14th CHRIS MEETING Shanghai, China, 15-17 August 2002

REPORT ON THE III GEOMATICA CONGRESS Havana, CUBA, February 2002

Rear Admiral ANGRISANO and the Professional Assistant Michel HUET participated in the above Congress, from 18 to 22 February 2002 in Havana, Cuba.

The GEOMATICA Congress was included in the scientific programme of the INFORMATICA 2002. On 18 February, before the opening ceremony of *INFORMATICA 2002*, the National Hydrographic Office of Cuba organised a seminar on ECDIS and ENC.

The seminar was aimed at presenting the status of the standards for the electronic charts and their production. Three IHO Member States participated, namely: **Australia**, represented by Cdr. Robert WARD, **Cuba**, represented by Col. Eloy Alum ORTIZ, Head of the Cuban Hydrographic Service, and Cdr. Rolando FEITO SARDUY, and **USA**, represented by Captain Lee ALEXANDER. **Mexico**, a pending member state, also attended the congress, represented by Rear Admiral DE ABIEGA, Head of the Hydrographic Service of the Mexican Navy, and by Lt. CARDENAS. The attendance of three private companies, namely: C-MAP Norway, represented by Mr. Thor SVANES, TRANSAS Marine, represented by Captain Vladimir SEKACHEV, and Seven Cs, represented by Dan PILLICH, was welcomed and helpful. The seminar, chaired by Rear Admiral Angrisano, was also aimed at discussing the implementation of the project SHARED applied to the Regional Hydrographic Commission of the Caribbean Sea and Gulf of Mexico.

The following were amongst the presentations given:

- The status of ENC Coverage world wide, by ICA Michel HUET, IHB;
- The situation of the Electronic Charts Standards, by Captain Lee ALEXANDER, USA, which proved to be a very useful recapitulation of the various standards mainly established by the IHO or based on IHO standards;
- Marine Information Objects, by Mr. Dan PILLICH, 7 Cs, Germany;
- The WEND Principles and the future of the RENC concept, by Commander WARD, Australia.

At the end of the presentations, Captain Lee ALEXANDER and Rear Admiral ANGRISANO conducted a debate on the implementation of the *dual-fuel* (ENC- RASTER) Project for the provision of electronic charts to the users.

This project, led by the US Coast Survey of NOAA, had been proposed during the III Conference of the Caribbean Sea and Gulf of Mexico Hydrographic Commission, Jamaica, April 2000, and Captain Lee ALEXANDER is acting at present as facilitator, on behalf of Coast Survey. He said that he had positive responses from Cuba, Colombia, Jamaica and Mexico, concerning the continuation of the project.

Whilst studying the possibilities of implementing the dual-fuel concept, the proposal to add, in the region, the creation of a Virtual RENC to that activity, was raised. The Industry's delegates were very keen on the idea and said that the industries they represented are prepared to contribute with the release of equipment at a minimal cost.

On 19 February, Rear Admiral ANGRISANO was asked to make a brief speech during the opening ceremony of GEOMATICA and Professor Bengt RYSTEDT gave a presentation on Cartography and Geographic Information as an aid to take social and economic decisions.

After the opening ceremony, Rear Admiral ANGRISANO paid a visit to Vice-Admiral Pedro M. PÉREZ BETANCOURT, Chief of the Cuban Navy. He welcomed the idea of creating a virtual RENC and added that he pays special attention to the training of hydrographers, both in Cuba and abroad (IMA Trieste, Italy).

The following day, the GEOMATICA programme included an hour and half of presentations on electronic charts. Rear Admiral ANGRISANO presented the paper "*The Challenges of ECDIS*", which had been prepared by Rear Admiral GUY, slightly modified to take into account the discussions of the previous days on the Caribbean project. The presentation was followed by a panel on "*Different Perspective in ECDIS*", which included presentations by ICA M. HUET, Cdr. R. WARD and Mr D. PILLICH. A large audience followed the presentations and the panel with much interest.

After the panel, Rear Admiral ANGRISANO convened a meeting of the representatives of the IHO MS and Mexico, in order to finalise the way ahead of the project for the provision of the electronic charts in the region. The facilitator, Captain Lee ALEXANDER, had to go back to the USA on 19 but, fortunately, Cdr. Robert WARD's participation permitted to progress in drafting a viable programme. The participation of the Industry, that reiterated the preparedness to assist the hydrographic services in the region in the meeting, was again very useful and it is hoped that a good feasibility study of the project can be produced shortly in order to present it for funding to a donor agency.

The next day, Rear Admiral ANGRISANO paid a visit to the Vice- Minister of Foreign Affairs of the Republic of Cuba, HE Abelardo MORENO. The Minister said that the maritime lines of communication in the Caribbean should be developed further and suggested CARICOM as the right forum for making the voice of the IHO heard. He also encouraged the IHO to make good use of the present status of observer at the UN General Assembly in order to promote hydrography.

Another visit was paid to the Naval Academy, where numerous officers are trained in hydrography. The Academy is large and well maintained, and the level of training appeared to correspond to the standards.

In conclusion, the congress GEOMATICA was a success and in particular it was very interesting to have industry' representatives participating in the meetings aimed at delineating a technical cooperation project. It is the first time that this has happened and it is something that gives another, more practical, prospective to technical co-operation projects.

Finally, as usual the Cuban Hydrographic Service must be congratulated for the organisation of the various events and for the technical level of the marine cartography production reached.

List of presentations at GEOMATICA 2002 of interest to the Hydrographic Community

- The Cartography and the Geographical Information for the Economic, Social and Environmental decision taking", by Bengt RYSTEDT, Sweden.
- "Protection of Cartographic Databases and Digital Maps under European and International Law", by Dietrich DIEZ, Germany.
- Techniques for Self-Paced Learning of Three Dimensional Concepts and Field Procedures In Geomatic Engineering", by Mark SHORTIS, Australia.
- Development of the Charts distribution based on the Web", by George GARTNER, Austria.
- "Visor on-Line de Objetos Geográficos a Partir de Estándares Internacionales (Opengis)" ("On-line visor for Geographical Objects from International Standards"), by Rafael Cruz IGLESIAS, Cuba.

- "Estado Actual de las Infraestructuras de Datos Espaciales en América" ("Present Status of the Spatial Data Infrastructures in America"). Regional Perspectives, by Dora Inés REY, Colombia.
- "Avances en la Infraestructura de Datos Espaciales de la República de Cuba" ("Progress in the Cuban Republic Spatial Data Infrast.ructure"), by Tatiana DELGADO FERNÁNDEZ and Eloy Luis ALUM ORTIZ, Cuba.
- Time in GIS: a Time Geography-based perspective", by Dr. Francisco ESCOBAR, Australia.