Centre for Maritime Simulations
A new realism in Maritime Simulation

AMC Search is a wholly owned subsidiary of the University of Tasmania.
Training In:
ECDIS, ARPA, AIS
High Speed Navigation
Maritime Resource Management (MRM)
Pilotage/Competency Audits
Tug Operations
Customised courses/Professional development programs
Simulation studies
Evaluating new and expanded port designs
Evaluating tug requirements
Extending port operational parameters
Standard operating/emergency procedures
Incident investigation
Handling of new, larger ships
Human factors
FPSO mooring
Human system integration
Whole port operations utilising ships, tugs and Vessel Traffic Services
Full Mission Bridge
- DNV Class A standard
- Horizontal field of view—240° + 15° + 15°
- Vertical field of view—35° - above horizon 18°, below horizon 17°
- 5 x Panasonic 4k projectors, projecting onto a 7.5m radius screen
- 2 x ARPA radars
- 2 x ECDIS
- 1 x GPS Qastor Pilotage Chart Display
- KPOS DP control
- Capability to connect Clients Portable Pilotage Unit via Cable or Bluetooth
- Participant controlled shift of visual, via joystick or step shift, includes pan and tilt
- Binocular channel, and search light
- Birds eye view
- 2 x Engine Telegraph controls
- 2 x Thruster controls
- 2 x Azi Pod controls
- Ships helm with Follow Up, Non Follow Up and Auto Pilot controls
- Split rudder controls
- Multi media control station
- 1 x ARPA radars, 1 x ECDIS with docking mode, track control, and track control or offshore survey screen capability
- 2 Main propeller /pitch controls,
- Up to 4 x Azipod controls
- 2 x Tunnel Thruster controls
- Manual Lever / Joystick / DP Thruster Control
- K-Pos DP 21 DP Control System SW Basis 7 with three models (Offshore Supply/Subsea Construction Vessel, DP Shuttle Tanker, Semi Submersible Drilling/Accommodation)
- C-Joy Independent Joystick
- Manual hydraulic winch control with tension sensor input

Dynamic Positioning Mini Bridge
- Horizontal field of view - 206° forward
- Vertical field of view - 42° - above horizon 28° and below horizon 14°
- Participant controlled shift of visual, via joystick or step shift, includes pan and tilt
- 1 x ARPA radars, 1 x ECDIS with docking mode, predictors, and track control or offshore survey screen capability
- 2 Main propeller /pitch controls,
- Up to 4 x Azipod controls
- 2 x Tunnel Thruster controls
- Manual Lever / Joystick / DP Thruster Control Selector Switch
- K-Pos DP 21 DP Control System SW Basis 7 with three models (Offshore Supply/Subsea Construction Vessel, DP Shuttle Tanker, Semi Submersible Drilling/Accommodation)
- C-Joy Independent Joystick
- Manual hydraulic winch control with tension sensor input

Functional Capabilities Include
- 6° of freedom (DOF) own ships and tugs
- Dynamic sea, swell and wind effects, including shadowing effects and environmental sound
- Client data input for tide and currents
- 6 Channel de-brief room
- Digital recording of all simulation exercises
- Visual and audio recording of simulation exercises

Debriefing Room
- 6 Wall mounted screens allowing display of Main Bridge Visual channels as well as information from either of the bridges such as: ECDIS Display, Radar Display, Conning Display, CCTV (with or without audio)
- 60° electronic chart table with touch controls and replay functionality, giving participants and observers details such as:
  - Course and Speed
  - Helm, Engine, and Thruster Orders
  - Tug forces
  - Vessel swept path
  - Environmental data – wind, currents, etc
  - Capability to measure ranges and bearings
  - Capability to make annotations on the charted display
- Ability to export the charted image and associated data and annotations to PDF for inclusion in the Final Report.
- Conference room fitted with projector and whiteboard

6 X Ship Operations Cubicles
- Horizontal field of view 150° (5 x 48” plasmas)
- 2 x ARPA radars, 2 x ECDIS with track control
- Full suite of bridge equipment
- 1 Bridge is equipped to carry out Vessel Traffic Services functions
- 2 Bridges mounted back to back and can be customised to show 300° HFOV, for towing and/or anchor handling

Modelling Stations
- 3 x Visual system and area modelling stations
- 2 x Ship hydrodynamic modelling stations
- In-house modelling capability for ships and areas

Web Enabled Simulator
- A reduced capability simulator that can be installed at a client’s site as per their requirements
- Utilises same software and modelling calculations as used in Centre for Maritime Simulations at AMC
- Requires internet connection to CMS at AMC

Options available to users include:
- Number of visual channels
- Hardware controls for engine, rudder, and/or thrusters
- Access to a number of vessel models from the AMC CMS Open Library
- Capability of integrating with Portable Pilotage Units

Uses include:
- Port familiarisation
- Low level feasibility studies
- Contingency response
- Bridge Resource Management training
- Remote technical support and facilitation available

Debriefing Room
Counselling/Conference Room
Dynamic Positioning Unit

AMC SEARCH
COMMERCIAL ARM OF THE AUSTRALIAN MARITIME COLLEGE

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