

Report

of the Sub-Committee for Automatic Data Processing

1. In 1957, a "Sub-Committee for Mechanizing the Index of Hydrographic Data held by the Council" was constituted, with Prof. HELA as chairman. The first object of the Sub-Committee was to make arrangements so that all hydrographic data received by the Service Hydrographique was in punched card form, or could be easily transferred to punched cards. For that purpose, special card forms and corresponding observation forms were worked out and printed. A manual was printed to assure uniformity of procedure from all contributors. The transfer of hydrographic data to punched cards enabled the Service Hydrographique to replace the "Bulletin Hydrographique" with the "ICES Oceanographic Data Lists", produced directly from the punched cards. A "Chemistry Card" has also been agreed upon, so that all chemical data should in the future be contributed on cards or corresponding observation forms.
2. At the meeting in 1964, it was stated that the Sub-Committee's primary goals had been achieved. It was decided, however, that the Sub-Committee should continue with a changed name: "Sub-Committee for Automatic Data Processing" and new terms of reference: "To assist and advise the Hydrographical Committee and the Service Hydrographique on such problems as will arise as consequences of the mechanization of the Index and<sup>of</sup> the further development of automatic methods in data handling".
3. During the preceding year, a few changes have been made in the ICES punch card system. They are summed up in Appendix VI, which has been printed and distributed. A second edition of the ICES Punch Card manual, incorporating all the Appendixes (I-VI) is now in press and will be distributed in the near future.

At the meeting of the Subcommittee in Copenhagen October 5, additional points pertaining to the system were discussed. Development of more precise positioning methods, and the need for a closer indication of observation time, may in some instances make it desirable to allot columns for the indication of such information. In addition, some of the contributing institutions may wish to enter into the cards special information not embraced by the ICES system. It was decided that some of the spare columns in the Hydro Depth Card could be freely disposed for such purposes, whereas a number of columns should be held in reserve for information which might at a later date be deemed desirable to have included into the obligatory ICES-system.

At the meeting on the Service Hydrographique in March, 1966, it was recommended that the Service Hydrographique should be enabled to include machine-generated values of  $\sigma_t$  etc. into its data-holdings. The Sub-Committee recommends that the contributing institutions should, as far as possible, supply such computed values together with the observed values. In all other cases, the Serv. Hydrographique should be prepared to carry out such computations on request and at cost.

This obligation should, however, not be made effective before it is clear whether the investigations, now under way at the National Institute of Oceanography, will necessitate a change of tables or formulae for the computations.

The situation of the ICES' holdings of BT-data and of the flow of such data into the Data Center was discussed. The present situation is unsatisfactory, as some of the greatest producers of BT-data has found the ICES-system unpractical and do not transfer their BT-data to the ICES. Moreover, there has been virtually no demand on the Service Hydrographique for BT-data.

The Sub-Committee will take up this question with the interested parties, and hopes to be able to present a proposal for the amelioration of the situation at the next Council Meeting.

4. It was strongly urged by the Hydrographer that the Sub-Committee should continue to exist, as it was of a great help to the work of the Service Hydrographique.
5. Mr. G.W. Andison was elected Chairman of the Sub-Committee.  
Members: Dr. R.A. Cox, Dr. F. Koroleff, Mr. J. Smed, Dr. O.H. Sælen, Dr. G. Tomczak.

O.H. Sælen