



TRIBUNAL N° 12

“AREA GLOBAL 9 ESPECIALIDAD T5: HIDRODINÁMICA NAVAL”

Segundo Ejercicio de la fase Oposición

CASE NUMBER 1

A foreign navy requests a project for a naval ship of the following dimensions:

- Length overall 300 m
- Beam..... 39 m
- Draft..... 10 m
- Displacement..... 80000 t
- Thrusters..... 2 propellers
- Steering..... 2 rudders
- Appendages..... No bow thrusters
Bilge keels
2 pairs of stabilising fins
2 double shaft struts per shaft line
1 stern keel

The Client requests a proposal of administrative documentation to be carried out, justified test plan and planning, to include:

- Data communication security system.
- Proposal of Non Disclosure Agreement.
- Proposal of mandatory regulations.
- Vessel power prediction.
- Model(s) construction.
- Resistance and propulsion tests.
- Propeller cavitation study.
- Manoeuvrability tests.
- Seakeeping tests.
- Detailed planning by months and milestones.

It is requested to carry out a project that includes the above, with emphasis on:

- Security proposal.
- Justified technical proposal.
- Detailed planning by months and milestones.
- Proposal of personnel and dedication required from the different departments and/or laboratories.
- No assessment is required.
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Proceso selectivo para ingreso, por el sistema de acceso libre, en la Escala de Tecnólogos de los Organismos Públicos de Investigación, convocado por Resolución de 21 de febrero de 2023. BOE nº 47 del 24 de febrero de 2023.

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CASE NUMBER 2

The Sub-Directorate General for Naval Systems needs to create a new Laboratory with capacity to research and technological development work for sea trials on ships and platforms.

The capacity of the Laboratory should provide equipment and personnel to carry out the following sea trials:

- Speed and power required tests.
- Sea performance tests.
- On-board vibration measurement.
- Measurement of underwater radiated noise.

In this context, the following points, with justification, are requested to be developed:

- Location of the new laboratory enclosure (integrated in the existing ones and/or new building), with simple scheme of the enclosure, space requirements and any other conditions to be considered.
- Instrumentation and minimum equipment required and determination of the measurement for which it is to be used.
- Personnel requirements.
- Development of a basic procedure for the work to be carried out and estimated regulations to be applied.
- Estimation of the safety and occupational risk prevention measures during the sea trials campaigns.
- Proposal of the Laboratory's information management system.
- Project schedule.