REPORT BY THE PRESIDENT OF THE DIRECTING COMMITTEE 1972-1977

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According to custom an address by the President has been given at the Opening of each Conference. Its purpose seems to have been to highlight some of the more outstanding items of progress made by the Organization during the five years which have elapsed since the previous Conference. If the address is to serve a useful purpose I believe that it should also focus attention on problems currently facing the Bureau, and take a broad look at the direction in which the Organization seems to be moving forward.

Such information forms a useful background to the Conference, which is a unique five-yearly occasion when plans for the future can be laid by the Organization as a whole. Thus, it seems to me, the report should precede the Conference by weeks rather than hours, and accordingly the Directing Committee has agreed that my address be published in the January number of the *I.H. Review*.

Reprints of this address will be available at the Opening, whilst it is my intention on that occasion to give only a brief resumé, surely much to the relief of the audience, anxious as they will be to get on with the real work of the Conference.

I first turn my attention to giving some account of the stewardship by the Directing Committee since we took office in September 1972. All three members of the Committee changed on that occasion; and although we had a good "turn-over" from our predecessors, nevertheless by the end of the first month I, for one, realised that although I had been in charge of a national hydrographic office, yet I knew little about how the Bureau was run. As there was no "second term" Director to provide continuity we had to rely on the permanent staff for advice in the early stages. I believe the staff also found some difficulty in adapting themselves to a sudden and complete change "at the top".

The national Hydrographer, having sought the advice of his staff, makes the ultimate decisions; thus he finds it strange at first in the Bureau where decisions result from a consensus of the opinions of the three Directors. Ideally each Director comes from a different continent, with a different hydrographic and administrative background, often holding

divergent views. Here, perhaps, lies the strength of the Directing Committee which collectively has a wide geographical and international outlook. To make the most of this advantage the Directors, including the President, have to adapt themselves to a "Committee form" of decision making, not always the most concise and rapid method of conducting business. However, with experience we have developed a reasonably expeditious method of bringing our combined experience to bear when decision making.

The Bureau is the Secretariat of the Organization and much of the five year term of office of the Directing Committee is spent in carrying out, or inviting or arranging for Member States to implement, the various decisions of the Conference.

The Bureau itself cannot usefully contribute unless its internal administration is working smoothly. Much thought and effort is required when dealing with a staff composed of a number of different nationalities, despite the small numbers involved.

One of the first administrative tasks was to weld the draft Personnel Statutes of 1971 and the existing Staff Regulations into the new single Staff Regulations (1974). The necessity of the staff themselves taking part in this work led to the formation, for the first time in the Bureau, of a permanent Staff Committee of three representatives who meet with the President from time to time to deal with matters concerning staff welfare. This Committee has contributed significantly to the smooth running of the Bureau.

The Directing Committee made some internal re-organization during the latter part of 1972 in order to concentrate the 17 Members of the Staff into three clearly defined Sections — I: Administration and International Relations; II: Periodical Publications; and III: Technical and Charting. The Head of Section III, Commodore A.H. Cooper, former Hydrographer of Australia, is the only member of the Bureau Staff with hydrographic experience, excluding the Office Manager who has many other duties. The other two Heads of Section are at present non-specialist naval officers, a command of languages being of over-riding importance in these posts.

Although the Head of Section III is most ably assisted by his Deputy, Mr. Ferrero, who has such long experience in the Bureau, they cannot cope with the ever-increasing technical aspects of all the projects which emanate from the three Directors, each working in his own allotted field of responsibility. The Directors have therefore to get right down to the technicalities and much of the drafting of correspondence themselves, leaving little time for joint discussion on matters such as the content of Circular Letters and the replies to Member States' enquiries; thereby the Organization loses much of the value of employing three Directors of wide and differing experience.

This major weakness in the Bureau organization could be cured by the appointment of another technically qualified assistant, but perhaps in the prevailing financial circumstances at the Bureau such an increase in staff would be beyond consideration.

From the outset the Directors divided the Member States and potential Member States into three broad geographical areas — Europe and Africa, the Americas, and East of Suez — each Director being responsible for

getting to know the Hydrographers and their problems within his area. However, individual Director's travel, which must always be limited by financial consideration, has been dictated by the subject matters being discussed at the various conferences and meetings. Each Director is assigned to cover separate topics such as, for instance, Radio Navigational Warnings and Chart Symbols — Rear Admiral Tison; Law of the Sea, GEBCO and Publications — Commodore Kapoor; the International Chart and Finance — myself. Nevertheless, during our term of office the Directors and Heads of Section have visited well over half of our Member States Hydrographic Offices at least once, returning to the Burcau on every occasion with renewed understanding of what these Member States are doing and what they expect the Bureau to do for them.

During our travels, and in communication, we have tried to seize every opportunity to point out to non-member maritime states the advantages to be gained by joining the Organization, a number of such states having established hydrographic services. Despite our concerted endeavours only four new Members have adhered to the Convention during the period under review: why it is so difficult to attract new Members to the Organization is a matter which might well merit the attention of the Conference. Other intergovernmental organizations concerned with the oceans, requiring considerably greater contributions from their Members, have over double our membership.

An innovation during the period under review was the sending of the Assistants for refresher courses as proposed at the last Conference. Owing to the generosity of the Hydrographers of the Federal Republic of Germany, the United Kingdom, France and Italy, the four Category A staff and the Bureau draughtsman have each been given a two-week insight into the working of a national hydrographic office with a minimum of expense to the Bureau.

It would be tedious to deal here one by one with all the tasks allotted to the Bureau by the 10th Conference. The progress made in each one of these during the last four and a half years is described in "Work of the Bureau (May 1972 - 31st December 1976)" which is being distributed as a Conference document. The Member States have helped the Bureau in many ways to complete these tasks, and only two in particular will be mentioned here.

Resolution K 1.7 concerning the collection and publication of tidal data seemed at first to be a very difficult one to carry out, entailing as it did the establishment of a data centre for the storage and retrieval of harmonic constants. This was beyond the resources of the Bureau, but a generous offer by the Dominion Hydrographer led to the setting up of an organization as envisaged in the Resolution, within the Canadian Hydrographic Service. Many data have now been assimilated and are ready for dissemination, and a proposal to make this service permanent is being put forward at the Conference by the Bureau with the approval of the Dominion Hydrographer.

Resolution K 2.3 concerning the urgent need to update and publish new correction tables for the velocity of sound in seawater was another undertaking beyond the Bureau's capability. Here the U.K. Hydrographer came

to our aid by arranging for Matthews Tables to be completely revised by the British Institute of Oceanographic Sciences using modern data provided by Member States. The resulting tables are to be published by the U.K. Hydrographic Department, and it is hoped that proof copies will be displayed at the Conference.

COMMISSIONS AND WORKING GROUPS

The setting up of ad-hoc commissions and working groups, which was a notable feature of the 10th Conference, seems to be an excellent way of advancing the work of the Organization on a broader basis than would be possible within the Bureau. The latter must be in a position to coordinate and to assist with the secretarial work involved, to host and support meetings of the groups when held in Monaco and to deal with the collation, printing and circulation of the resulting reports. A considerable amount of time will necessarily be devoted at the forthcoming Conference to the consideration of seven or eight of such reports.

A brief mention may here be made of one or two of the commissions which have been at work during the last four and a half years.

Resolution K 2.7 led to the setting up of a joint commission comprising representatives of IMCO and the IHO to study questions related to the promulgation of radio navigational warnings to shipping. The first, and very well attended, meeting was held in the Burcau in May 1973 and a draft plan, dividing the world into about 15 areas, each having one nation as the area coordinator, was developed.

Pressure from the Government of the People's Republic of China upon the Secretary General and Council of IMCO necessitated the dissolution of this joint commission. An IHO Commission on the promulgation of Radio Navigational Warnings was then set up under the chairmanship of Commander P.B. Beazley (U.K.) to carry on the work in collaboration with the IMCO Sub-Committee on Radiocommunications. Commander Beazley will be putting forward the final draft plan for approval by the Conference; meanwhile about one third of the designated areas are already covered by radionavigational warnings issued by the selected coordinating nations.

The Commission on the Standardisation of Nautical Books, chaired until recently by Captain H. Schumann (Federal Republic of Germany), has held one preliminary and two full meetings in the Bureau. The report to the Conference will propose some useful recommendations.

Resolution K 2.4 on the Training of Hydrographers led to the setting up of a working group under the chairmanship of the Dominion Hydrographer, Mr. G.N. Ewing. Coordination with a similar group in FIG, particularly during the FIG Conference in Washington in 1974, resulted in the establishment of the IHO/FIG Working Group on the Training of Hydrographers. This Group held its first session in England in February 1976 when Mr. Ewing was unanimously elected as Chairman, but in his absence Commodore Kapoor took the chair. Considerable progress was made in

compiling a syllabus of courses in hydrography to be used by all countries engaged in such training; the object being to reach an acceptable curriculum reflecting the basic standards of excellence which should be common to all hydrographic surveys. The Chairman's report should engender a great deal of interest in this subject, which is of growing importance in the field of international hydrography.

The production and printing of the International Chart on small scales has made very steady progress since the last Conference, particularly on the scale of $1/3\frac{1}{2}$ million. At the time of writing, 51 Int Charts have been published and 42 of these have been adopted by one or more Printer Nations.

Meanwhile the North Sea International Chart Commission, which was set up as a result of Resolution K 2.2. to study the problem of producing International Charts at medium and large scales, has been working extremely hard under the Chairmanship of Mr. Newson (U.K.) to resolve the many problems involved, which are certainly far more complex than those concerned with the establishment of small scale Int Charts. The Chairman's Report on the work of the NSICC, which will be presented at the Conference, will surely contain many important recommendations concerning the future of international charting.

It became obvious to the NSICC fairly early in their deliberations that the successful production of Int Charts on the larger scales would require a much increased level of international symbol standardisation than at present prevailing. The Commission has compiled their specifications to include symbols and abbreviations, and these appear to be developing as a compromise between existing Technical Resolutions, current national practice, and the need for new symbols.

Meanwhile, the Bureau has been continuing its efforts to standardise individual symbols in correspondence with Member States. This practice has been followed for many years and it is therefore surprising that only 28% of the "Standard List" of symbols is covered by existing Resolutions.

As the Bureau and the NSICC have proceeded along their separate ways in the field of symbolisation it has become clear to both that the work is not only being duplicated, but in some instances is counter-productive.

The ten Member States involved in the NSICC have been carrying out the most extensive study yet made concerning the standardisation of chart symbols; consequently the Bureau feels that the NSICC specifications will provide a firm basis on which the IHO could develop a full set of specifications for world-wide application.

The Bureau believes that a Chart Specification Committee should be set up by the Conference to complete the NSICC list and to advise as new symbols are proposed and developed. The work of this Committee could replace in large measure the haphazard symbol standardisation which inevitably has been unrelated to chart specifications as a whole.

BUREAU PRINTING UNIT

During 1972 and 1973 commercial printing costs rose erratically and it became impossible to obtain even short-term estimates, whilst at the same time increasing printing delays were experienced. A study convinced the Directing Committee that although the capital outlay would be in the region of 24,000 Gold Francs it was advisable to establish in-house printing at the Bureau for nearly all work except the *Review* and the *Yearbook*.

In-house printing went into operation in February 1974 and an offset printer was appointed in November as the workload increased. Owing to a retirement it was possible to engage a printer without an overall increase in staff numbers.

This system has been working well, and it is estimated that the capital expenditure involved will have been recovered by savings made in printing costs when the publications concerned with the Conference are completed during 1977.

A number of special publications have been printed by the Bureau since 1974 including the *IHO Resolutions* (1976). All Administrative and Technical Resolutions have been brought together in a single loose-leaf form, which facilitates corrections and additions and eliminates the need for printing future editions in their entirety. This simple-to-use publication should facilitate the work of the Organization both at the Conference and in the Offices of the Member States.

The *IHO Resolutions* is the largest printing job completed within the Bureau so far and stretched the editing, printing and collation capabilities to the utmost. It also provided useful lessons for the future.

Some changes in the format and content of the *I.H. Review, Bulletin* and *Yearbook* have been introduced during the past 4½ years to make these publications more informative and interesting. Higher sales and prices of the *I.H. Review* have resulted in an increase of revenue of 60% during the last four years.

INTERNATIONAL COOPERATION

An important role of the Bureau is to maintain liaison with other international organizations concerned with navigation and oceanography. The relationship with IMCO has already been referred to, but collaboration has been equally close with IOC, IALA, and WMO.

Cooperation with IOC included work on preparing the Guide to International Marine Data Services for publication. Soon after the present Directing Committee took office, the Institut Géographique National informed the Bureau that owing to financial restrictions the printing of GEBCO charts of the 4th Edition would have to be discontinued. This necessitated

a new look at GEBCO as a whole, and with the assistance of SCOR and IOC a Joint IOC/IHO GEBCO Guiding Committee was set up in 1974. Its dozen members provide world-wide representation equally divided among scientists and hydrographers. An offer by the Dominion Hydrographer to print the charts in Canada made it possible for the first sheet of the new GEBCO 5th Edition to be published in 1975. Two more sheets are nearing publication.

Happily the association of GEBCO with Prince Albert I of Monaco, the founder of this well known series, has been maintained. The Directing Committee acknowledges with thanks the continued annual contribution of 25,000 French Francs by the Government of Monaco towards the upkeep of the bathymetric data centre at the Bureau. This comprises the 1/1M plotting sheets provided and kept up-dated by the 18 cooperating Member States.

Invitations by IALA to the Directing Committee to send a representative to various of their Committees have enabled the Bureau to keep in touch and to put forward Member States' views concerning developments in radio beacon emissions, the reliability and availability of aids to navigation and the introduction of the new uniform buoyage system in North-West European waters.

There has been liaison with WMO concerning the coordination of broadcasts of navigational and meteorological warnings.

The U.N. Law of the Sea Conferences seemed to the Directing Committee to be of importance to hydrographers in view of the significance of nautical charts to the work of the Conference, and the eventual need to define limits and evaluate morphological features. Commodore Kapoor was therefore designated as an Observer in reply to an invitation received from the Special Representative of the U.N. Secretary-General. Commodore Kapoor attended relevant parts of the Conferences in Caracas, Geneva and New York, during which a small body of technical experts, composed of Member States' representatives present, was established. This group was able to give advice on the purely technical and hydrographic aspects of the Law of the Sea.

The Bureau has been able to respond actively to requests for assistance in establishing hydrographic services in Syria and Papua - New Guinea, the latter not yet a Member of the Organization.

I admit to some disappointment at the lack of response to our advice to a number of developing countries advocating the setting up of some form of hydrographic organization, however modest. On the other hand I believe that our constant efforts to stress the importance of hydrography to the developing world have led to a greater awareness.

Requests from Member States for information on many subjects, ranging from computer programmes to deep-draught navigation, from the availability of contract surveying to details of survey ship construction, and from chart printing to side-scan sonar performance, have been answered with promptitude. The Bureau has, in turn, sometimes sought the necessary information from other Member States, who have always been very willing to cooperate in furthering the general free exchange of technical information within the Organization.

I have passed somewhat swiftly over the achievements of the Bureau and the Organization as a whole over the last four and a half years, dealing only with highlights. Those seeking more details of the achievements must have recourse as already mentioned to the Conference Document Work of the Bureau.

FINANCE

I conclude by discussing the very crux of the matter, concerning all future activities of the Bureau.

The present Directing Committee took over a financial situation in which they were instructed to increase by 10% and $7\frac{1}{2}\%$ the salaries of Heads of Sections and Senior Assistants respectively; to introduce statutory leave travel for Category A Staff, including their dependents, every three years; to include Directors' dependents in joining, leaving and statutory leave travel expenses, and to include the Directors in the Social Security Scheme and in the Retirement Benefit Scheme which latter requires the Bureau to contribute a sum equal to 10% of these salaries.

Some of these laudable improvements in Directors' and certain Staff Members' welfare conditions had been recommended by a Group of Administrative and Financial Experts which met at the Bureau in March 1971, but these new expenses were incurred during a period of inflation, and at a time during which fluctuating currency values have frequently caused decreases in Bureau capital due to losses on exchange.

The Conference instructed the Directing Committee to resort to capital if necessary until such time as an increase in contributions would be required. Escalating personnel and running costs hastened the necessity for a 30% rise in contributions during 1974, and the Finance Committee put a proposal to this effect to the Member States.

Fortunately a 2/3rds majority was obtained for this proposal which went into effect on 1st January 1975, otherwise the Directing Committee would not now be reporting the satisfactory completion of another five-year period of progress.

Some idea of the way in which personnel and running costs have increased must be briefly stated in order that Member States may appreciate the present serious financial situation within the Bureau whereby we can expect to have only half our Reserve Fund available by the end of 1977.

As it is the policy of the Organization to maintain Bureau salaries at the same level as those paid to Monegasque civil servants, the cost-of-living increases, which are declared from time to time by the Governments of France and Monaco, have to be applied; the resulting percentage increases have been as follows: — 1973: 10.5%; 1974: 16.6%; 1975: 11.84%; and 1976: 8.78%.

With regard to running costs, the prices of materials and services of every kind have steadily risen; for instance, in 1976 we have paid 40% more for postage than we did in 1973.

At least in this area we have been able to do something to wrestle with the situation. Paper and printing materials have been purchased well in advance and stored against rising prices; strict economy in the use of office materials has been exercised; telephone calls and telex use have been restricted; and finally "shopping around" and hard bargaining have been practiced in purchasing. In all this I must give credit to the astuteness of Mr. B. Lahire, the Office Manager, and Mrs. S. Orlandi, the Finance Officer.

Unless we can look forward with confidence to a reduction of the inflationary trend in France and Monaco and to a steady increase of Membership during the next five years, the 11th Conference will have to balance realistically the tasks, and hence the numbers of persons required at the Bureau, against the contributions Member States are prepared to pay from 1st January 1978 onwards. Some system must be devised whereby the yearly income from contributions is related to the workload of the Organization and also to the current inflationary or deflationary conditions obtaining in Monaco.

I suggest that the debate on the Five Year Budget will transcend in importance all other items on the Conference Agenda.

Finally, I will conclude by saying that when the Organization finances are being considered it should never be forgotten that but for the generous provision of the Bureau building, together with its maintenance and domestic services, by H.S.H. Prince Rainier III and the Government of Monaco, our financial burden would be very much heavier to bear.

Abbreviations used:

IMCO: Inter-Governmental Maritime Consultative Organization

IOC: Intergovernmental Oceanographic Commission

IALA: International Association of Lighthouse Authorities

WMO: World Meteorological Organization

IHO: International Hydrographic Organization
 GEBCO: General Bathymetric Chart of the Oceans
 SCOR: Scientific Committee on Oceanic Research.

FIG: International Federation of Surveyors