

**Attachment A  
Summary of  
CIRCULAR**

**Defining the Chief Characteristics of Three 30-knot Torpedo Boats and other Torpedo Boats for the US Navy<sup>i ii</sup>**

**Three Torpedo Boats of 30-Knots Speed**

- Maintain not less than 30-knots for one hour.
  - Built to contractor plans and specifications.
  - Delivered complete ready for sea with Government provided ordnance, torpedo tubes, torpedoes, rapid fire guns and ammunition installed.
  - Two conning towers in convenient positions, one forward one aft.
  - Accommodations for four commissioned officers and an adequate crew.
  - An incandescent electric lighting plant must be fitted, but no searchlight.
  - Comply with a set of general requirements for machinery including<sup>iii</sup>
    - Pressure testing requirements for boilers, steam piping and engine cylinders.
    - 3000 gallon per day evaporating plant to provide fresh water for the boilers, with 1600-gallon boiler feed tank.
    - Screw propellers of manganese bronze.
  - Bidders must specify detail weights of hull, machinery, all outfit and armament to be carried on trials, also total coal capacity of bunkers.
  - Designs submitted must include all plans and specifications, calculations of weight displacement and stability to demonstrate satisfactory strength and stability of whole structure.
  - If use other than Navy Dept. specifications for steel, must fully identify modifications.
  - If on trial, fails to equal or exceed 30 knots for one hour, any money that may have been paid to the contractor shall be refunded.
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**Torpedo Boats to Cost Not Exceeding \$500,000**

- Exact size, number, and speed not having been fixed by Congress, the Navy will accept bids for two types.
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**Type No. 1**

**General Dimensions (Approx.)**

Length on load line-	105 ft
Beam on load line	12-1/2 feet
Mean draft	4-1/2 feet
Displacement (about)	68 tons
I.H.P. (about)	850
Speed	20 knots

**Armament (3-1/2 tons)**

Two single torpedo deck guns  
One 1-pounder rapid fire gun  
Two automobile torpedoes  
180 rounds 1-pounder ammunition

- Accept both-
  - Class 1- Built to Navy plans and specifications.
  - Class 2- Built to contractor furnished plans and specifications. May adopt any Navy plans and specifications into their design.
- Maintain not less than 20 knots for two hours.

- Delivered complete ready for sea with Government provided ordnance, torpedo tubes, torpedoes, rapid fire guns and ammunition installed.
- Two conning towers or sighting hoods in convenient positions, one forward one aft.
- Freeboard forward to be not less than 4 feet 3 inches.
- Accommodations for two officers and an adequate crew.
- On speed trial trip must carry 12-1/2 tons additional weight for armament (3-1/2 tons) and outfit
- Coal capacity must be at least 16 tons at 43 cubic feet per ton. .
- Designs submitted must include all plans and specifications, calculations of weight displacement and stability to demonstrate satisfactory strength and stability of hull. Similar requirement for machinery.
- If use other than Navy Dept. specifications for steel, must fully identify modifications.
- Machinery must fulfill general requirements of BuSteam.
- If trial speed below 20 but exceeds 19, boat accepted at reduced price, set at \$10,000 per knot below 20. If below 19, at the discretion of the Secretary of the Navy, boat rejected, or accepted at mutually agreed reduced price.

**Type No. 2**  
**General Dimensions (Approx.)**

Length on load line-	140 ft
Beam on load line	14-1/2 feet
Mean draft	4-3/4feet
Displacement (about)	105 tons
I.H.P. (about)	1700
Speed	22-1/2 knots

**Armament (3-1/2 tons)**

Two single torpedo deck guns  
 One 1-pounder rapid fire gun  
 Two automobile torpedoes  
 180 rounds 1-pounder ammunition

- Accept bids under Class 2- Built to contractor furnished plans and specifications.
- Maintain not less than 22-1/2 knots for two hours.
- Delivered complete ready for sea with Government provided ordnance, torpedo tubes, torpedoes, rapid fire guns and ammunition installed.
- Two conning towers or sighting hoods in convenient positions, one forward one aft.
- Accommodations for four commissioned officers and an adequate crew.
- General plans of a boat of this type may be seen at BuC&R
- On speed trial trip must carry 20 tons additional weight for armament and outfit
- Coal capacity must be at least 25 tons at 43 cubic feet per ton. .
- Designs submitted must include all plans and specifications, calculations of weight displacement and stability to demonstrate satisfactory strength and stability of hull. Similar requirement for machinery.
- If use other than Navy Dept. specifications for steel, must fully identify modifications.
- Machinery must fulfill general requirements of BuSteam.
- If trial speed below 22-1/2 knots but exceeds 21-1/2, boat accepted at reduced price, set at \$10,000 per knot below 22-1/2. If below 21-1/2, at the discretion of the Secretary of the Navy, boat rejected, or accepted at mutually agreed reduced price.

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<sup>i</sup> Extracted from “CIRCULAR Defining the Chief Characteristics of three 30-knot Torpedo Boats and other Torpedo Boats for the US Navy”, Philip Hichborn , Chief Constructor USN, Chief Bu C&R. “Bu C&R No. 1540/96”. Circular issued on June 18, 1896, with the advertisement requesting proposals to build the TBs. *George Albert Converse Papers and Photographs, 1861-1897*, MSS 0068, Box 1, Folder 8. DeGolyer Library, Southern Methodist Univ.

<sup>ii</sup> For a contemporary 1897 analysis of the essential characteristics of the sea-going torpedo boat and the harbor or coast defense torpedo boat see Assistant Naval Constructor H. G. Gillmor, “Torpedo Boat Design” *Transactions SNAME* Vol V, 1897 pp 51-79 .

<sup>iii</sup> “30-Knot Torpedo Boats”, *Journal American Society of Naval Engineers*, Vol. 8, August 1896 Pgs. 599-601.