



ALUMNI WORKSHOP OF IHO-ROK CATEGORY "A" PROGRAMME AT THE USM, USA

sponsored by the Republic of Korea (Busan, 12 - 14 September 2023)

LT. MARLON E ESTROPIA

Chief Survey Officer – BRPH VENTURA

National Mapping and Resource Information Authority - Philippines



LAYOUT OF PRESENTATION

- Self Introduction
- Current Work Designation
- Current Work Responsibilities
- Trainings conducted Since Graduation as Speaker
- Accomplishments/Application to work Since Graduation

SELF-INTRODUCTION

- MARLON E ESTROPIA
- 2022 Graduate of MS in Hydrographic Science
- Hydrography of the Navy Award
- Undergraduate Degree: BS in Electronics Engineering
- Technological University of the Philippines



Figure 1. 2022 Graduate sponsored by ROK-KHOA



Figure 2. Lt. Estropia receiving Certificate for Hydrography of the Navy Award

CURRENT WORK DESIGNATION

- Chief Survey Officer of BRPH VENTURA
 - Multi disciplinary platform: MBES, SBES, SSS and ADCP and Sub-bottom profiler
 - With smaller platform for SBES and Shallow Water MBES
- Assistant Training Officer
- Lieutenant

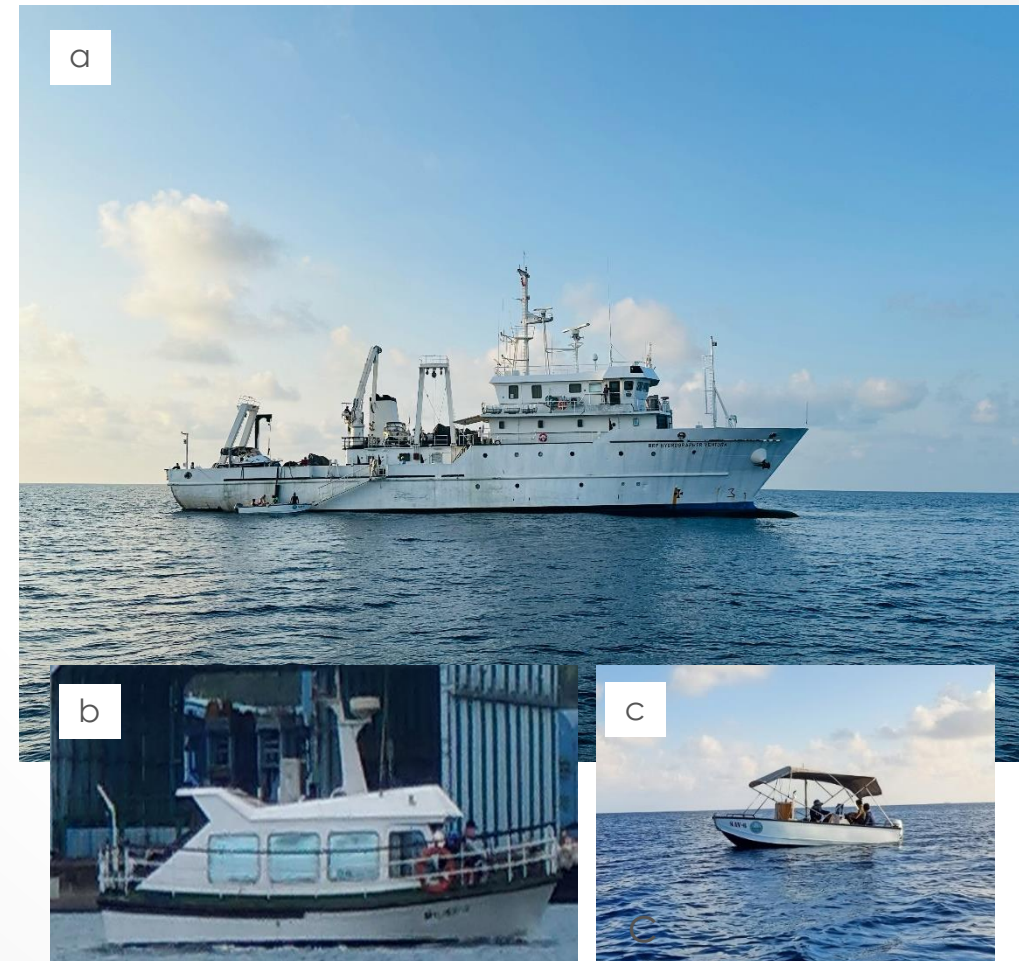


Figure 3. (a) BRPH VENTURA, (b) Motor Launch and (c) survey skiffs



CURRENT WORK RESPONSIBILITIES

1. As Chief Survey Officer, prepare data acquisition plans for the hydrographic, topographic and oceanographic survey activities of the Command.
2. Supervise the overall execution of the hydrographic, topographic and oceanographic related to the completeness and quality of data.
3. Supervise the overall data processing of hydrographic and topographic data ensuring that standards are met.
4. Prepare descriptive reports, smooth sheets and project deliverables.
5. As Assistant Training Officer, assist the Executive Officer in providing trainings to Junior Officers specifically related to hydrography.



TRAININGS CONDUCTED SINCE GRADUATION AS SPEAKER

- **Basic Hydro training Module I- NAVMETOC – Instructor**
 - Naval Meteorological and Oceanographic Center (NAVMETOC) of the Philippine Navy (PN)
- Topics: Geodesy and Positioning, Water Levels and Flow, Bathymetry, Hydrographic Practice, and Hydrographic Data Handling. The program was part of NAMRIA's efforts to provide technical assistance to other national government agencies.

Figure 4. Participants of the Hydro Training from NAVMETOC-PN





TRAININGS CONDUCTED SINCE GRADUATION AS SPEAKER

- **Virtual Hydrographic Survey Seminar for Geodetic Engineers of the Philippines-National Capital Region (GEP-NCR), in partnership with NAMRIA**
- Topics: Introduction to Hydrography; Water Levels and Flow, Depth Determination and Hydrographic Survey Practice; System Familiarization, Calibration, and Installation; Topographic and Hydrographic Survey; Survey Data Processing; and Preparation of Data Deliverables.



Figure 5. Participants of the Hydro Training from GEP-NCR

ACCOMPLISHMENTS/APPLICATION TO WORK SINCE GRADUATION

- **Lead the Creation of Instructional Videos for new hires and seminars covering the following activities:**
 - Bar Check Calibration/Chain Measurement
 - Base Station Set-up
 - Data Acquisition (MBES and SBES)
 - Data Processing(MBES and SBES)
 - Patch Test Calibration
 - Project Preparation in Hypack
 - SBES Setup
 - Topographic Survey

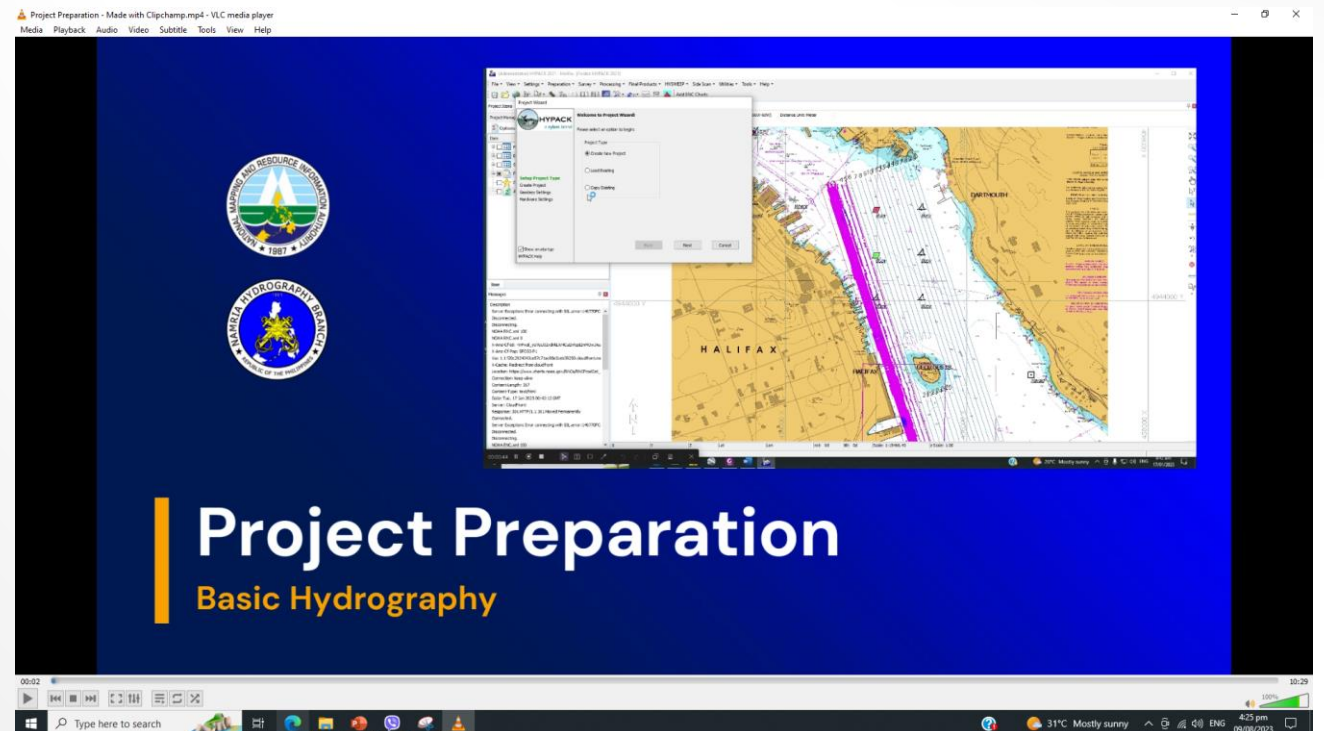


Figure 6. Sample Video Tutorial



ACCOMPLISHMENTS/APPLICATION TO WORK SINCE GRADUATION

- AS CHIEF SURVEY OFFICER
- **Offshore Hydrographic Survey of Archipelagic Waters and Marine Internal Waters: Coast of Zambales and Bataan - 04-06 October 2022**
 - Approx 697 sq. km Multibeam Survey

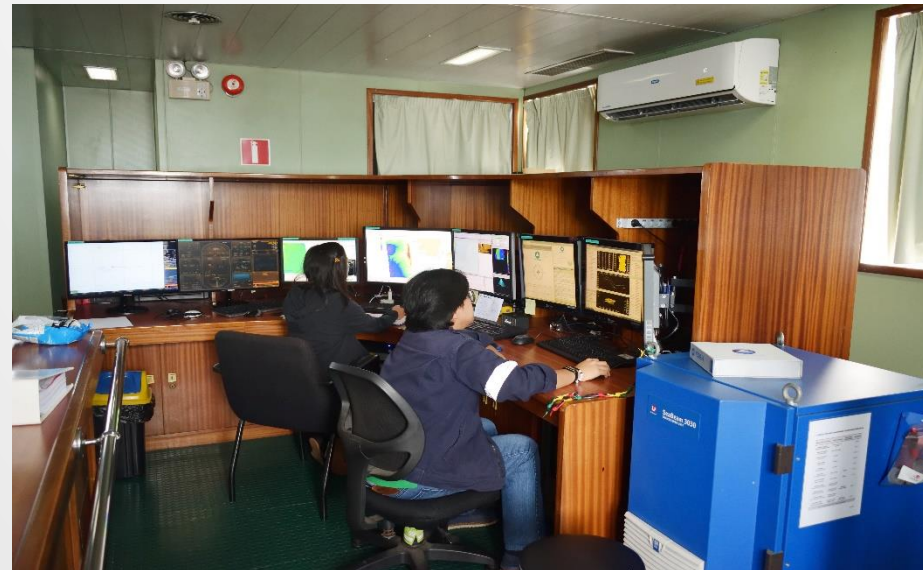


Figure 6. Data Acquisition inside BRPH VENTURA

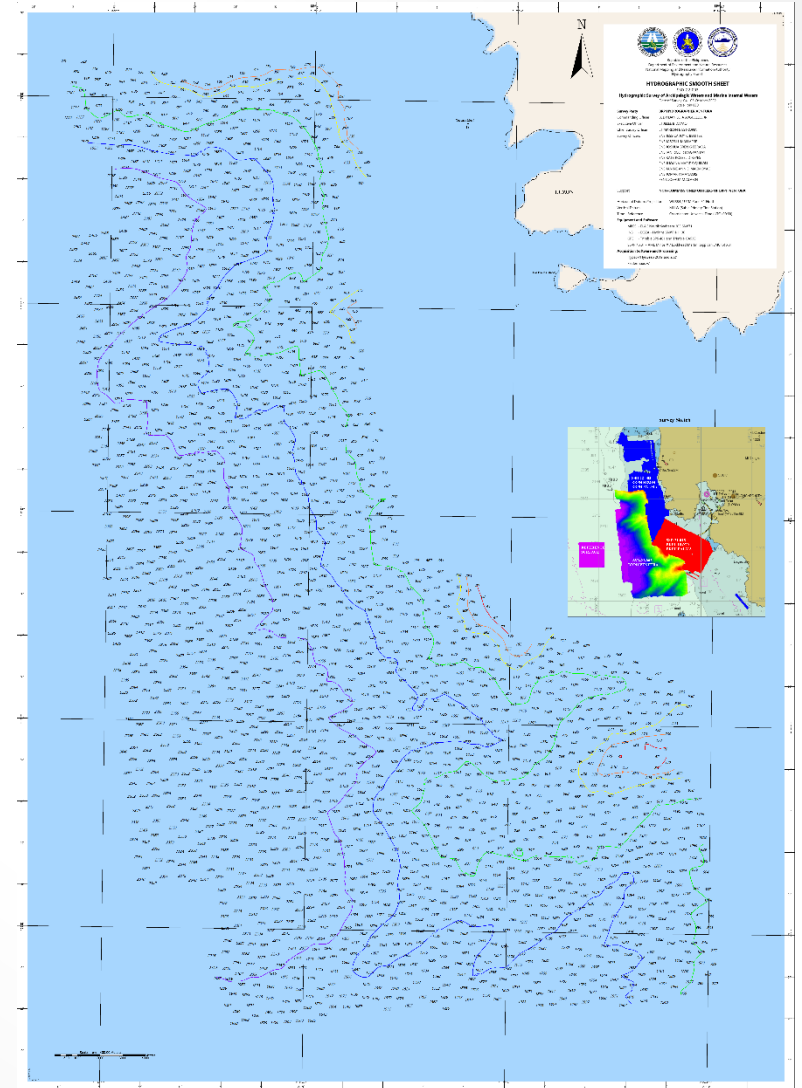


Figure 7. Final Smooth Sheet of the Survey

SURVEY ACCOMPLISHMENTS/APPLICATION TO WORK SINCE GRADUATION

- AS CHIEF SURVEY OFFICER
- **PORTS AND HARBOR SURVEY**
 - **Hydrographic Survey of Hidden Beach, Subic Bay and Vicinity (MBES and SBES) - 17 January – 02 March 2023**
 - Topographic Survey
 - Survey Verifications of underwater pipelines and wrecks

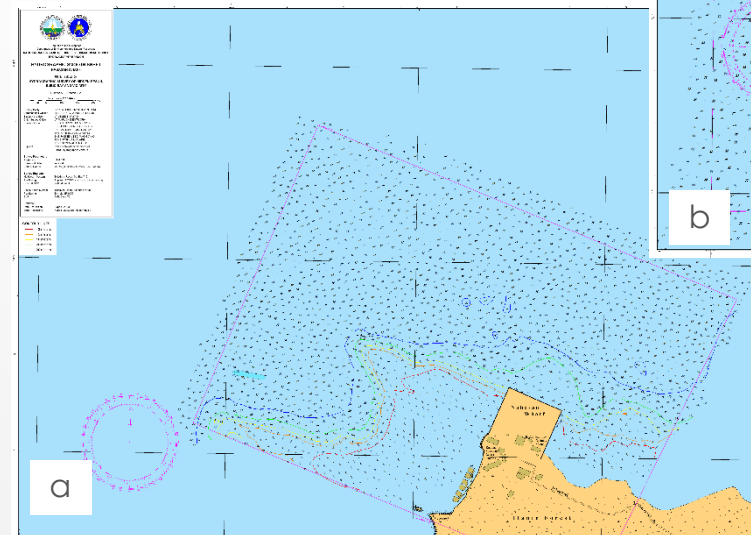
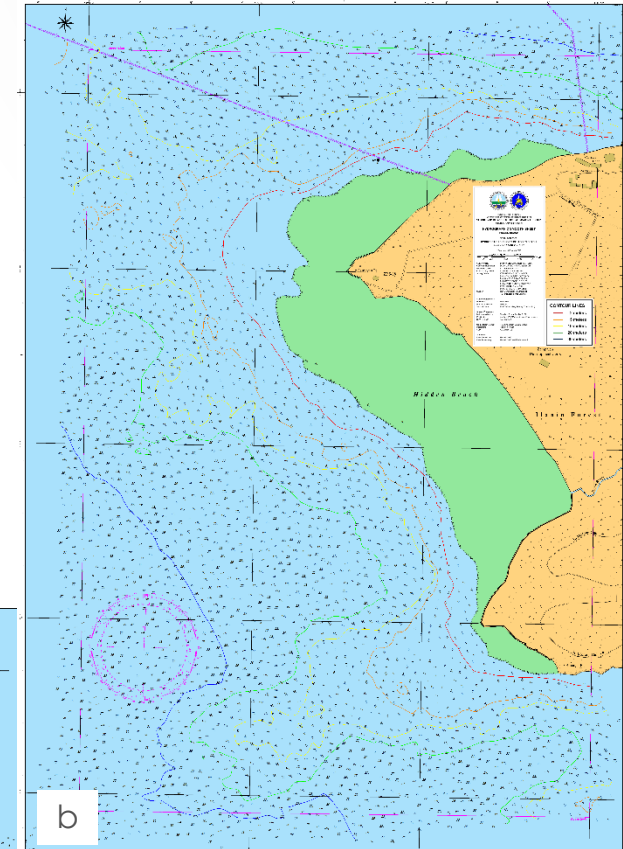


Figure 8 a and b. Final Smooth Sheet of the Survey

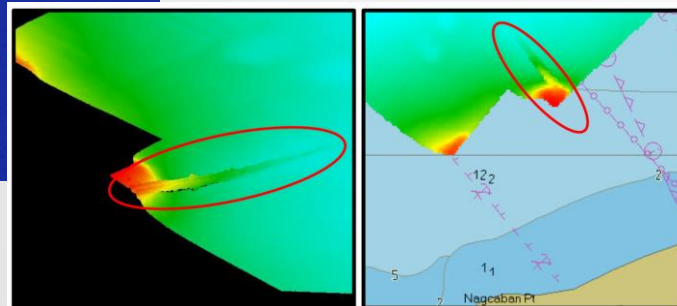
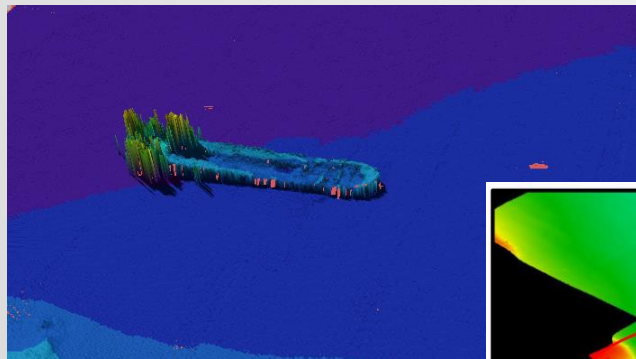


Figure 9. (a) Wreck and (b) pipeline verification survey

SURVEY ACCOMPLISHMENTS/APPLICATION TO WORK SINCE GRADUATION

- AS CHIEF SURVEY OFFICER
- **Search for the M/T Princess Empress Hydrographic Survey Survey Duration: 4 -10 March 2023**
- tanker MT Princess Empress, which sank off the coast of Oriental Mindoro with 800,000 liters of industrial fuel oil on February 28, 2023 causing massive oil-spill
- [Sunken oil tanker MT Princess Empress finally located | Inquirer News](#)



Figure 10. Oil Spill cause by sunken MT Princess (photo from: [MT Princess Empress: A sunken oil tanker is threatening biodiversity in the Philippines. And it could take months to contain | CNN](#))

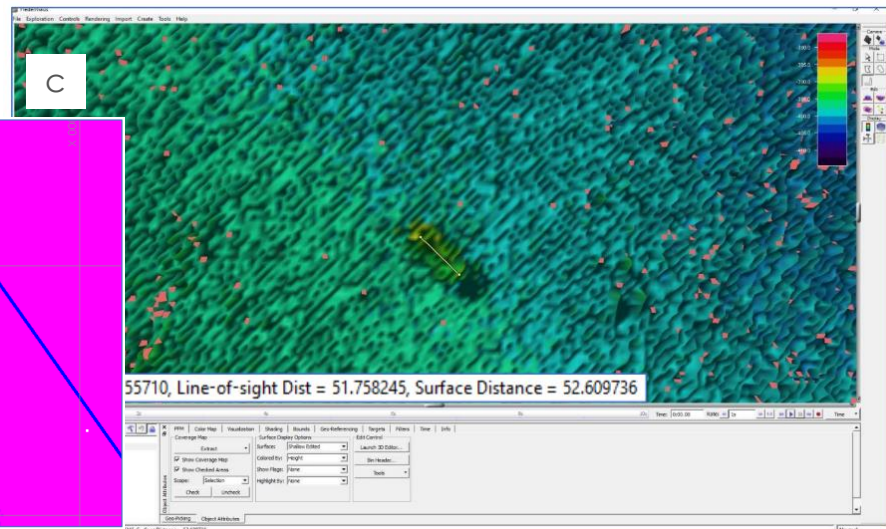
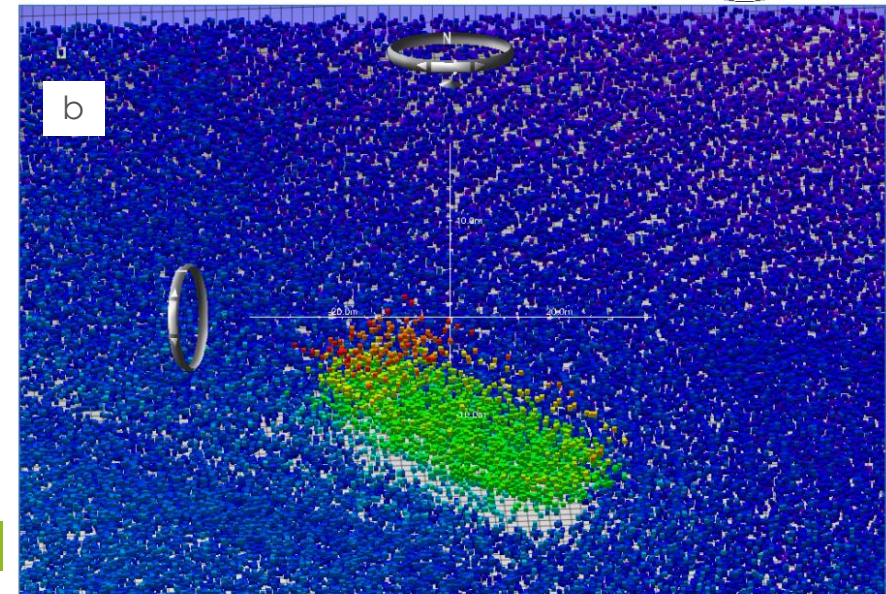
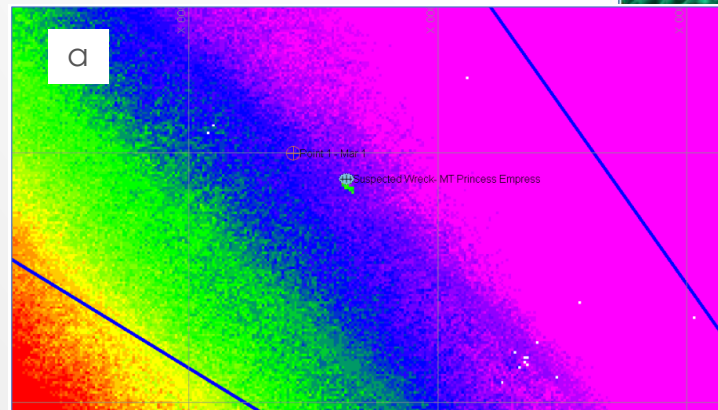


Figure 11 (a) Location of MT Princess with (b) perspective view and (b) top on Fledermaus

SURVEY ACCOMPLISHMENTS/APPLICATION TO WORK SINCE GRADUATION

- AS CHIEF SURVEY OFFICER
- **Hydrographic Survey of Pag-asa Island, KIG and Vicinity - 17 April 2023 – 08 June 2023**
- Ports and Harbor and Offshore survey Using multiple platforms (MBES and SBES)

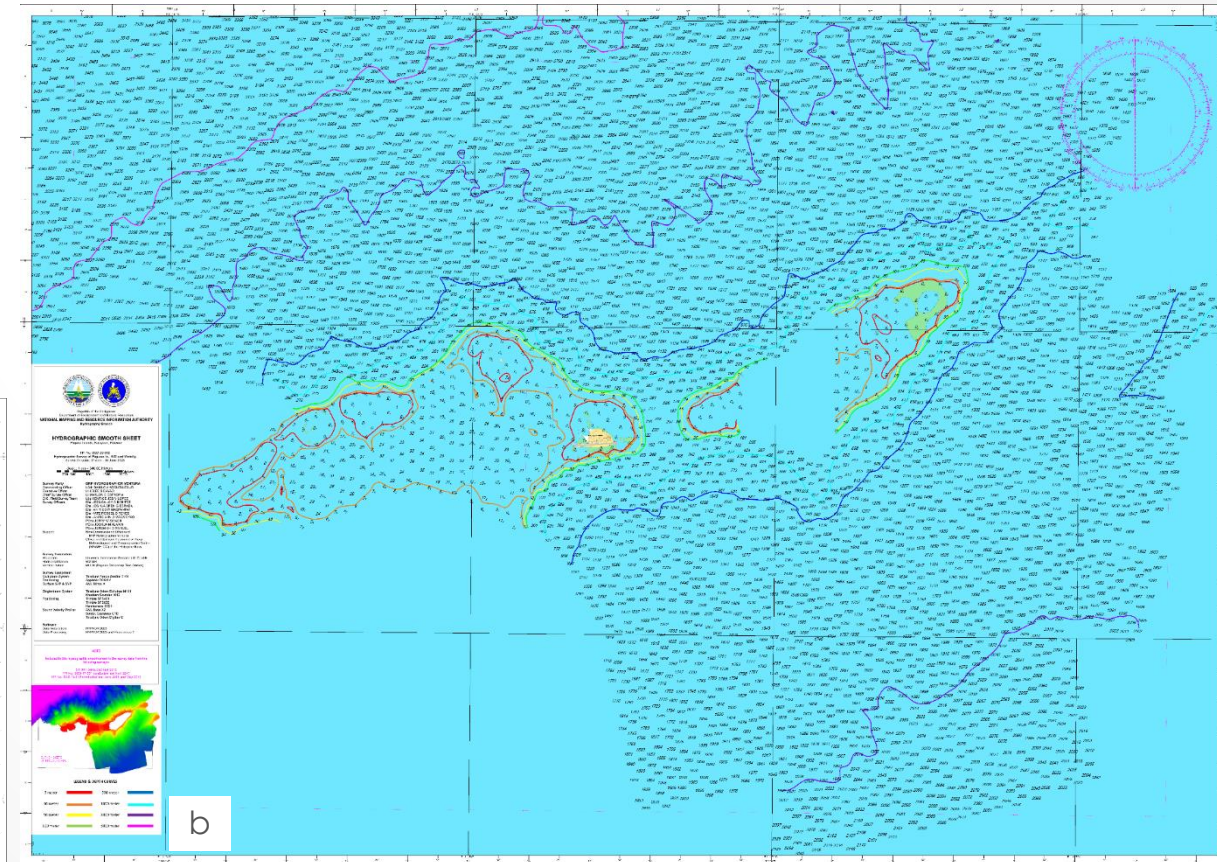
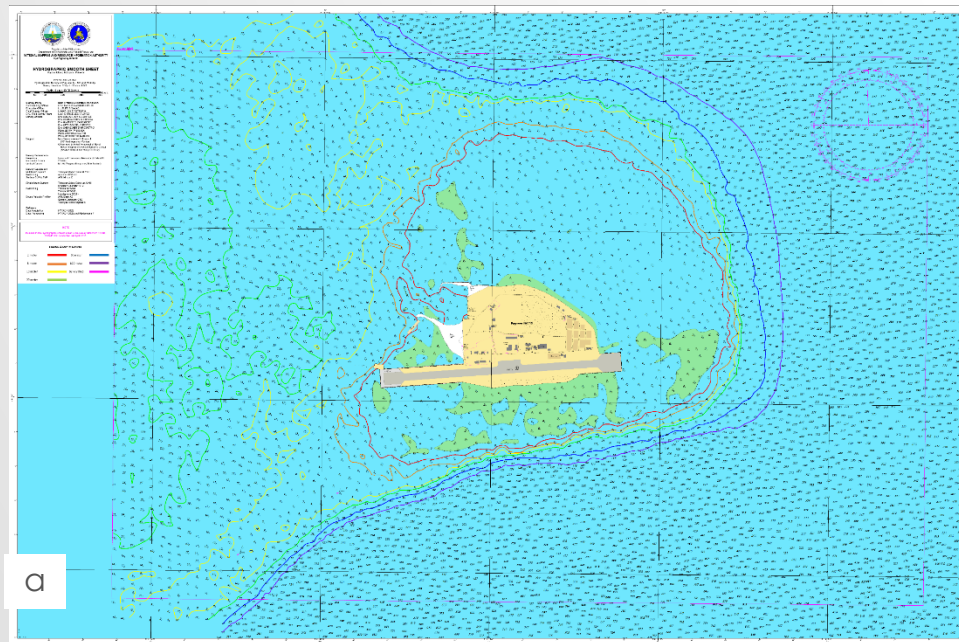


Figure 11 (a) Final smooth sheet (1:4,000) and (b) smooth sheet of 1:300,000 scale chart

SURVEY ACCOMPLISHMENTS/APPLICATION TO WORK SINCE GRADUATION

- AS CHIEF SURVEY OFFICER
- **Hydrographic Survey of Pag-asa Island, KIG and Vicinity - 17 April 2023 – 08 June 2023**
- Topographic Survey and Physical Oceanographic Survey

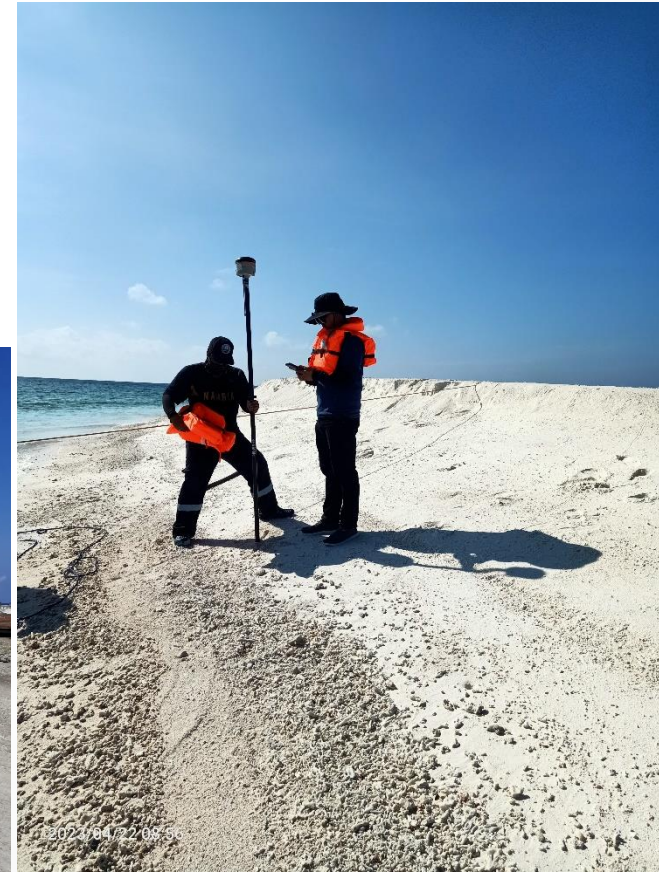


Figure 12 (a) Tidal Installation, (b) Leveling (C-Check) and (c) Topographic Survey

Thank you!

