



e-Pilotbook

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Abstract

SUMMARY

This paper presents the development of an innovative and novel IT application to the information and aids to coastal navigation. Is a radical approach to the traditional information systems and sources as it makes possible to access in an attractive method all updated navigation related information as Sailing Directions, List of Lights and Radio Signals, Meteorological and Hydrographical data, depicted in a 3D vision of the coast topography, with all the relevant and conspicuous points as can be seen from the craft. With ease of operation and very economic to use, it can be accessed by means of portable consumer devices as mobile phones and PCs by all segments of the leisure and merchant mariners, enhancing the quality of the navigation, improving the overall safety of people, property and environment.

ANTECEDENTS

International Legislation makes reference to the SOLAS Convention which stipulates the official documents that ought to be carried on board to perform a safe navigation. Nonetheless all vessels of less than 150 GRT in any kind of trip and fishing vessels of less than 500 GRT engaged in coastal navigation are exempted of this rule. As a result and due to the high costs involved these mariners are often set aside by the data providers. Information to carry out a safe navigation is then gathered from different sources resulting most of the time in "out of date" information with the consequent risks. Therefore the need arises for a facility intended for efficient and updated information provision.

DEVELOPMENT

An agreement with CETEMAR S.L. and the United Kingdom Hydrographical Office as navigation-related data provider and Google Earth® for 2D/3D image supply, linked to a network of worldwide servers and proprietary software, permits any user within the coverage of Internet (GPRS and Satellite) and by means of a mobile phone, palm or portable PC, the access to real time and updated navigation information. Presented with a graphic interface that actually shows the coast line including port approaches and with links to all the landmarks for navigation that when accessed displays in text and graphic form the data for such a relevant point. Furthermore direct access by embedded links is provided to weather and safety related information. Therefore the systems permit all users, irrelevant of the craft type or size an easy access to all information suited to the particular area of interest.

CONCLUSION

With a worldwide fleet exceeding 2.8M leisure crafts over 9 metres length and taking into account that most of the SAR sorties are related to this segment of mariners, a qualitative and quantitative improvement in the overall safety of navigation shall be achieved by this means. All the needed equipment is a portable consumer device and a low-cost annual subscription to attain a safe and enjoyable navigation therefore enhancing the protection of the people, property and environment.