



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.

CP 1235059

Dengan ini dinyatakan bahwa  
*This is to certify that*

Nama  
*Name*

**ALVI WAHYU ADITA**

Tempat dan tanggal lahir : **PEKALONGAN, 18 March 1992**  
*Place and date of birth*

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

**OPERATIONAL USE OF ECDIS TRAINING PROGRAMME**

yang dilaksanakan oleh : **PERTAMINA MARITIME TRAINING CENTER**  
*which has held by*

di : **JAKARTA**  
at : **25 January 2016 to 29 January 2016**

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 amended, Regulation*  
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*



34-16-002-0028



**JAKARTA, 29 January 2016**

An. Direktur Jenderal Perhubungan Laut  
*For Director General of Sea Transportation*

Sesuai/Direktur/Kepala  
*Principal/Director/Head*

**Capt. SUHENDAR WIJAYA, MM**



# OPERATIONAL USE OF ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEMS

## Subject Area

Based on STCW 1978 as Amended

Chapter II section A-II/1 and IMO Model Course 1.27

1. Introduction of Electronic Chart Display and Information System (ECDIS)
2. Legal Aspects & Requirements
3. Principle types of Electronic Chart
4. ECDIS Data
5. Presentation of ECDIS Data
6. Sensors system
7. Basic Navigational Functions and Settings
8. Simulator Exercise I :
  - 8.1. Familiarization
  - 8.2. ECDIS Data
  - 8.3. Presentation of ECDIS Data
  - 8.4. Sensors
  - 8.5. Basic Navigational Functions & Settings
9. Specific Functions for Route Planning
10. Simulator Exercise II :
  - 10.1. Operate All Specific Functions and Obtain All Relevant Information for Route Planning from ECDIS
  - 10.2. Sea Area Selection
  - 10.3. Route Planning Information
  - 10.4. Construction of a Route
  - 10.5. Adjustment of a Planning Route
  - 10.6. Curved Track Planning
  - 10.7. Planning Notes
  - 10.8. Safety Values
  - 10.9. Check for Navigational Safety
  - 10.10. Ultimate Route
11. Specific Functions for Route Monitoring
12. Simulator Exercise III :
  - 12.1. Operate All Specific Functions for Route Monitoring and Obtain All Relevant Information for Navigation and for Ship's Safety
  - 12.2. Monitored Area
  - 12.3. Required Route
  - 12.4. Vector Time
  - 12.5. Check Measurements
  - 12.6. Look ahead Function
  - 12.7. Alarms
  - 12.8. Current and Wind
13. Updating
14. Display & Function of Other Navigational Information
15. Errors in Displayed Data
16. Errors of Interpretation
17. Status Indications, Indicators and Alarms
18. Documentation
19. Integrity Monitoring
20. Back up System
21. Risk of Over Reliance on ECDIS
22. Simulator Exercise IV :
  - 22.1. Production and Distribution of Updates, Manual, Semi-Automatic and Automatic Updating, Performing Updates on Board Updating and Safe Navigation
  - 22.2. Radar Superimposition, Automatic Track-Keeping, use of Transponders, SAR
  - 22.3. Potential Errors in the ECDIS Display, in the Display of Own Ship's Position, Correctness of Displayed Data
  - 22.4. Potential Errors of Interpretation and Take Proper Action to Avoid These Errors
  - 22.5. Definition & Meaning of Indicators & Alarms, Nautical Indications and Sensor Alarms, Data & Chart Alarms, Automatic Voyage Recording, Reconstruction of Past Track
  - 22.6. On-Line Test, Manual & Visual Tests, Verification of Proper Functioning
  - 22.7. Takeover by the Back-Up System
23. Review & Final Assessment

