Seminar-Workshop Proposal:
Submitted to
Captain Sean Anthony U Villa, PN
Head, N8 Education and Training
Philippine Navy (PN) Headquarters, Manila

Introducing Geographic Information Systems (GIS) Technology as a Tool to Enhance the Decision Making Capacity of the Philippine Navy

Why this seminar-workshop for the Philippine Navy?

A foremost challenge to the Philippine Navy is to keep up with fast-developing advances in naval operations technologies. In this day and age, the use and development of information technology, specifically naval information technologies, is increasing exponentially. Needless to say, the Philippine Navy, as the "Guardian of the Philippine Seas", needs to be updated with the use of latest marine information technologies. It has to continually evolve into a more relevant naval defense and security force to better address the new dynamic challenges in the archipelago.

The Philippine Navy is already hard-pressed maintaining the security of 7,105 islands and 36,289 km of coastline – one of the longest in the world. Coupled to this challenge is the new 220-mi limit stipulated in the Exclusive Economic Zone (EEZ) of the UN Convention of the Law of the Seas of 1985. The UN also requires countries to put emphasis on maintaining marine ecology. Additionally, new heightened tensions have developed in the Spratly Islands demanding further vigilance on the part of the Navy. With these additional challenges among many others, the Navy has to find new and novel approaches that can produce objective information to support in making intelligent decisions quickly.

Geographic information system (GIS) is a fast developing technology that has seen increasingly intensive applications in a wide range of disciplines, workplace, and institutions. The Philippine Navy can enhance its goals and thrusts and increase its relevance through the application of GIS in decision making that pertains to general naval operations and other non-traditional tasks such as safeguarding the archipelago's marine ecology and disaster and rescue operations. GIS is now widely

applied in an array of transportation systems as well as in naval base operations and management and Marines deployment.

This training initiative proposes an introductory seminar and workshop on GIS to familiarize audiences with the nature and power of GIS as applied to naval operations. This seminar-workshop is especially designed for the Philippine Navy information technology support and operations. GIS institutional capacity buildup can move at a faster pace once initial GIS knowledge is developed among appropriate Philippine Navy personnel.

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Event date	Four days on **March 6-9, 2012** (4 days)

Intensive Hands-on GIS Training-Workshop
(Duration: 4 days)

MAIN OBJECTIVE:
To introduce GIS as an information-technology tool for enhancing the institutional decision-making capacity of the Philippine Navy

TARGET PARTICIPANTS:
Naval Operations, ICT Personnel, and Researchers

PARTICIPANT QUALIFICATIONS:
Average computer literate; enthusiastic to learn and apply GIS

NUMBER OF PARTICIPANTS:
20

SOFTWARE TO USE (All are gratis)
MapWindow GIS, Quantum GIS, OpenOffice, Google Earth, ArcGIS Explorer Desktop, and 7-Zip.

WORKSHOP COVERAGE:
Teaching participants GIS skills to include the following:
1. Fundamentals of GIS
2. Basic hands-on skills how to use a common GIS and visualization software to process and display data
3. How to plan, implement, and report a GIS project.

WHAT TO BRING:
1. Laptop (2-gig memory; installed with Windows XP, Vista, or 7)
2. Maps and datasets from the Philippine Navy, AMOSUP, government agencies (e.g. CHED, TESDA, NAMRIA, MARINA, NOAA, POEA, etc.), and other sources (including digital maps, GIS datasets if any, paper maps, and tabulated data)
3. Thumb/flash drive

TO BE ACCOMPLISHED BY EACH PARTICIPANT:
1. All workshop exercises

2. Individual simple GIS project
3. Presentation of GIS project
4. Packaged project digital output (includes project report, presentation, datasets used and produced, and related files - all in single folder) to be submitted to LCDR Baylon.

VENUE REQUIREMENT:
Adequate Internet connectivity

DAY 1

AM

- Registration (including participant's name, email address, office address, supervisor and email)
- Opening Introductions
- Introduction to Geographic Information Systems
- File Management
- Software Download and Installation
- Fundamentals and Demonstration of MapWindow GIS

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- Exercise 1: Creating a Simple Map
- Exercise 2: Creating Complex Maps with Several Layers; Labeling and Using the Coloring Scheme

DAY 2

AM

- Integrating GIS in Philippine Navy Operations
- Using Google Earth and ArcGIS Explorer
- Exercise 3: Digitizing Features (Creating Points, Lines, and Polygons) in MapWindow, Google Earth, and ArcGIS Explorer, including conversion between KML or KMZ and GIS files

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- Making a Simple GIS Project (includes title, summary of your project, background and significance, beneficiaries and implications, objective, data, procedure, results and analysis, conclusion, and future work)
- Exercise 4: Editing Attribute Tables, including using OpenOffice Calc (or Excel) to Populate Tables

DAY 3

AM

- Exercise 5: Geoprocessing
- Exercise 6: GPS, Projections, and Geographic Referencing
- Project Assignment
- [Work on Project]

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- [Work on Project]

DAY 4

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- [Work on Project]
- Participant Project Presentation (15 minutes each)

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- Participant Project Presentation -- Continued
- Feedback from Participant Audience
- Submission of Packaged Output (in single digital folder) to LCDR Baylon
- Awarding of Certificates and Closing Remarks

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