KEMENTERIAN PERHUBUNGAN REPUBLIK INDONESIA
DIREKTORAT JENDERAL PERHUBUNGAN LAUT

MINISTRY OF TRANSPORTATION OF THE REPUBLIC OF INDONESIA
DIRECTORATE GENERAL OF SEA TRANSPORTATION

SERTIFIKAT KETERAMPILAN
CERTIFICATE OF PROFICIENCY

Nomor Seri / *Serial No.*
CP4287993

Nomor Sertifikat / *Certificate No.*
6202115713280321

Dengan ini dinyatakan bahwa
This is to certify that

Nama / *Name* :: **TEGAR ARMIANTO**

Tempat dan tanggal lahir / *Place and date of birth* : JAKARTA , 05 October 1993

telah menyelesaikan pelatihan dan lulus evaluasi :
has completed approved training and passed the assessment of

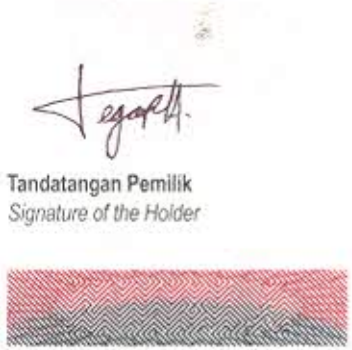
OPERATIONAL USE OF ECDIS TRAINING PROGRAMME

yang dilaksanakan oleh : PIP Semarang
which has held by

di : Semarang
at : 15 February 2021 to 19 February 2021

Sesuai ketentuan STCW 1978 beserta dengan amandemennya, Peraturan : Chapter II Section A-II/1, A-II/2 STCW 2010
in accordance with the provisions of STCW 1978 as amanded, Regulation *Chapter II Section A-II/1, A-II/2 STCW 2010*
yang telah mendapat pengesahan dari Direktorat Jenderal Perhubungan Laut selaku Administrasi.
which has been approved by the Directorate General of Sea Transportation as Administration.

Tandatangan Pemilik
Signature of the Holder



PIP Semarang

Semarang , 08 April 2021
An. Direktur Jenderal Perhubungan Laut
O.b. Director General of Sea Transportation
Ketua/Direktur/Kepala
Principal/Director/Head

POLITEKNIK ILMU PELAYARAN SEMARANG

Dr. Capt. MASHUDI ROFIK, M.Sc

ELECTRONICS CHART DISPLAY AND INFORMATION SYSTEM (ECDIS)
Subject Area
Based on Reg. II/1, II/2, II/3 and STCW 2010 Code Section A-II/1, A-II/2, A-II/3

1. Use of ECDIS to Maintain the Safety of Navigation

1.1 Knowladge of th capability and limitation of ECDIS Operations
- 1.1.1 A thorough understanding of Electronic Navigational Chart (ENC) data, data accuracy options and other chart data formals
- 1.1.2 The dangers of over-reliance
- 1.1.3 Familiarity with the fuctions of ECDIS required by performance stanadards in force

1.2 Prificiency in operation, interpretation, and analysis of information obtained from ECDIS
- 1.2.1 Use of fuctions that are integrated with other navigation systems in various instalations, including proper functioning and adjustment ti desired settings
- 1.2.2 Safe monitoring and adjustment of information, including own position, sea area display, mode and orientation, chart data displayed, route monitoring, user-created information layers, contacts (when interfaced with AIS and/or radar tracking) and radar overlay functions (when interfaced
- 1.2.3 Confirmation of vessel position by alternative means
- 1.2.4 Efficient use of setting to settings to ensure conformance to operational procedures, including alarm parameters for anti-grounding, proximity to contacts and special areas, completeness of chart data and chart update status, and backup arrangements
- 1.2.5 Adjustment of setting and values to suit the present conditions
- 1.2.6 Situational awareness while using ECDIS including safe water and proximity of hazard, set and drift, chart data and scale selection, suitability of route, contact detection and management, and integrity of sensors

2. Maintain the Safety of Navigation through the use of ECDIS and associated Navigation Systems to assist Command Decision Making

2.1 Management of operational procedures, system file and data
- 2.1.1 Manage procurement, licencing and updating of chart data and system software to conform to established procedures
- 2.1.2 System and information updating
- 2.1.3 Create and maintain system configuration and backup files
- 2.1.4 Create and maintain log files in accordance with established procedures
- 2.1.5 Create and maintain route plan files in accordance with estabilished procedures
- 2.1.6 Use ECDIS log-book and track history functions for inspection of system functions, alarm setting amd user reponses

2.2 use ECDIS playback functionality for passage review, route planning and review of system functions

3. Assessment and Evaluation