







Instituto Hidrográfico de la Marina



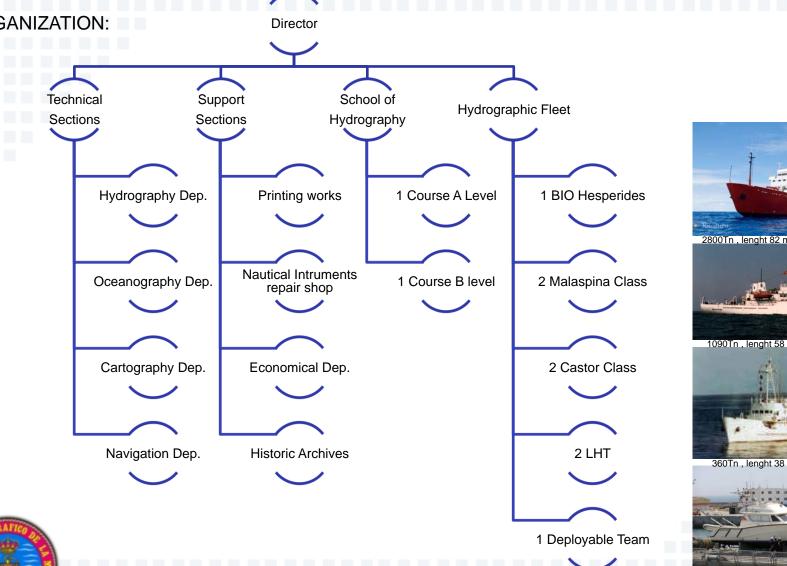














2800Tn , lenght 82 m, beam: 14 m



1090Tn , lenght 58 m, beam: 18 m



360Tn, lenght 38 m, beam: 8 m

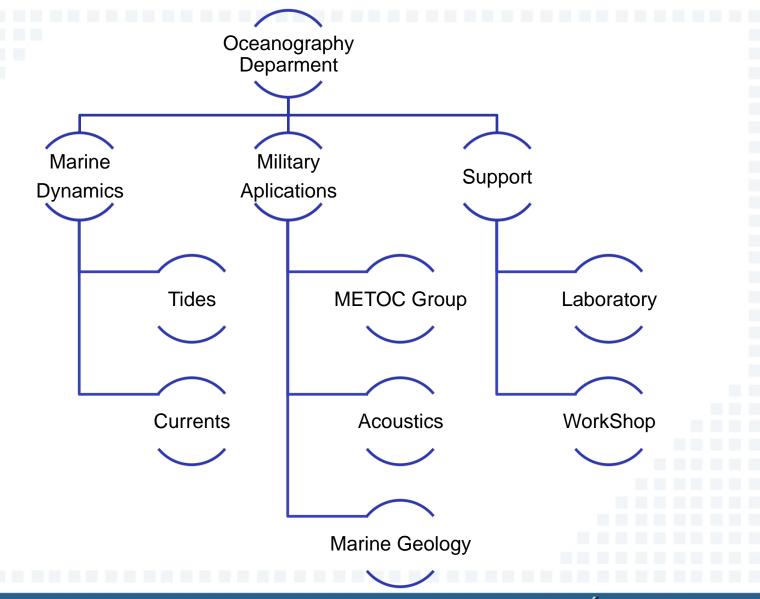


10 Tn , lenght 12 m, beam: 4 m

















http://www.armada.mde.es/ArmadaPortal/page/Portal/ArmadaEspannola/ciencia_ihm_1/











Productos y Servicios

Avisos a los navegantes

Radioavisos NAVAREA /

NAVAREA Warnings

Correcciones a los

Derroteros

Faros y Señales de Niebla

Catálogo de Cartas

Cartas de Papel

Cartas Electrónicas

Cartas Deportivas

Buscador de Cartas

Naúticas

Ayuda Catálogo de

Cartas

Publicaciones Náuticas

Agencias de Ventas

Distancias entre puertos

Notice to Mariners

NAVAREA warnings

Corrections to Sailing Directions

List of Lights

Catalogue of Charts

Nautical Publications

Sales agencies

NO TIDE INFORMATION

Información Anuario Mareas Contacto IHM y Enlaces









UP TO DATE, ONLY TEMPORAL INSTALATIONS OF SHORT PERIODS DURING OUR SURVEYS









SPANISH NET OF PERMANET TIDE GAUGES:

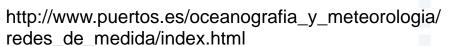


http://indamar.ieo.es/



- Longest series (some of the from 1943)
- 12 stations
- RT and HIST data
- Mostly mechanical float type with digital output
- A renew with radar sensor has started

Puertos del Estado





- Established in 1992
- 38 stations
- Radar (MIROS) and acoustic tide-gauges
- RT and HIST data
- Predictions with meteo corrections
- Not only tide products







OUR NEXT CONTRIBUTION TO PERMANENT NET:



10 PERMANENT RADAR TIDE GAUGES:

- With meteo stations
- TX data in RT
- Naval bases









COLABORATION BETWEN AGENCIES (IHM, PdE, IEO and IGN):

OBJETIVE: TO ISOLATE LAND MOVEMENTS FROM SEA LEVEL SERIES



High precision levelling between TG and land references every no more than 5 years



CGPS instalation on TG / Geodetic GPS temporal observations











mail: oceano@fn.mde.es

