

IHB File No. TA-006

CIRCULAR LETTER 6/2002
19 February 2002

**COURSE ON «HARBOUR AND COASTAL HYDROGRAPHY»
AT THE INTERNATIONAL MARITIME ACADEMY (IMA),
TRIESTE, ITALY.
(24 June - 06 December 2002)**

Dear Sir,

The International Maritime Academy (IMA) in Trieste has informed the IHB, on behalf of the Italian Authorities, that the fourth edition of the course on «Harbour and Coastal Hydrography» has been scheduled in 2002.

The course received recognition at Category B Level, option 2 as laid down in the 8th edition of the Standards by the FIG/IHO International Advisory Board.

A module on «Hydrographic Data Management» has been added to this standard course, thus the students will be trained in the modern management of hydrographic and cartographic data.

The course will start on 24 June 2002 and will end on 6 December 2002.

The course is intended for twelve students from all countries. Government authorities responsible for Hydrography in the countries are requested to forward their candidates' applications to the International Maritime Academy (IMA), via Eduardo Weiss 15, 34127 Trieste, Italy (Telephone: +39 040 350829, Fax: +39 040 350322 and E-mail imoima@imoima.org) **through the ITALIAN EMBASSY in their country**, with a copy to the International Hydrographic Bureau. **The nominations not sent through the Italian Embassies, will not be accepted**, and therefore will not be taken into consideration for the selection. **Nominations must reach the IMA by 15 April 2002 at the latest.**

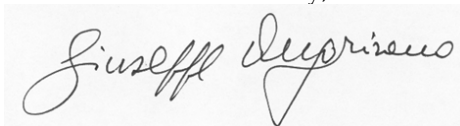
The support provided by IMA will cover travel expenses, local transport to Trieste, accommodation and food. **Money for other personal expenses (pocket money) must be provided by each STUDENT'S NATIONAL AUTHORITY. (See Annex 2, page 4).**

The course is of great importance for its objectives, its duration and the technical contents.

It is hoped that the hydrographic community, and, in particular, the European Hydrographic Services are available and willing to give their support to IMA in terms of lecturers, on the basis of the requests which IMA will address directly to each country.

Information on the course programme and the logistics are provided in Annex 2. A copy of the Nomination Form is also attached (Annex 3).

On behalf of the Directing Committee
Yours sincerely,

A handwritten signature in black ink, reading "Giuseppe Angrisano". The signature is written in a cursive style with a large, stylized initial 'G'.

Rear Admiral Giuseppe ANGRISANO
President

Annex 1 -	Distribution list	
Annex 2 -	Course Details & Logistics	(in English only)
Annex 3 -	Nomination Form for Participation & Acceptance Form	(in English only)

DISTRIBUTION LIST

- All IHO Member States including suspended MS.
- Selected Non-IHO Member States (including IHO pending Member States) :
Bulgaria, Cameroon, Costa Rica, El Salvador, Honduras, **Kuwait**,
Latvia, Malawi, **Mauritania**, **Mauritius**, **Mexico**, **Myanmar**, Nicaragua,
Palestinian Authority, Panama, **Qatar**, Saudi Arabia, **Slovenia**,
Tanzania.
- Mr. David Edwards, Technical Co-operation Division, International Maritime
Organization, 4 Albert Embankment, London SE1 7SR, UK.
- Mr. W. De Ruyter, Head of Division, EC DG TEN, European Commission, 200,
Rue de la Loi, Brussels, Belgium.
- Mr. Roberto Salvarani, Head of Unit for Information and Communication, European
Commission Directorate General-Energy and Transport, 200, Rue de la Loi, Brussels,
Belgium.
- International Maritime Academy, Trieste, Italy.
- Italian Ministry of Foreign Affairs, Directorate General for Cooperation to
Development, Piazzale della Farnesina 1, Rome, Italy.
- Prof. Umberto Leanza, Italian Ministry of Foreign Affairs, Servizio del
Contenzioso Diplomatico e dei Trattati, Piazzale della Farnesina 1, 00194 Roma,
Italy.
- Italian Ministry of Foreign Affairs, DGCS Ufficio IX, viale Tiziano 80 - Rome,
Italy.
- Dr. Renzo Tondo, President of the Regional Council, Piazza Unità d'Italia 1,
34121 Trieste, Italy.
- Friuli-Venezia Giulia Region, Assessore Regionale ai Trasporti, via Giulia 75/1,
34125 Trieste, Italy.
- President of the Province of Trieste, Piazza Vittorio Veneto 4, 34132 Trieste,
Italy.
- President of Trieste Port Authority, Punto Franco Vecchio, 34135 Trieste, Italy.
- University of Trieste - Magnifico Rettore, Piazzale Europa 1 (Rettorato), 34100
Trieste, Italy.
- President of Trieste Chamber of Commerce, Piazza della Borsa 14, 34100
Trieste, Italy.

DETAILS OF THE COURSE

Background

▪ Requirements for the Course

The course on Harbour and Coastal Hydrography is aimed at Harbour and Coastal Surveyors working for services and bodies responsible for coastal and port areas management, whose objectives are:

- the safeguard of the environment
- the promotion of the safety of coastal navigation and the prevention and monitoring of marine pollution
- the development of maritime transport through the knowledge and the modern management of the port basins and their access.

The above-mentioned activities are generally carried out by Government Technical Services and/or local Authorities responsible for the management of the coastal areas and the Harbour Masters Offices or Ports. The Surveyors of the technical services do not always receive adequate training according to international standards, which can harm the efficiency of the Services.

Looking at the range of possibilities mentioned above, it is evident that such Harbour and Coastal Surveyors must be highly specialized in order to satisfy the different requirements for correct port functioning together with the capacity of assisting engineers, geologists, physicists, oceanographers, biologists etc, in the planning and execution of coastal operations.

Therefore, the course intends to train such personnel, in the application of the latest techniques and equipment and following the guidelines of the (FIG-IHO) International Standards of Competence for Surveyors.

Course Aim and prospective users

The course is designed to address the needs of the Authorities which require personnel specialized in harbour and coastal surveys, capable of performing the following:

- bathymetric surveying and underwater researches
- topographic and geodetic surveying in coastal areas
- tidal measurements and establish Tidal Datum
- follow the natural evolution of the coasts
- follow the coastal processes of siltation and erosion
- assist maritime works and marine geologists with the necessary bathymetric, oceanographic and topographic surveying
- assist oceanographers in the collection of oceanographic samples and measurements
- control dredging operations
- control pollution monitoring
- conduct hydraulic surveys
- implement suitable maritime signals
- update nautical charts and publications pertaining to coastal and harbour areas and disseminate any amendment relevant to the safety of navigation
- organize a coastal hydrographic operative unit

Attendees (entry standards)

The course is open to personnel coming from Authorities responsible for the managing of coastal areas and for the functioning of the ports.

Applicants must hold at least a Higher School Certificate and have good knowledge of the English language, spoken and written.

Number of participants

In order to ensure the maximum efficacy, the course should not be attended by more than 12 trainees.

Language

The course will be held in the English language.

Course Certificate, diploma

The Certificate of Level B Hydrographic Surveyor will be awarded to the students who present documentation demonstrating completion of at least 24 months of supervised Hydrographic activity.

Upon successful completion of the course, a document will be issued by IMA certifying that the holder has successfully completed the course.

COURSE OUTLINE

The duration of the course will be 24 weeks. Lessons will be, generally, 7 hours per day, from Monday to Friday, for a total number of 835 hours.

The course has been subdivided into the following 8 modules.

Every module contains specific segments which are developed taking into consideration the requirement of the course and the time allocated.

The program includes complementary activities such as visits to Port Services (dredging works, buoyage pilotage, operative offices and VTS) and final tests.

<i>Modules</i>	<i>Hours</i>
GENERAL INTRODUCTION.....	4
1. Basics	75
1.1 Mathematics and Statistics.....	17
1.2. Physics and Applied Physics.....	28
1.2 Computers.....	30
2. Surveying.....	329
2.1 Geodesy	56
2.2 Horizontal and Vertical Control	42
2.3 Positioning	44
2.4 Cartography	35
2.5 Computer assisted Cartography	28
2.6 Photogrammetry and air Photogrammetry	14
2.7 Preparation Surveys.....	21
2.8 Bathymetry	40
2.9 Tides and Water levels	14
2.10 Survey boats and equipments	14
2.11 Automated survey systems	21
3. Field Practice	160
3.1 Planning, execution, processing of harbour and coastal surveying practical project, comprehensive of land and sea surveying	
4. Environmental Sciences.....	80
4.1 Meteorology.....	16
4.2 Coastal oceanography	29
4.3 Waves, beaches and maritime structures	16
4.4 Marine geology and sedimentology	19
5. Nautical sciences	46
5.1 Aids to navigation in coastal waters ...	12
5.2 VTS and VTMS.....	12
5.3 Information to Mariners.....	6
5.4 Electronic Cartography	16
6. Legal aspects	28
6.1 Law of the Sea.....	14
6.2 delimitation zones.....	14
7. Specialism Subjects.....	78
7.1 Dredgers and dredging operations	12
7.2 Obstruction surveys	22
7.3 Buoyage and beaconing technology	8
7.4 Marine information systems.....	16
7.5 Pollution monitoring	12
7.6 Organization of a survey operative unit	20
8. Hydrographic Data Management.....	35

LOGISTICS

Accommodation: Twin-bedded rooms (two students per room) for the entire period of the course.

Food arrangements: breakfast, lunch and dinner will be provided by IMA.

Health and accident insurance will be provided.

Pocket money and other personal expenses will be at the charge of the organization to which the student belongs.

Assistance in obtaining a visa may be provided by IMA, but should be the responsibility of the national organization.

Prepaid air tickets will be made available at a selected air company (will be communicated by IMA) in the country.

Note: The air ticket will have to be refunded in case of non-completion of the course.

COURSE ON HARBOUR AND COASTAL HYDROGRAPHY
(from 24 June - 06 December 2002)
NOMINATION FORM FOR PARTICIPATION

A completed nomination form should be submitted to the Director of the International Maritime Academy,* Trieste, Italy **THROUGH THE ITALIAN EMBASSY ****, with a copy to the IHB Monaco***. Nominations should be made as early as possible, using a separate form for each nomination, indicating clearly the Government's priority if more than one participant is nominated:

1. FAMILY NAME
- FIRST NAME
- OTHER NAME
2. Mailing address.....
-
-
- Telephone.....
- Fax.....
- E-Mail
3. Nearest airport where air travel will commence and terminate:
- Name of airport.....
- Location.....
4. Date of birth.....
5. Sex: Male Female
6. Place of birth.....
7. Nationality
8. Passport No.
9. Date and Place of Issue

* International Maritime Academy, via Eduardo Weiss 15, 34127 Trieste, Italy. (Fax: +39 040 350322. e-mail: <imoima@imoima.org>)

** **The nominations not transmitted to the Italian Embassy will not be accepted and taken into consideration**

*** International Hydrographic Bureau, BP445, MC 98011 MONACO CEDEX, Principality of Monaco. (Fax: +377 93 10 81 40; e-mail: <info@ihb.mc>)

10. Person to notify in case of emergency:

Name

Address

.....

Telephone.....

Fax.....

E-Mail

11. Present position and description of duties

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12. Educational background.....

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13. Previous experience.....

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Nominee's signature

The above-mentioned person is nominated as our first/second possible participant in the course.

Name and signature of **Government official** authenticating this nomination.....

Title

ACCEPTANCE FORM

I hereby accept the invitation of the International Maritime Academy (IMA) to participate in the Course on Harbour and Coastal Hydrography (24 June to 06 December 2002).

I confirm that:

1. I will refrain from engaging in political, commercial and any activities other than those governed by the course programme;
2. I will advise the Academy immediately if I am unable to attend the course; and
3. I will travel to Trieste, Italy and return to my home country at the end of the course, as appropriate, by the route designated by the Academy.

Signature of Participant

Name of Participant
(Printed)

Address

.....

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Date.....