



**NOTICE OF  
UNIVERSITY ORAL  
GEODESY AND GEOMATICS ENGINEERING**

**Master of Engineering**

**Andrés Millán Gamboa**

**December 11, 2007**

**@ 9:00 am**

**Room E-11, Head Hall**

**Board of Examiners: Co-Supervisors: Dr. David Wells, GGE**

**Examining Board: Dr. John Hughes Clarke, GGE  
Dr. Lee Alexander, CCOM (UNH)**

**Chair: Dr. Sue Nichols, GGE**

**Sailing Directions in Digital Format: An Opportunity for Enriched Media and  
Information Content**

**ABSTRACT**

Hydrographic offices have developed an important effort to turn all their issued traditional nautical publications into digital formats. In such a way, many nautical publications are now available in digital formats. While useful, most of them are just digital scans of printed publications. Concerning one of the most important publications for the navigator, Sailing Directions, a real improvement can be performed by means of digital multimedia features.

It is proposed that digital video film clips embedded in a GIS environment become a supplemental means to provide additional information to the mariner about coastal descriptions and harbour facilities. Used as an illustrated report, digital video can show not only the information provided in printed Sailing Directions, but also some additional aids (e.g., for manoeuvring or berthing). While still pictures can also provide visual information, a 20-second video clip could easily be equivalent to a hundred pictures and several paragraphs of text. In addition, a video clip can provide on-the-fly verbal narration and superimposed figures. This not only allows the navigator to acquire the information more comfortably, it also depicts the real-world situation.

The major benefit of video film clips are to complement – not replace – the use of digital nautical charts and published Sailing Directions. In addition, the incorporation of digital Sailing Directions into GIS software can provide further decision-support capability for navigators. GIS related digital Sailing Directions would be a good chance to turn this publication on digital format according to IHO standards.

**Faculty Members and Graduate Students are invited to attend this presentation.**