



FAST ATTACK CRAFT SIMULATOR

Realistic, modular, mission-ready training for modern naval operations

The Fast Attack Craft (FAC) Simulator delivers high-fidelity, fully integrated training for ship handling, navigation, combat tactics, and remote-weapon engagement. Built for realism, safety, and repeatability, it enables operators to rehearse mission-critical skills in a fully immersive, non-destructive environment.

An integrated Instructor Operator Station (IOS) provides scenario control, environmental modulation, automated scoring, and objective performance analytics.

CORE CAPABILITIES

- Immersive visualization of coastal and open-sea scenarios
- Precision propulsion & steering controls with force feedback
- Remote Weapon Station (RWS) simulation with EO/IR sensors & stabilization
- Radar, ARPA & ECDIS procedures for degraded-visibility operations
- COLREGS-compliant navigation, passage planning & situational assessment
- High-density traffic, harbor approach & close-quarters maneuvering
- Integrated bridge workflows with full sensor suite
- IOS-based scenario creation, control & real-time performance monitoring



OPERATIONAL USE CASES

- **Operator Training:** Ship handling, maneuvering, collision avoidance, SAR
- **Combat Readiness:** Target acquisition, engagement under RoE, threat response
- **Team Coordination:** Multi-operator combat drills
- **Tactical Training:** Close-range defense, asymmetric threat response, attack profiles

WEAPON SYSTEMS & TARGETING

- Weapon stabilization during maneuvering & sea-state motion
- Automatic Target Tracking (ATT)
- Simulated laser range finding for ballistic computations
- Configurable crosshairs/reticles by weapon type
- Environmental effects: IR bloom, haze, sea clutter
- Multi-target engagement & fire-control drills under motion and stress



Training Benefits

- Reinforces spatial orientation & situational awareness
- Conditions operators for fatigue, recoil & platform instability
- Enhances kinesthetic response & combat decision-making

INSTRUCTOR OPERATOR STATION (IOS)

IOS provides adaptive scenarios, real-time analytics & automated evaluation.

Core Functions

- Scenario creation with customizable vessels, environments & missions
- **Environmental controls:** wind, current, fog, swell, precipitation
- **Fault injection:** hardware failures, sensor errors, comms faults
- **Live monitoring:** actions, timing, errors, tactical decisions
- **Playback & debriefing:** multi-camera replay, heatmaps, scoring reports.



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