



ASTT – ACTION SPEED TACTICAL TRAINER

The primary training focus of Rheinmetall Electronics' Action Speed Tactical Trainer (ASTT) is the delivery of knowledge and skills required for tactical decision making under conditions of uncertainty and time pressure.

Specifically the ASTT can be used to conduct courses for officers or ship teams and crews with different skills and at different levels:

- Operator training
- Tactical training
- Operational training

An ASTT typically provides the following facilities, however customers may define different variations:

- Trainee cubicles
 - Task group cubicles of type I, II or III
 - Staff room cubicles
 - Bridge team cubicle (optional)
 - Planning rooms for exercise development and preparation
 - Briefing rooms for student briefings and task group debriefings
- Game controller facility for exercise control
- Debrief facility/auditorium
- Trainer support facility incl. DIS linking module for shared exercises with compliant simulators

By varying trainee cubicle types, their sizes and their equipment typical command chains can be reflected where e.g.

- **Task Group Cubicle Type III** simulate big size ships (e.g. frigates). These can be used for platforms hosting the Commander Task Group (CTG).
- **Task Group Cubicle Type I and II** represent the Task Group Units, like smaller (e.g. patrol boats or submarines) and medium size ships (e.g. corvettes) or helicopters
- **Staff Rooms** representing a Maritime Headquarter

The Bridge Team Cubicle (BTC) opts for several goals. It first puts a special emphasis on two of the main key players, the bridge and the CIC team. Secondly and equally important, it focuses on one of the major challenges on board, which is information flow.

Offering the possibility of working together simultaneously enhances the interaction and competent co-operating of both teams e.g. for manoeuvres or internal procedures.

Furthermore, BTC's training of external general, especially tactical communications with the means of radio communications, message handling or tactical data link improves the professional handling of any situation of interest.

Another advantage derives from its connectivity. The BTC can be linked to any other trainee cubicle of the ASTT via the Cubicle Combination Capability. The BTC then represents the bridge of the own ship, while the merged cubicle serves as the CIC.

Finally and no less important, all RME ASTTs allow the beneficial integrability into wider simulation networks with regards to creation of distributed exercise and training environments. A possible setting could be to navigate tactically one own ship with the bridge part of the BTC, and to train the CIC team from another trainee cubicle.

The Bridge Team Cubicle is fitted with the following equipment:

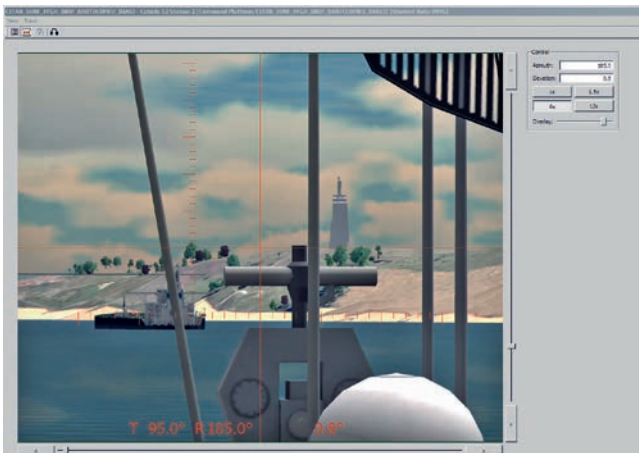
- **180° bridge view** with five 55" displays
- **Navigation console** with touch screen, steering wheel and EOT for issuing guidance command to the own ships
- Two **vertical consoles** with radar information and **BINO views**
- **Chart/plotting table** providing manual and automatic plotting capabilities on digital ENC or paper charts
- **Overhead panel** with own ship data, e.g. course, speed and relative wind

Four dedicated student role profiles will tailor the HMI's of the bridge consoles towards the needs and tasks of the bridge team's operators:

- Role "Helmsman" for navigation console
- Role "Officer of the Watch" for chart/plotting table
- Roles "Watchman Port" and "Watchman Starboard" for the vertical consoles

Concisely, the Bridge Team Cubicle provides the following additional benefits for an ASTT:

- Tactical Training between Bridge and CIC plus
- Communication flow between Bridge and CIC teams plus
- Optimization of information flow, decision-making and combination of procedures with emphasis on training bridge teams in specific tactical scenarios plus
- Visual identification via bridge and BINO views for the picture compilation process



BINO view at watchman station starboard



Navigation console

Front page: Overview Bridge Team Cubicle