

INTERNATIONAL HYDROGRAPHIC BUREAU



BUREAU HYDROGRAPHIQUE INTERNATIONAL

7, Avenue Président J. F. Kennedy  
B.P. 345 MC — MONACO  
PRINCIPAUTE de MONACO

Telegraph : BURHYDINT MONACO

Telex : 469870 MCS CARLO Attn : INHORG

Telephone : MONACO (93) 50.65.87

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MONACO 7 July 1980

To : All Members of the IHO/FIG International Advisory Board on the Training of Hydrographers.  
Participants in the Third Session (List at Annex II to Enclosure).

THIRD MEETING OF THE IHO/FIG INTERNATIONAL

ADVISORY BOARD ON TRAINING

FINAL REPORT

Dear Colleague,

Enclosed is a copy of the Final Report of the proceedings of the 3rd meeting of the IHO/FIG International Advisory Board on Training.

Yours sincerely,

D.C. KAPOOR  
Rear Admiral, Indian Navy (Retd)  
Chairman of the Advisory Board

Encl. : (1) : Report + 2 annexes.

cc. : Chairman, FIG Commission 4.

FINAL REPORT ON THE  
THIRD MEETING OF THE IHO/FIG INTERNATIONAL ADVISORY BOARD  
ON THE TRAINING OF HYDROGRAPHERS  
(IHB - MONACO - 22/24 April 1980)

Present were:

Rear Admiral D.C. KAPOOR, I.N. (Retd.), Chairman  
Lt. Cdr. A.E. INGHAM, R.N. (Retd.)  
Mr A.J. KERR  
Dr A. SINZI (representing Dr T. UCHINO)  
Ingénieur Général de l'Armement J. BOURGOIN  
Commander FERRAZ  
Commander RAO

Also in attendance were Cdr. N.N. SATHAYE, Mrs S. RIBAUD and Mlle M. CADARS of the IHO Secretariat.

Rear Admiral RITCHIE, President of the Directing Committee of the International Hydrographic Bureau, welcomed the members of the Board and wished them a successful meeting.

1. OPENING OF MEETING

The Chairman opened the meeting and welcomed the members, especially the new members, Commander FERRAZ from Brazil and Commander RAO from India. Another new member, from Nigeria, Mr. Bosun T. AYINDE, the national member of FIG Commission 4, had expressed interest in the work of the Board but was unable to attend because of other commitments. Apologies had also been received from Commander DON.

2. ADMINISTRATIVE ARRANGEMENTS

The Chairman made some administrative announcements concerning the timetable for the meeting.

3. ADOPTION OF AGENDA

At the request of Mr KERR, an additional item was included to take account of the many short courses and seminars now being conducted. With this addition, the Agenda was adopted. (See Annex I)

4. CO-OPTION OF ADDITIONAL MEMBERS TO THE BOARD

The Chairman invited the members to comment on the desirability of co-opting any further members. It was decided that this was not necessary at this time. However, an observer from the U.S.S.R. should be invited to attend the next meeting.

5. APPROVAL OF MINUTES OF SECOND SESSION AND MATTERS ARISING

Item 4

The Chairman stated that the "Standards" had been printed in English, French, German and Spanish versions, and Japanese and Portuguese versions had been prepared by the Hydrographic Offices of Japan and Brazil. The corrections to the "Standards" made at the second meeting of the Board had been circulated by means of Information Paper N° 6, in English, French and German. The other versions had incorporated these corrections in the texts.

With regard to the reference to National Focal Points, the Chairman confirmed that the Italian Hydrographer had agreed to act as a National Focal Point.

The Chairman confirmed that the report to the IHTC on the work of the Board had been published in the I.H. Review. Information Paper N° 6 also circulated a report.

With regard to the financing of the attendance at meetings by FIG Board members, it was noted that only a limited amount of funding was available, which was not sufficient for the expenses involved. The Chairman agreed to take up this matter with FIG. Commander FERRAZ and Commander RAO requested for sufficient advance notice of the date and venue of the next meeting, in order to facilitate the necessary administrative sanction.

Item 6

The Chairman had informed the U.K. Hydrographer of the Board's decisions concerning his proposals on Law of the Sea.

Item 7

It was decided that further amendments to the "Standards" would be circulated as an Information Paper. The next Information Paper would contain all amendments made so far.

Item 8

The Chairman had written to the individual hydrographer concerned regarding the Board's decision on the question of certification of individuals.

Item 9

The form for the review of course programmes had been circulated by means of Circular Letter 22/1979.

As regards Policy towards developing countries, listed under this item in the previous Minutes, the Chairman regretted that it had not been possible to obtain funds from the U.N. for the Seminar the IHB had hoped to organize in Monaco for Arab and African countries.

With regard to the hydrographic training facility in India, Commander RAO described the assistance to be provided by UNDP and the plans for developing the school as a regional training centre. The Board noted that this was very desirable and hoped that such centres adopt the "Standards", to enable developing countries to acquire hydrographic expertise to conduct their own surveys. It was agreed that both naval and civilian surveyors were required and were equally important. After a discussion on the different aspects of training in various countries, it was wondered whether some reference to the 7 years' experience, as recently recommended by the U.N. Conference in Wellington, might not be advisable. It was decided to leave the "Standards" as they stood, but to bear the fact in mind.

Item 10

The Australian and French Hydrographers had been informed as stated in the Minutes. The Chairman remarked that only minor points in the SHOM courses required modification, and he hoped SHOM would re-submit the course programme which had come so close to obtaining recognition.

Mr BOURGOIN informed the Board that the suggested modifications had been made and an official communication would be sent by SHOM to this effect. The members authorized the Chairman to act on their behalf in providing recognition to this course.

There being no further remarks, the Minutes of the Second Session were approved.

6. REVIEW OF COMMENTS ON THE "STANDARDS OF COMPETENCE" AND MODIFICATIONS ARISING

No further comments had been officially submitted.

Mr FERRAZ remarked that there was nothing in the "Standards" to specify the number of hours to be spent on each subject. It was noted that different entry requirements made such a specification difficult. There ensued a discussion on the equivalence between diplomas gained after formal education in various countries. It was decided that the National Focal Points should help the Board in clarifying what these comprised in each country, where necessary.

After much discussion, the Board decided to amend Item 3.1.1 of the "Guide Notes" to read:

"A course syllabus, with list of reference material used, in which are .....etc."

Regarding a point of the Syllabus, following comment by Dr. SINZI, the Board decided that para. 2.1(b) on page 12 of the "Standards" could be deleted, and hence (a) of that item could be removed, and under para. 6.4(a), after "The definition of astronomical terms", the phrase "including sidereal and solar time" added.

Similarly, under "3.1 Measurement of time", the words "and scales" should be added after "frequency standards" (line 4). Also, under "6.1 Geodesy", at the end of sub-paragraph 6.1(a), it was decided to add : "; the relationship of geodetic, astronomic and geocentric latitude, longitude and azimuth".

7. CONSIDERATION OF POLICY FOR THE PUBLICATION OF A REVISED UPDATED EDITION OF THE "STANDARDS OF COMPETENCE"

The general opinion of the Board was that, as the Standards had been very widely circulated (the IHB had printed 1 500 copies) and were just being usefully referred to, it was advisable not to send out a new edition just yet.

The issue of a second edition for the XIIth I.H. Conference in 1982 would probably be appropriate when Bibliography is ready for its inclusion. The Board decided that a cumulative document including all corrections made thus far should be issued, and any remaining copies of the "Standards" clearly stamped to say that those corrections should be made. They decided to place on the Agenda of the 4th Session (in 1981) the review of the question of a new edition in 1982.

8. REVIEW OF TRAINING PROGRAMMES SUBMITTED BY INSTITUTIONS

The Board first discussed procedure for the review of training courses. It was decided that all submissions should first be distributed to members of the Board, who would be asked to submit their comments by a set deadline of two months. The comments so received might then be returned to the National Focal Point so that any clarification required might be given before the next meeting. It might even be advisable for the National Focal Point or, at his request, a representative of the Institution concerned to attend as an observer the meeting at which the submission would be discussed.

Syllabi of the Royal Naval Hydrographic School at H.M.S. DRAKE

The Board then considered the R.N. course in the light of comments made thereupon by members by correspondence, and the letter from the U.K. National Focal Point explaining why certain aspects of the "Standards", which were not applicable in the British Navy, were not covered in their course,

After very extensive discussion the opinion of the Board was that the standard of the submission was very high (Category A), but that a course which did not cover all the areas required by the international standards could not receive the Board's official recognition until clarification had been received on how these were intended to be covered. The Chairman was asked to write to the U.K. National Focal Point to this effect, explaining the desire of the Board to grant very early recognition to the R.N. course. The items concerned were : 1.5(b) Three dimensional co-ordinates geometry; 7.1(e) Positioning by underwater acoustic beacon; 7.4(c) Airborne and satellite techniques; 8.4, 8.5 and 8.6 Law of the Sea (this subject might be added as an extra short course as part of the Long or Final course).

## Course for Plymouth Polytechnic Diploma in Hydrographic Surveying

The Board next considered this submission, comparing the course with the "Standards" point by point and discussing each in detail. The Board found some shortcomings in the course and the Chairman was asked to address the U.K. National Focal Point accordingly and convey the Board's views. The general opinion was that the course could at best be assessed only as a B-level course, though some aspects were covered up to A-level standard.

### 9. PREPARATION OF BIBLIOGRAPHY

Copies of a Bibliography prepared by Commander INGHAM incorporating material submitted by Mr KERR (Canada), Ing. Gen. BOURGOIN (France) and Dr UCHINO (Japan), and material from the Hydrographic Society reading list, were distributed.

The Board expressed appreciation to the members concerned and especially to Commander INGHAM.

Commander INGHAM pointed out that the Bibliography included references classed according to the subjects in the "Standards" syllabus and in the following order under each:

1. Japanese references
2. French references
3. English references

He asked members to review the list and report any corrections or additions.

The Board recommended that in addition to manuals it was most important that training institutions subscribe to a number of technical journals in order to keep abreast of progress in the rest of the world.

Although originally only text books were to be included in the Bibliography, the Board now felt that it was also relevant to include appropriate papers, in respect of newly developing fields where definitive textbooks were not yet available. These were specified as: 7.4(c), 7.4(b)(iii), 7.6(b) and (c), and Law of the Sea.

Photocopies of the UNESCO format and the forms used for submitting references to UNESCO were circulated.

After discussions it was decided that this format would be applied to the Bibliography. An adapted version of the submission form, a copy of the UNESCO format, and the draft Bibliography prepared by Commander INGHAM would be sent to Germany and Spain with a request for their submissions in the German and Spanish languages by October 1980. Board members were also asked to review the Bibliography and submit their reviews and any additional information by October 1980.

### 10. PROGRESS OF TRAINING FACILITIES. COOPERATION WITH REGIONAL CENTRES AND UNCLOS SECRETARIAT

This item had already been referred to in part under 5: "Matters arising from the Minutes of the second meeting". The Chairman referred to the hopefully imminent conclusion of the Law of the Sea Conference and the consequent highlighting of the need for charting facilities at the national level. He referred to two specific requests received by the IHO from the UNCLOS Secretariat, one concerning the IHO's activities in the field of training and education, and the other concerning the development of expertise in hydrography including nautical charting and baseline delineation.

He referred to the new IHO Special Publication N° 47, which described the training courses made available by Member States of the IHO. Members of the Board were asked to comment on the training requirements of developing countries in this context.

The point was made that developing countries perhaps preferred to have training facilities in their countries or regions rather than in countries with different environments. It was appreciated that language would be a primary consideration in establishing regional training facilities. Three members provided information on facilities available in their own hydrographic services.

#### 11. REPRESENTATION AT VARIOUS CONFERENCES AND SEMINARS

The Chairman urged that every possible opportunity should be taken to publicize the activities of the Board at Conferences throughout the world where hydrography was concerned. He explained the IHB's policy of doing this; every endeavour was made to be represented at all relevant Conferences. All resolutions adopted at such Conferences with international impact were reported in the I.H. Bulletin.

In summing up on this item, the Chairman referred to the resolution adopted by the Ninth U.N. Regional Cartographic Conference for Asia and the Pacific in Wellington, which was published on pages 155-156 of the April I.H. Bulletin.

#### 12. RECOGNITION AND PUBLICIZING OF SHORT COURSES (SYMPOSIA) AND SEMINARS

It was felt advisable that some recognition be given to such events, which were valuable in keeping up with the state of the art, but the Board decided that recognition could only be given to short courses of this type if these were held on a regular basis as, normally, some kind of examination was a pre-requisite to recognition of a course.

#### 13. FORMAT OF CERTIFICATES OF RECOGNITION

The Board discussed what form these should take, recalling that they must show the date of approval and require that any changes subsequently made to the recognized course must be reported to the Board. The Chairman offered to draft a suitable text which would be circulated to the members for information.

#### 14. DATE AND PLACE OF NEXT MEETING

The Board decided that mid-April 1981 was the most appropriate period for the fourth meeting, and it was thought that this might actually be held in a training institution if this could be arranged.

Commander RAO and Commander FERRAZ agreed to explore the possibilities of this being either in India or in Brazil.

The meeting closed at 16.40 on 24 April.

Monaco, 28 April 1980

THIRD SESSION OF THE IHO/FIG ADVISORY BOARD  
ON TRAINING OF HYDROGRAPHERS  
Monaco, 22-24 April 1980

AGENDA

1. Opening of the session.
  2. Administrative arrangements.
  3. Adoption of the Agenda.
  4. Co-option of additional members to the Board.
  5. Approval of Minutes of the Second Session, and matters arising.
  6. Review of comments on the "Standards of Competence" and modifications arising.
  7. Consideration of policy for the publication of a revised updated edition of the "Standards of Competence 1978".
  8. Review of training programmes submitted by Institutions.
  9. Preparation of Bibliography.
  10. Progress of training facilities. Cooperation with regional centres and UNCLOS Secretariat.
  11. Representation at various conferences and seminars.
  12. Recognition and publicizing of short courses and seminars.
  13. Any other business.
  14. Date and place of next meeting.
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LIST OF MEMBERS OF THE IHO/FIG ADVISORY BOARD ON THE TRAINING OF HYDROGRAPHERS  
AND PARTICIPANTS IN THE 3RD SESSION, IHB, MONACO, 22-24 APRIL 1980

1. Ingénieur Général de l'Armement Jean BOURGOIN  
 Directeur de l'Etablissement Principal du Service Hydrographique  
 et Océanographique de la Marine (EPSHOM)  
 13, rue du Chatellier (B.P. 426)  
 29275 BREST CEDEX  
France Tel. (98) 80.00.06
2. Commander C. DON, R.N.N. (Ret.) *(unable to attend 3rd Session)*  
 Survey Manager, OSIRIS CESCO bv  
 1 Witte de Withlaan  
 2253 XS VOORSCHOTEN  
Netherlands
3. Lt. Cdr. Alan E. INGHAM, R.N. (Ret.)  
 North East London Polytechnic  
 Department of Land Surveying  
 Walthamstow, LONDON E17 4JB  
U.K. Tel. (01) 527 2272
4. Mr Adam J. KERR  
 Regional Director Hydrography (Atlantic)  
 Bedford Institute of Oceanography  
 P.O. Box 1006  
 DARTMOUTH  
 NOVA SCOTIA  
Canada Tel. (902) 426 3497
5. Dr T. UCHINO *(represented at 3rd Session by Dr A. SINZI)*  
 Deputy Director of Surveying Division  
 Hydrographic Department  
 Maritime Safety Agency  
 No. 3-1, 5-Chome  
 Tsukiji, Chuo-ku  
 TOKYO 104  
Japan
6. Cdr. B.A. RAO, I.N.  
 Officer-in-Charge, Hydrographic School  
 INS GOMANTAK, Vasco-da-Gama  
 GOA 403802  
India Tel. Vasco 2143 Ext. 274 (Off.)  
 248 (Res.)
7. Cdr. L.A.C. FERRAZ, B.N.  
 Departamento de Instrução  
 Diretoria de Hidrografia e Navegação  
 Praca Barao de Ladaris s/nº  
 20091 RIO DE JANEIRO  
Brazil Tel. 253 7744 Extension 31 (Off.)  
 253 5583



ANNEX II

p. 2

8. Mr B.T. AYINDE *(unable to attend 3rd Session)*  
National Delegate, FIG Commission 4  
Nigerian Institute of Surveyors  
P.O. Box 3610  
LAGOS  
Nigeria
9. Rear Admiral D.C. KAPOOR, I.N. (Retd.), Chairman  
International Hydrographic Bureau  
B.P. 345  
MC - MONACO  
Principality of Monaco  
Tel. (93) 50.65.87

Also participated in 3rd Session:

Dr A.M. SINZI *(representing Dr UCHINO, Japan)*  
Astronomisches Rechen-Institut  
Mönchhofstr. 12-14  
6900 HEIDELBERG 1  
Federal Republic of Germany

Cdr. N.N. SATHAYE  
International Hydrographic Bureau  
B.P. 345  
MC - MONACO  
Principality of Monaco  
Tel. (93) 50.65.87