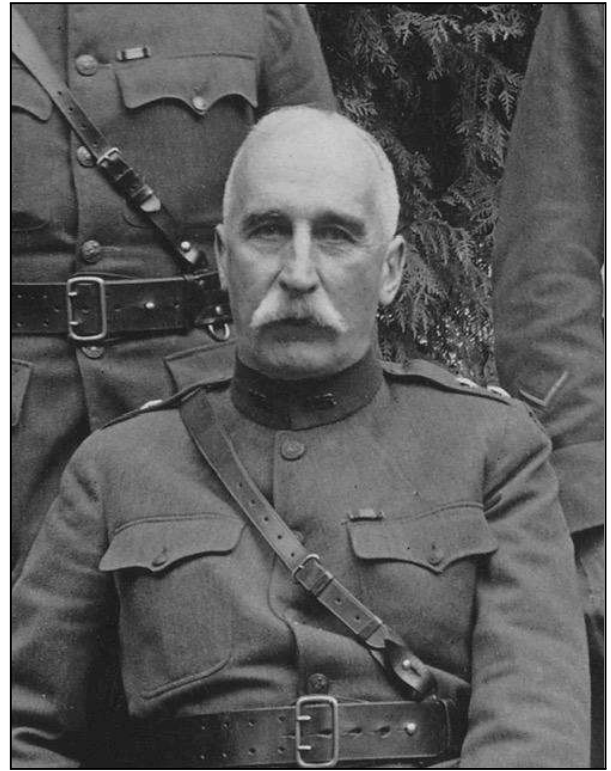
A profile...

Major-General Charles G Morton

By Christopher L Kolakowski

When H.M.S. *Hood* stopped in San Francisco during the Empire Cruise, one of her honored guests was Major General Charles G. Morton of the U.S. Army, who at the time commanded the IX Corps Area responsible for the defense of the West Coast. This post was the culmination of a long career, which left a prominent legacy visible today.

Charles Gould Morton was born in Maine on 15 January 1861. Three months later the U.S. Civil War broke out, lasting until 1865. Some of his family served in the Union Army during the conflict.



Charles G. Morton, 1918 (US National Archives)

Inspired by this service, Morton in 1879 secured an appointment to the U.S. Military Academy at West Point. He graduated with the Class of 1883 and commissioned as a lieutenant in the 6th Infantry Regiment. After several years of active service in Colorado and Utah in the Indian Wars, he taught officer cadets at the East Florida Seminary (today the University of Florida).

Rejoining his regiment, Morton deployed as a major to the Philippines, and was involved in the Philippine War from 1900-1902. He again deployed to the islands for a second tour 1905-1907, after graduating from the U.S. Army War College. He subsequently held command and staff posts in the western and northern United States, along the Mexican border, and in the newly-opened Panama Canal Zone.

Upon U.S. entry into World War I on 6 April 1917, the U.S. Army began organizing and expanding its ranks for overseas service. This process included consolidating National Guard (state militias, equivalent of Britain's Territorials) units into divisions to train and fight. The 29th Division grouped elements from New Jersey, Maryland, Washington DC, and Virginia. In August 1917, Morton took command of the 29th at Fort McClellan, in Anniston, Alabama.