ARCHIVES AND MUSEUM OF THE HYDROGRAPHIC INSTITUTE OF CROATIA
LEGACY OF THE 150-YEAR ORGANISED HYDROGRAPHIC ACTIVITY IN THE EASTERN ADRIATIC

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**Hydrography** is the branch of applied science which deals with the measurement and description of physical features of the navigable portion of the Earth’s surface.

**Hydrographic activity** includes hydrographic survey, oceanographic research, and **nautical cartography** shaping the data into nautical charts or publications.

**One of the basic activities** of the HHI is the construction, production, and maintenance of **navigational charts** of the Adriatic Sea.

**Navigational chart** is primarily designed to ensure safe navigation in specific sea area.

**Recommendations of:**
- International Hydrographic Organisation (IHO),
- International Maritime Organisation (IMO),
- International Association of Lighthouse Authorities (IALA)
- First scientifically based hydrographic measurements: French hydrographer and cartographer *Charles Beautemps-Beaupre* / beginning of the 19th century

- Hydrographic activity was institutionalised by Austro-Hungarian Navy: Hydrographic Office in Trieste / 1860
HHI continues the 150-year tradition of an organised hydrographic activity in the Eastern Adriatic Sea.
ARCHIVAL MATERIAL

CLASSIFICATION OF ARCHIVAL MATERIAL IN HHI

- Archives of fair charts
- Archives of reproduction originals
- Archives of paper charts
- Archives of exchanged charts
- Archives of ancient charts and maps
- Library
Archives of Fair Charts

Fair chart is a charted set of data (depths, seabed area, rocks) obtained from a hydrographic survey, at a particular scale, and it is used as a base for chart production.

- sounding sheets from 1906 to 1910 (the Austro-Hungarian period), being the earliest hydrographic survey data kept at the HHI,

- sounding sheets from 1931 to 1939 (the Kingdom of Yugoslavia period),

- harbour charts and fair charts from 1945 to 1990 (the Socialist Federal Republic of Yugoslavia period),

- data from the new hydrographic survey in the independent Republic of Croatia since 1991,
ARCHIVES OF REPRODUCTION ORIGINALS

- Produced using different materials:
  paper, tracing paper, engraving sheets, mostly transparent films,
- systematically stored publishing reproduction originals of all charts issued by the HHI since 1945,
- older, unsystematically preserved originals, the oldest one from 1910,
Reproduction original of chart No.6358 (Šibenik area) 1:150 000 scale, from 1910
Original is kept in the HHI Archives of reproduction originals
ARCHIVES OF PAPER CHARTS

- holds all charts printed by the HHI,
- after printing, 3 to 5 copies of each chart, either a reprint or a new edition, were stored in specially assigned metal cabinets,
- history of each chart can be traced from its first printing to the present day,
Chart No. 207, 1:80 000 scale, new edition 1977 (HI-edition)
Original and the first edition from 1936 are kept in the HHI Archives of paper charts
ARCHIVES OF EXCHANGED CHARTS

- charts of the Eastern Adriatic Sea at different scales, of different publishers,
- charts of seas, coasts and ports of domicile states,
- other various charts received from related institutions worldwide on exchange basis (United Kingdom, Italy, France, Greece, USA, Spain, Japan, Germany, etc.), within international cooperation, according to the recommendations of the IHO
Chart / Western Mediterranean, 1:151 000 scale, 3rd edition from 1957, based on the survey from 1839 to 1844 (Hydrographic Office Paris – France)

A copy is kept in the HHI Archives of exchanged charts
ARCHIVES OF ANCIENT CHARTS AND MAPS

- holds charts, topographic maps, special charts (military, meteorological, bathymetric charts, etc.), and other charts at different scales,
- collected during troubled times in these areas, which affected the Institute itself,
- situated in special spaces with restricted access in special environmental conditions: dark moisture-proof spaces fitted with independent fire protection systems, and special metal cabinets
Chart of the Adriatic, 1637/1662 (Barents)
Original is kept in the cartographic collection of the University Library in Split
Vincenzo de Lucio chart, Golfo di Venezia, turn of the 18th /19th centuries
Plan of the port of Split, 1806 (Beaurepaire)
Original is kept in the cartographic collection of the National and University Library in Zagreb
Chart No. 204 (Molat island and Zadar) from 1867 (Austria-Hungary), revised edition from 1927 (Kingdom of Yugoslavia)
Original is kept in the HHI Archives of ancient charts
ARCHIVES OF ANCIENT CHARTS AND MAPS

Second world war german military topographic chart, of the Split Coastal area, 1944
Chart of the Vis island from 1944 (partisan navy)
Original is kept in the HHI Archives of ancient charts and maps
- holds special archival material intended for daily use in the work of the Institute,
- library collections include master and doctoral theses, ancient atlases, publications, almanacs, and professional papers such as original manuscripts on the research of the Adriatic Sea from 1911-1914
- keeps complete collections of Institute’s own editions: *Notices to Mariners* since 1924, *Nautical Almanac* since 1934, and *List of Lights of the Adriatic Sea* since 1938,
- over 8000 valuable titles make this Library an irreplaceable part of the past, and a source of knowledge for the present and the future of the Institute.
ANDREES

ALLGEMEINER

HANDATLAS

in 126 Haupt- und 137 Nebenkarten

nebst vollständigen alphabetischen Namensverzeichnisk

vierte, völlig neubearbeitete und vermehrte Auflage

herausgegeben von

A. SCOBEL


BELLEFEDT & LEIPZIG

VERLAG VON VELHAGEN & KLAUSING.

1895.
Mihad Količić
ISTOČNI JADRAN U DJELU BEAUTE MPS-BEAUPRÉA
EASTERN ADRIATIC IN THE WORK OF BEAUTE MPS-BEAUPRÉ

Hrvatski hidrograški institut
ESTABLISHING OF THE HHI MUSEUM

_HHI MUSEUM_ is supposed to fulfil multiple purposes:

- preserving a part of the maritime tradition of Croatia – hydrographic activity, and especially the heritage of maritime cartography as its representative part,
- saving old technologies and instruments from oblivion and decay, gathering them together in one place,
- presenting the historical development and the present of the Institute to the public.
ESTABLISHING OF THE HHI MUSEUM

HHI MUSEUM LAYOUT

DISTINGUISHED PERSONS

RECEPTION DESK

ANCIENT CHARTS AND MAPS

HISTORY

OLD INSTRUMENTS AND EQUIPMENT

PRODUCTION PROCESSES
Part of exhibits in the cartographic section of the museum

engraving foil, film…
Part of exhibits in the cartographic section of the museum

engraving pins...
Part of exhibits in the cartographic section of the museum

Portable coordinatograph
Part of exhibits in the cartographic section of the museum

Optical pantograph
Part of exhibits in the cartographic section of the museum

Work on coordinatograph
Part of exhibits in the cartographic section of the museum

engraving
Part of exhibits in other sections of the museum

Oceanography

Mechanical current meter Ekman – from the 1950s
Instruments for measuring sea currents and temperatures, and for sea sampling
Part of exhibits in other sections of the museum

*Hidrography*

Instruments for depth measuring, position fixing…
Part of exhibits in other sections of the museum

*Hydrography*

Theodolites, Antennas…
Part of exhibits in other sections of the museum

Nautics

Nautical publications through 20th century
Part of exhibits in other sections of the museum

Nautics

Red and green light; left and right side...
Part of exhibits in other sections of the museum

Old plotter, terminal, printer…
Part of exhibits in other sections of the museum

Digitalization: Instrument Calcomp 9600
Part of exhibits in other sections of the museum
Reproduction

Foto Camera
Part of exhibits in other sections of the museum

Reproduction

Nautical symbols made of lead for relief printing
Facsimiles of old manuscript nautical atlases:
- THE CATALAN ATLAS OF THE YEAR 1375
- NAUTICAL ATLAS BY VESCO CONTE MAGGIOLO, 1512
First pilot book of the Adriatic Sea: PORTOLANO DEL MARE ADRIATICO
Capt. Giacomo Marieni, 1830
CONCLUSION

- Museum opened: 14.11.2010 by the President—Ivo Josipović
CONCLUSION

- HHI Museum recollect the entire history of the hydrographic activity

- Cartographic heritage – nautical cartography – throughout history.

- HHI Museum – tradition - respect for that tradition - knowledge about the past achievements guiding the future development

- Evidence of the common history of the European peoples

HVALA!
POZDRAV IZ SPLITA.