WITH REGARD TO A REFORM OF THE REPERTORY OF TECHNICAL RESOLUTIONS

by Captain C. F. Albini, Senior Hydrographic Officer of the IHB

The latest issue of the I.H. Review (July 1963) contains an article by Captain Langeraar, dealing with the problem of uniformity in nautical documents; he sets forth new ideas which should lead to a reform of the Repertory of Technical Resolutions.

The question is one of importance and before making any decision, the Directing Committee considers that opening the Review to a preliminary debate, showing the advantages and inconveniences of this proposal, would greatly help to clarify the matter.

With this purpose in mind, the Directing Committee has entrusted Captain Albini, head of the technical section, who has been in charge of keeping the Repertory of T.R. up to date for the past dozen years, with the task of expressing his own viewpoint, in regard to Captain Langeraar's opinions.

On the basis of Captain Langeraar's probable response to the present article, and considering the various opinions which we hope other hydrographers will submit, the Directing Committee will draft the proposals to be submitted to States Members on this subject.

The IHB Directing Committee

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I wish to thank the Directing Committee for the confidence it has placed in me. I shall endeavour to help study this proposal, which I personally feel to be useful and practicable, but with reservations.

I shall cover the three aspects of Captain Langeraar's proposal one by one: the reported drawbacks; the proposed remedies; the suggested lay-out for the Repertory.

Reported drawbacks of the present system

Possible contradictions may occur in technical resolutions, since they are drawn up at several years' intervals and by different persons. In general,

these contradictions arise from the fact that persons proposing new resolutions are not always aware of the existing ones. However, by exercising reasonable care, the IHB can easily prevent such inconsistencies — due solely to inattention — from happening.

For instance, at the 8th Conference, when Japan, in view of the increase in ship draughts, proposed inscribing on charts decimetre fractions of sounding figures for depths up to 20 metres instead of 18, (see P 34), the Bureau pointed out that the question was linked to other existing resolutions. Indeed, if decimetre fractions were inscribed for depths up to 20 metres, this would imply that this figure should henceforth be considered the safe limit for surface vessels. Consequently, resolutions concerning sunken rocks and wrecks (B 137.I, B 138 and B 141.I) would also require amendment, by increasing the safe limit from 18 to 20 metres.

These amendments were made; no discrepancy occurred. Each resolution has been corrected while retaining the same number and place in the Repertory.

I agree that such attention to all existing resolutions has not always been observed; indeed in 1953, when a general verification of the Repertory was made prior to the publication of the 4th edition, a few contradictions and ambiguities were found, and circular letter 17 H, 1954, submitting the appropriate amendments to States Members, was sent out. Subsequently, the Bureau has been duly vigilant, and as far as I know, there should no longer exist in the Repertory any contradictions due to inattention or, more precisely, to lack of familiarity with existing resolutions.

There only remain those contradictions or inconsistencies set forth deliberately and pointed out by Captain Langeraar. These are two in number and I believe them to be the only ones.

The first concerns B 134.I (Drying height). Actually, I fail to see any real inconsistency in this resolution. There is probably room for ambiguity as it concerns heights indicated by sounding figures, but it appears logical to me to give more importance to the gist of the matter (height) than to its form (type of figure) and thus to apply the principle of B 147.

The second inconsistency pointed out concerns P 30 (Wreck over which depth is known) submitted by the IHB at the 8th I. H. Conference. If the entire background to the question is examined through circular letters 20 H, 1954; 12 H, 1956; 11 H, 1957; and 10, 1961, one realizes the Bureau's efforts to arrive at a consistent solution. If this objective has not been reached, it is because the majority of States Members were opposed thereto. But it is not a question of method; I feel that whichever way the proposal was being submitted, the results would still have been the same: the majority of States Members were willing to use a figure of different type to indicate soundings out of position for rocks, but not to indicate soundings out of position for wrecks.

Anyway, whatever the interpretation of the real or seeming inconsistencies, the cases are always isolated ones and, in my opinion, do not mar the basic consistency of the Repertory as a whole. They may be examined and, wherever necessary, corrected, without interfering with the rest of the volume.

Proposed remedies

While of the opinion that the inconveniences pointed out by Captain Langeraar cover details which do not affect the general system, I believe that the introduction of resolutions which he terms "Fundamental Technical Resolutions" (FTR) — and which I would prefer to name "guiding resolutions" — could be useful for the purpose of guiding States Members when they intend to submit proposals.

Incidentally, the Bureau has in the past submitted resolutions of this type, which, although not definitely designated as such in the Repertory, serve the purpose of guiding the drafting of other proposals.

For instance, B 60 and B 115 were submitted by IHB circular letter in 1954 with a view to standardizing the manner of indicating, in the various symbols, the exact position of the object represented.

Another such resolution, which the Bureau has had the intention of submitting for a long time, would concern the manner of regulating the use of the dashed line and of the dotted line. At present, either one is used by following tradition rather than a sense of uniformity. Conversely, the two lines could be made distinctive by deciding for instance that the dotted line will, as far as possible, be used to indicate objects actually existing but not normally or readily seen (under-water port constructions, submarine cables, fishweirs, ruins, paths, fresh water springs in sea bed, etc.), and that the dashed line will be used to define lines not shown on the earth's surface (leading lines, limited areas, recommended tracks, sectors, maritime limits, etc.).

The drawback would be that such a resolution would entail changing several existing symbols, which should be avoided as much as possible. For that reason, the Bureau has never submitted it.

However, may I repeat that these "fundamental" or "guiding" resolutions would be useful and convenient in guiding the drawing up of new resolutions, and also because they would make it easier for the IHB to avoid contradictions, but in my opinion, they would be of little help in eliminating inconsistencies.

New lay-out of the Repertory suggested by Captain Langeraar

It is the new "structure" of the Repertory as outlined by Captain Langeraar, that appears to me most likely to cause confusion.

The principle of dividing the resolutions into FTR (Fundamental Technical Resolutions), DTR (Derived Technical Resolutions) and ITR (Independent Technical Resolutions) and to number them accordingly, would have certain advantages but would involve several disadvantages, the major ones being as follows:

(a) One FTR could have several DTR's based on it, concerning different nautical documents. According to Captain Langeraar's proposal, all the FTR's should be immediately followed in the Repertory by their respective relevant DTR's. As a result, they would appear in the Repertory

in an order which might be logical theoretically, but which is definitely not practical.

Example: A FTR could be worded as follows:

International abbreviations which have become symbols should be called "symbols" and should not be punctuated.

The DTR's, i.e. A 3 (Symbols for units), A 7 (Cardinal points) and G 2 (Mean sea level symbols) as well as all others to be adopted in the future, should appear immediately thereafter. These DTR's can pertain to any nautical document and the Repertory user would certainly prefer finding them in the part concerning that particular nautical document rather than all grouped together.

(b) Certain DTR's could be based on two or even more FTR's.

Example: The present item B 137 should be considered as a DTR, paragraph I of which is based on the FTR dealing with the dangerous depth of submarine obstacles, and paragraph IIb on the FTR concerning sounding figures out of position.

In order to adopt the lay-out and numbering proposed by Captain Langeraar, the various paragraphs of item B 137 should be separated, which does not appear very desirable.

(c) The great majority of existing resolutions can be classified neither in the FTR's nor in the DTR's. They are those which Captain Langeraar calls "independent technical resolutions" (ITR). They should continue to be arranged and numbered in the Repertory as they are now. Consequently, two different lay-out systems would exist in the same volume.

Now, when the Bureau prepared the 4th edition of the Repertory in 1953, one of the most difficult tasks was to set up the order and rearrangement of the resolutions, because the convenient use of this volume essentially depended thereon.

It should be borne in mind that very often the users of the Repertory do not recall whether or not resolutions on a given subject exist. They thus search for them in the place they deem most appropriate: if the layout of the Repertory is not practical, the resolutions can easily escape their attention.

For that reason, the matter was very carefully studied in 1953 and the following steps decided upon:

- to divide the subject matter into parts and the parts into sections, so that the title of each section would show at a glance the subject matter of the resolutions contained therein;
- to set forth the resolutions concerning charts in as similar an arrangement as possible to that of the standard list of symbols and abbreviations;
- to put down each resolution once, even those concerning several parts or sections, but to insert as many cross references as possible (titles in smaller type) so that the existence of a resolution bearing an even distant relationship with a certain subject could hardly escape the reader's attention;

— to insert three kinds of indexes: an itemized summary of parts at the beginning of the volume; an alphabetical index, also itemized, at the end; and a comparison table of the standard list of symbols and abbreviations and the relevant resolutions.

All these steps might appear excessively cautious, but in practice, they have proved insufficient. Most of the hydrographic offices change section heads frequently and it occurs that the latter must look for a resolution before having had the time to study the arrangement of the Repertory. Consequently, it often happens that resolutions escape their notice, and this unsatisfactory situation was clearly felt during the discussions at conferences.

The Bureau is always ready to welcome any new methods for finding resolutions more rapidly and above all, with more certainty. We would therefore appreciate receiving suggestions on this aspect of the subject but would have to reject any new arrangement which, for the sake of theoretical logic, would render the search for resolutions in the Repertory more difficult and uncertain.

Conclusions

I am of the opinion that the essential part of Captain Langeraar's proposal, suggesting the creation of underlying principles, i.e. guiding resolutions, should be retained, but that it would be impractical to adopt the arrangement and numbering he suggests. This "graded structure" would give the Repertory a stiffness which would make the resolutions difficult to classify, but mainly it would require that the users do more extensive research than is now the case.

I believe that the best solution would be to adopt a certain number of guiding or fundamental resolutions (FTR) and to insert them in the Repertory in the appropriate place, according to the present general arrangement; however, a cautionary note, indicating that "this resolution must be considered fundamental on this subject and no resolution in contradiction with it can be adopted" should follow.

Moreover, all resolutions bearing even a secondary relationship with these FTR's should be followed by a note indicating: "See resolution..."; a special index would also be added for the FTR's.

When submitting a FTR to States Members, the Bureau would of course point out the existing resolutions to be modified, in case the FTR in question is adopted. In fact, this was the procedure followed for P 34 submitted to the 8th I.H. Conference by Japan and referred to above.

Appendix: Psychological aspects

Finally, I would like to add some considerations on the psychological aspects of standardization. The subject is a quite peculiar one, which persons who have not spent some time at the Bureau are generally unaware of.

The directors of the hydrographic offices, when dealing with technical resolutions, are naturally prone to consider the problem from the viewpoint of a chief with full authority over a number of sections which can be readily led to adopt new work methods.

The situation at the IHB is entirely different. It should not be forgotten that the technical resolutions are not mandatory and that the means at the Bureau's disposal for obtaining uniformity in nautical documents are all of a, say, persuasive character. To achieve this aim, tact, patience and pliancy are required.

Hereunder are some of the Bureau's guiding principles in its work, resulting from forty years' experience:

- 1) The Bureau must seek to guide the opinion of States Members, while allowing itself to be guided by their experience.
- 2) A resolution is useful not because it is laid down in the Repertory, but only if it is implemented. Thus one should avoid passing a resolution when it is not certain whether the near totality of States Members will eventually be able to put it into practice. The approval of a majority is one consideration, but not the only one when it comes to adopting a resolution.
- 3) Every effort should be made to avoid changing an existing resolution. A country which has gone to considerable trouble to implement a Bureau resolution, entailing hundreds or thousands of corrections on its charts, would lose all confidence in the efficiency of our organization if a few years later, it were informed that its work had been useless.
- 4) Often custom should prevail over sheer logic: a symbol somewhat unsuitable but long-known to mariners, is preferable to a new symbol, even though it be very distinctive and logical.
- 5) It is better not to adopt any resolutions on a certain subject rather than adopt an unsatisfactory one. If the matter remains pending, a good solution can always be hoped for. An imperfect resolution, on the other hand, can bring the matter to a deadlock, as States which have implemented it will justly oppose the change.

I have explained the above principles to show that uniformity is an end which should be achieved progressively, with discretion and not drastically. Any drastic change or even too radical a rehandling would be dangerous, since it could cause us to lose what we have laboriously achieved up to this day. I admit there remains much to be done in the field of standardization, but what has been obtained, to wit the voluntary adhesion of forty-one countries to a great many questions, is a precious heritage which should be safeguarded at all costs.

I therefore recommend continuous but thoughtful and gradual improvement.