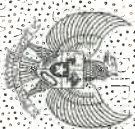




KEMENTERIAN PERHUBUNGAN REPUBLIK INDONESIA  
DIREKTORAT JENDERAL PERHUBUNGAN LAUT



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

**SERTIFIKAT KETERAMPILAN**  
**CERTIFICATE OF PROFICIENCY**

Nomor Seri/ Serial No.

**CP4528291**

Nomor Sertifikat/ Certificate No.

**6200017477031121**

Dengan ini dinyatakan bahwa

This is to certify that

**ILMA LUTFI**

Nama/  
Name:

Tempat dan tanggal lahir

**JEPARA, 15 March 1976**

Place and date of birth

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

**RADAR SIMULATOR**

yang dilaksanakan oleh **BINA SENA MARITIME TRAINING CENTER**

which has held by

di Jakarta  
at 07 August 2021 to 13 August 2021

Sesuai ketentuan STCW 1978 beserta dengan amandemennya, Peraturan Section A-II/1.5, A-II/2.2 STCW 2010  
in accordance with the provisions of STCW 1978 as amended, Regulation Section A-II/1.5, A-II/2.2 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.

**Jakarta, 31 August 2021**

Tandatangan Pemilik  
Signature of the Holder



**BINA SENA MTC**



**Dr. Direktur Jenderal Perhubungan Laut**  
**Utami, Direktur General of Sea Transportation**  
**Kepala/Direktur/Kepala**  
**Principal/Director/Head**

**FERRY PARANG TIRTA, S.Kom.**



## **RADAR SIMULATOR**

### **Subject Area**

**Based on Reg. II/1, II/2 and STCW 2010 Code Section A-II/1, A-II/2**

#### **Use of RADAR to Maintain Safety of Navigation**

1. Radar navigation
2. Knowledge of the fundamentals RADAR
3. Ability to operate and to interpret and analyse information obtained from RADAR
  - 2.1. Performance of:
    - 2.1.1 Factor affecting performance and accuracy
    - 2.1.2 Setting up and maintaining displays
    - 2.1.3 Detection of misrepresentation of information, false echoes, sea return, etc., racons and SARTs
  - 2.2. Use of:
    - 2.2.1 Range and bearing; course and speed of other ships; time and distance of crossing, meeting overtaking ships
    - 2.2.2 Identification of critical echoes; detecting course and speed changes of other ships; effect of changes in own ship's course or speed or both
    - 2.2.3 Application of the international regulation for preventing collision at sea, 1972, as amended
    - 2.2.4 Plotting techniques and relative – and true – motion concepts
    - 2.2.5 Parallel indexing
4. Evaluation of navigational information derived from RADAR in order to make and implement command decision for collision avoidance and for directing the safe navigation of the ship
5. Assessment and Evaluation