ANZAC Frigate Ship
2 x Diesel Engine MTU12V1163 TB83

Engine Room Simulator
ERS 5000 TechSim

The ANZAC Engine Room Simulator is developed to train and assess Officers and Technicians both in basic familiarisation and advanced operation of the ANZAC engineering/electrical systems.

Training Objectives
- Familiarisation with ANZAC Engine Room equipment
- System layout and flow diagrams
- Emission control and fuel economy management
- Control of the machinery
- Control system, automation, alarm and safety system
- Watch-keeping and troubleshooting
- Emergency operations
- Energy management
- Vessel resource management

Compliance With International Standards and Regulations
- Covers the essential areas of maritime training in full compliance with the STCW 2010 requirements
- Designed to meet the requirements of IMO Conventions and Resolutions and IEC standards
- Developed in accordance with DNVGL-ST-0033 Maritime Simulator Systems standard
- Has a statement of product quality according to the NK Standard for Certification of Maritime Education & Training Simulator Systems based on the latest STCW requirements and corresponding IMO model courses

Configurations: Solo, Network and Full Mission
- Principles of operation
- Advanced operations
- Resource Management training
- Diagnosis of engineering and electrical systems
- Human Factors training
- Communications protocols
- Emergency operating procedures
- Troubleshooting
- Machinery disaster management
- Final training and certification

![Engine Room Simulator](image1)
![Engine Room Simulator](image2)
Ship Model Specification

- 2 × Diesel Engine MTU12V1163 TB83
- ANZAC Class/modified MEKO type 200
- Joint operation with NTPRO simulator

<table>
<thead>
<tr>
<th>Vessel</th>
<th>Propulsion</th>
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<tbody>
<tr>
<td>Length</td>
<td>118 m</td>
</tr>
<tr>
<td>Beam</td>
<td>14.8 m</td>
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<tr>
<td>Draught</td>
<td>27 m</td>
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<thead>
<tr>
<th>Electric Power</th>
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<tbody>
<tr>
<td>4 × Ship Service Diesel Generator</td>
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<tr>
<td>812 kVA, 440V/60 Hz, 3 ph (diesel MTU8V 396 TE54 690 kW, 1800 RPM)</td>
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<tr>
<td>Two Main Switchboards (MSB) – FWD MSB and AFT MSB with</td>
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<td>cross-connection between MSBs</td>
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<tr>
<td>3 × Shore Connection Boxes</td>
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ANZAC Engine Room Simulator Features

- Remote control and monitoring of Propulsion Plant from the Navigational Bridge
- Remote control and monitoring from the Machinery Control Room
- Local control and monitoring from Engine Room compartments
- Imitation of Local Operating Panels
- Control, Monitoring and Alarm PC-based system
- Exhaust Gas emission monitoring and control
- Graphic presentation — performance analysis functionality
- Video Wall and Interactive system diagrams
- Training videos
- 3D Virtual Reality
- Touch Screen Solution