**IHB File No. TA-6** 

CIRCULAR LETTER 4/1999 21 January 1999

## NEW COURSE ON "PORT AND COASTAL HYDROGRAPHY" AT THE INTERNATIONAL MARITIME ACADEMY (IMA), TRIESTE, ITALY

Dear Sir,

The International Maritime Academy (IMA) in Trieste has informed the IHB, on behalf of the Italian Authorities, that a new course on "Port and Coastal Hydrography" has been scheduled in 1999.

The course will start on Monday 31 May 1999 and will end on 30 October 1999.

This first course is intended for twelve students from beneficiary countries of the MEDA Project for Southern and South East Mediterranean Sea. Government authorities responsible for Hydrography in the twelve MEDA countries are requested to forward their candidates' applications to the International Maritime Academy (IMA), via Eduardo Weiss 15, 34127 Trieste, Italy (Telephone: +39 40 350829, Fax: +39 40 350322 and E-mail imoima@imoima.inet.it) through the Italian Embassy in their country, with a copy to the International Hydrographic Bureau. Nominations must reach the IMA by <u>22 March 1999 at the latest</u>.

In addition to the 12 places mentioned above, 2 other students will be selected from amongst the IHO Member States and those countries which are known to be actively considering establishing or enhancing their own hydrographic services. The expenses for these two students will be funded by the Friuli Venezia Giulia Region.

The support provided by IMA will cover travel expenses, local transport to Trieste, accommodation and food. Money for other personal expenses (pocket mony) must be provided by each student's national authority. (See Annex 2, page 3).

It is hoped that the Hydrographic Offices of Germany, Greece, Italy, Portugal, Norway, Spain and UK might kindly provide lecturers as for other IMA courses, on the basis of the request which the 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).

Due to the limited places on this course, unsuccessful candidates will be considered for the second course which is planned for the year 2000.

On behalf of the Directing Committee, Yours sincerely,

# Rear Admiral Giuseppe ANGRISANO President

- Distribution list Annex 1 -
- Annex 2 -
- Course Details & Logistics Nomination Form for Participation Annex 3 -& Acceptance Form

(in English only) (in English only)

# **DISTRIBUTION LIST**

- All IHO Member States
- All MEDA Project 7 countries :

ALGERIA	(IHO Member State)
CYPRUS	(IHO Member State)
EGYPT	(IHO Member State)
ISRAEL	(Non-IHO Member)
JORDAN	(Non-IHO Member)
LEBANON	(Non-IHO Member)
MALTA (Non-	-IHO Member)
MOROCCO	(Pending IHO Member)
PALESTINIAN AUTHORITY	(Non-IHO Member)
SYRIA	(IHO Member State)
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TUNISIA	(IHO Member State)
TUNISIA TURKEY	· · · · · · · · · · · · · · · · · · ·

- MEDA Project 7 Steering Committee Members: France, Greece, Italy, Spain, EC DGI, EC DGVII.
- International Maritime Academy, Trieste, Italy.
- Italian Ministry of Foreign Affairs, Directorate General for Cooperation to Development, Rome, Italy.
- Friuli-Venezia Giulia Region, via San Francesco 37, 34100 Trieste, Italy.
- Province of Trieste, Piazza Vittorio Veneto 4, 34132 Trieste, Italy.
- Trieste Port Authority, Punto Franco Vecchio, 34135 Trieste, Italy.
- University of Trieste, Piazzale Europa 1 (Rettorato), 34100 Trieste, Italy.
- Trieste Chamber of Commerce, Piazza della Borsa 14, 34100 Trieste, Italy.
- Comune di Trieste, Piazza dell'Unità d'Italia 4, 34100 Trieste, Italy.

## **DETAILS OF THE COURSE**

### **Background**

The Port and Coastal Hydrography course is part of the hydrographic training programme established under the MEDA project. The MEDA project aims at promoting safety of navigation and prevention of marine pollution, as well as the development of maritime transportation and port efficiency.

The course is intended to meet the needs of Port Authorities, Hydrographic Services and other maritime organizations or bodies which require personnel who are specialized in port and coastal hydrography, responsible for carrying out the following tasks :

Bathymetric and geodetic surveys; underwater research Establishment of Tidal Datum; Advice on use of equipment, suitable systems and methods for hydrographic operations in ports and their approaches; Control dredging operations; Establishment/Maintenance of Aids to navigation; Monitoring the changes nearshore and in ports and entries to ports Hydrographic, oceanographic and geodetic surveying in support of marine development; Updating of nautical charts and publications concerning port areas and dissemination of relevant warnings to navigation; Organization of a Port Hydrographic Operative Unit.

#### **Entry requirements**

The course is open to students from Port Authorities, Hydrographic Services and Maritime Authorities and organizations, responsible for managing and for the functioning of ports, holding at least a Higher School Certificate and with a good knowledge of the English language, both written and spoken.

## **Total duration**

The duration of the course is 5 months (815 hours).

#### Language

The course will be conducted in English.

#### Course certificate, diploma

The course has been developed in conformity with the Model Syllabus of the Standards of Competence for Hydrographic Surveyors established by the FIG/IHO International Advisory Board. It is intended to submit the course for recognition by the FIG/IHO Advisory Board at Category B level. Upon successful completion of the course, a document will be issued by IMA certifying that the holder has successfully completed a course in Port and Coastal Hydrography.

#### **COURSE OUTLINE**

The course lasts five months (22 weeks). Lessons are generally 7 hours per day, from Monday to Friday, with a total number of 815 hours. The course has been subdivided into the following 7 modules, preceded by a General Introduction to the course. Every module contains specific segments, which are developed taking into consideration the requirements of the port and coastal environment.

The course includes three different phases:

1<sup>st</sup> PHASE (320 Hours):

GENERAL INTRODUCTION Module 1 - BASICS Module 2 - HYDROGRAPHY

# 2<sup>nd</sup> PHASE (160 Hours):

Module 3 - FIELD PRACTICE The *complementary activities* are included in Phase 3.

Modules

#### Hours

## GENERAL INTRODUCTION...... 4

1. Basics
1.1 Mathematics and Statistics
1.2 Physics and Applied Physics
1.3 Computers
2. Hydrography
2.1 Geodesy
2.2 Horizontal and Vertical Control 48
2.3 Positioning
2.4 Cartography 20
2.5 Computer assisted Cartography 12
2.6 Photogrammetry and Air Photography 10
2.7 Hydrographic Practice 20
2.8 Bathymetry
2.9 Tides and water levels 12
2.10 Survey boats and their equipments 12
2.11 Automated Survey Systems 20
3. Field Practice 160
Planning B Execution B
Planning B Execution B Processing of a Harbour Surveying practical
Planning B Execution B
Planning B Execution B Processing of a Harbour Surveying practical project, comprehensive of land and sea surveying.
<ul> <li>Planning B Execution B</li> <li>Processing of a Harbour Surveying practical project, comprehensive of land and sea surveying.</li> <li>4. Environmental science</li></ul>
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6. Legal Aspects	
6.1 Product liability	12
6.2 Contracts	8
6.3 Law of the Sea	8
6.4 Delimitation zones	8
6.5 International Laws, Conventions,	
Recommendations, Resolutions	8
7. Specialism Subjects	116
7.1Dredgers and dredging Operations	
<ul><li>7.1Dredgers and dredging Operations</li><li>7.2 Obstruction surveys</li></ul>	24
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<ul><li>7.2 Obstruction surveys</li><li>7.3 Buoyage and beaconing technology</li></ul>	24 20 12
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# COMPLEMENTARY ACTIVITIES ......63

The course programme includes the following activities:

A. Visits	26
B. Conferences	16
C. Final Tests	21

# 3rd PHASE (335 Hours)

Module 4 - ENVIRONMENTAL SCIENCES	3
Module 5 - NAUTICAL SCIENCES	
Module 6 - LEGAL ASPECTS	
Module 7 - SPECIALISM SUBJECTS	

# Annex 2 - 2/3

Hours

## 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.

## COURSE ON PORT AND COASTAL HYDROGRAPHY

From 31 May to 30 October 1999

## 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 40 350322. e-mail: <imoima@imoima.inet.it>)

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
12.	Educational background
13.	Previous experience

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 Port and Coastal Hydrography (31 May to 30 October 1999).

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
Address
Date