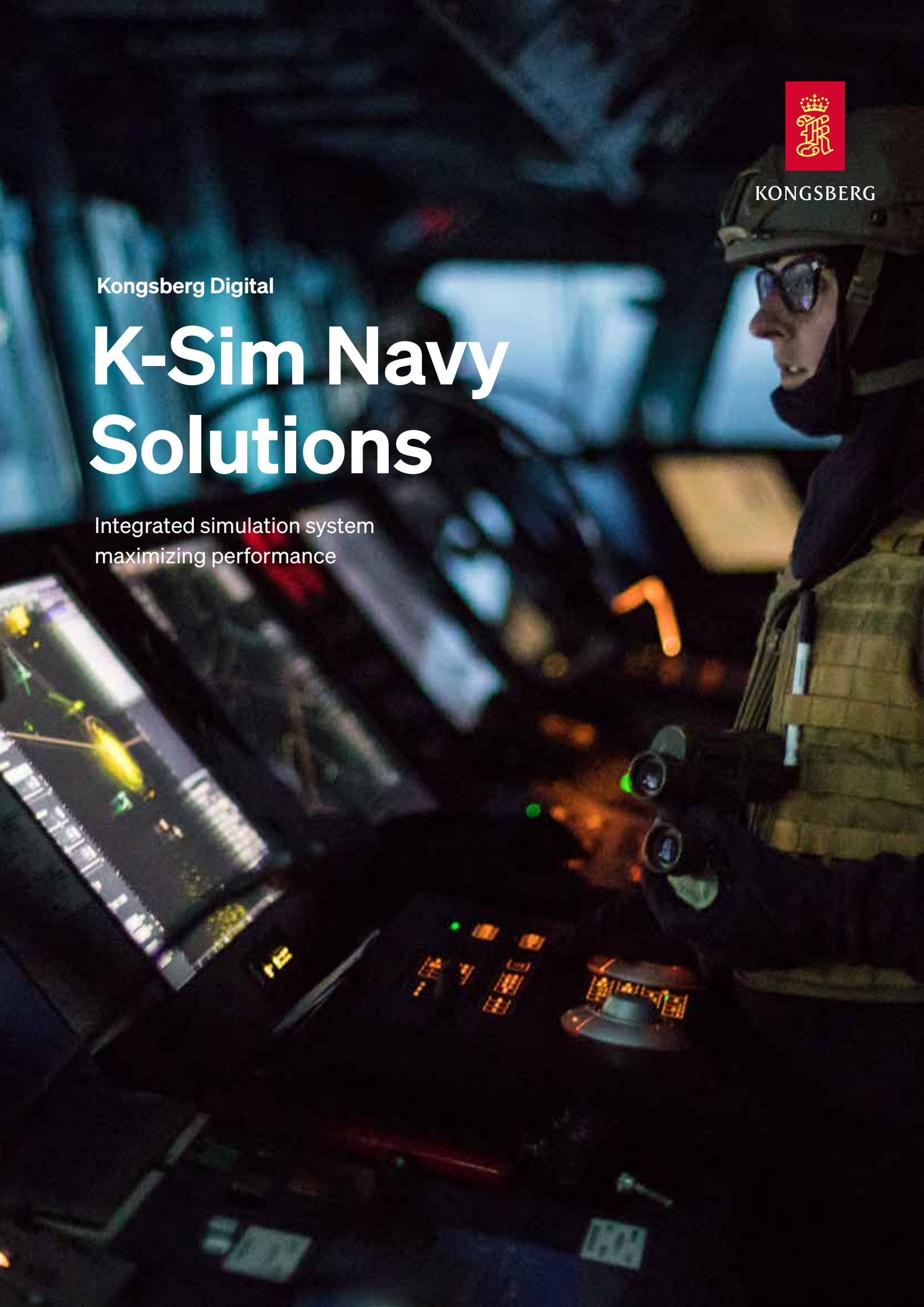

KONGSBERG

Kongsberg Digital

K-Sim Navy Solutions

Integrated simulation system
maximizing performance

Maximizing performance

With over 200 years of expertise, KONGSBERG provides state-of-the-art simulators, delivering realistic, cost-effective training without the risks and logistical constraints of live exercises. Our simulators offer recruits and officers immersive and highly realistical environments to prepare for missions and specific scenarios.

Flexible and customizable, the range of K-Sim simulators are vital for building competence across vessel operations, including navigation, engine control, safety, and fast craft deployment. By combining different simulators, teams can conduct complex, integrated training that covers all aspects of vessel operations within a single exercise.

KONGSBERG remains committed to developing advanced, strategic solutions worldwide.

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Meeting your exact training requirements

Complete Team Training with Integrated Simulators

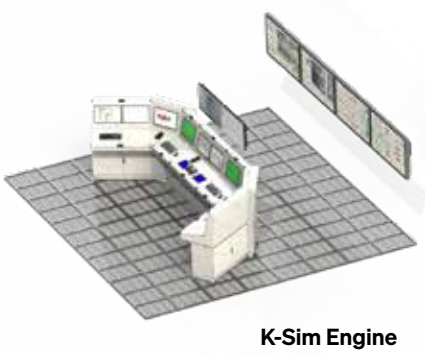
The K-Sim product family provides advanced, integrated solutions for interdepartmental crew training. By interfacing different K-Sim simulators crews gain comprehensive, realistic training across all critical functions.

No matter

the scenario...

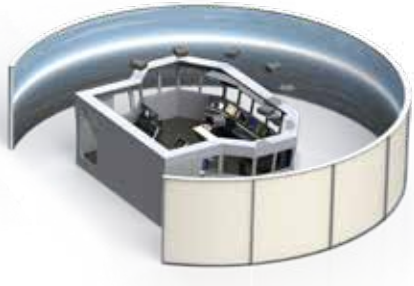
we have the exact

...simulators to connect for the ultimate crew training



K-Sim Engine

DIS/HLA Integration with CIC



K-Sim Navigaton

DIS and HLA Interface

K-Sim Navigation supports interoperability through Distributed Interactive Simulation (DIS) and High-Level Architecture (HLA) standards, enabling seamless integration with other systems.

Through the exchange of information with other simulators, trainees will integrate with other training personnel within a larger federated system of combat operations teams, aircraft, and land-based vehicles.

The Human Factor in Training

The integrated solution enables focus on key human factors development such as:

- Situational awareness
- Teamwork and interaction
- Effective internal and external communication
- Leadership and decision-making skills

Extensive Training Possibilities

K-Sim Navigation offers extensive training options and customized course development in line with international standards, covering:

- Procedure development, validation, and testing
- Bridge Resource Management (BRM)
- Engineering Resource Management (ERM)
- Engineering studies
- Concept testing and verification
- Crew competence screening

Supporting Research & Development

In addition to standard and special task training, K-Sim Navigation enables testing and R&D for:

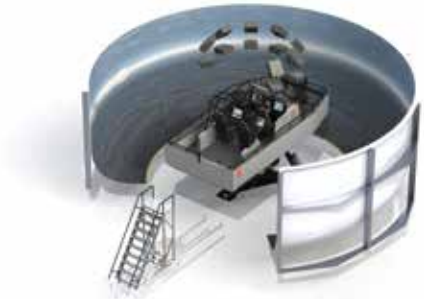
- Rapid prototyping
- Vessel behaviour studies
- Fuel economy studies
- Operator fatigue studies
- Port and fairway development studies

VR and MR Systems

K-Sim Safety

ensuring your team will be

...enhancing performance



K-Sim Fast Craft

K-Sim Cargo

K-Sim DP

K-Sim® Navigation

- world class maritime simulation

With a multitude of vessels, navigation aids, objects, avatars and geographical areas with all possible weather conditions, K-Sim Navigation enables a vast amount of training options.

Designed to Enhance Competence

K-Sim Navigation is designed to develop best practices and build competence for advanced maritime operations. Powered by a sophisticated physics engine, it offers high-fidelity hydrodynamic modeling, enabling vessels, objects, and equipment to behave with realistic interactions that significantly enhance training quality. With a state-of-the-art visual system and multiple integration options for additional equipment and simulators, K-Sim Navigation sets the standard in comprehensive maritime training.

Fully-Equipped Training Environment

The K-Sim Navigation full mission bridge replicates real-world vessel instrumentation, providing trainees with authentic controls and functionality for ship handling, navigation, and communication exercises. Standard bridge panels and controls are included, while custom naval options—such as Helicopter Status, Weapons Directing, Fleet Maneuvering, and Replenishment at Sea panels—equip student bridges for specialized naval training.

Unmatched Realism in Vessel Modeling

K-Sim Navigation features a broad range of hydrodynamic ship models, each with six degrees of freedom for precise vessel motion. Models can include dynamic loading, ballast control, and optional load calculator integration to simulate real loading conditions for large supply vessels, as well as damage control states.

The advanced physics engine provides 3D hull collision detection and enables realistic interaction with shore structures, vessels, and other maritime objects. It accurately simulates line, wire, and chain behavior, calculating forces and winch loads in detail for training in complex operations such as Replenishment at Sea (RAS), towing, and mooring.

Realistic Geographical Exercise Areas

For maximum realism, K-Sim Navigation includes an extensive library of geographic exercise areas, complete with visual, depth, buoy, chart, and radar data. The Student Chart feature allows the creation of customized operational areas, and Additional Military Layers (AML) can be included for specialized military requirements. Clients can also develop and manage custom exercise areas for exclusive in-house training.

Key points

- Realistic, high-fidelity simulation
- Fully-Equipped and realistic training environment
- Hydrodynamic vessel modeling
- Advanced physics engine
- Detailed geographical exercise areas
- Scalable for any budget
- Configuration flexibility Integration possibility
- Built-in assessment system

K-Sim Navigation

Configuration Flexibility

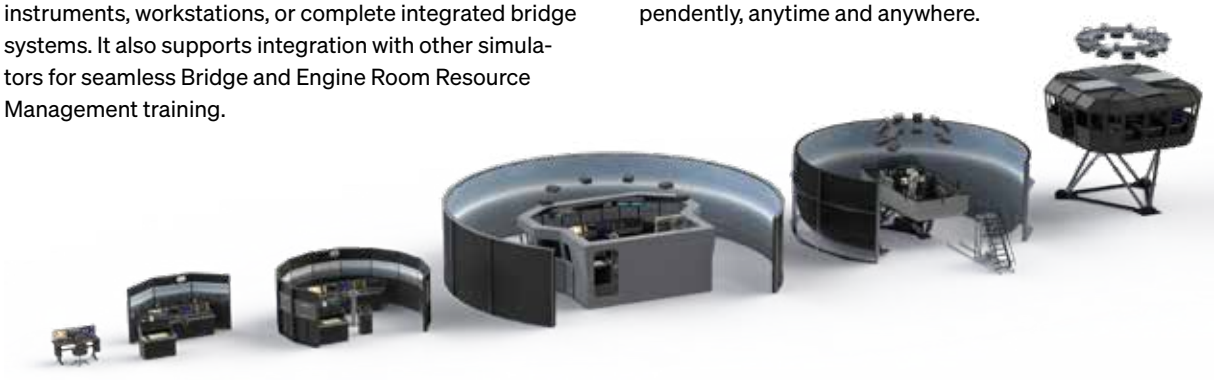
K-Sim Navigation provides a scalable range of modern bridge designs to suit any training requirement from PC-based desktop setups to fully equipped forward bridges on six-degrees-of-freedom motion platforms with immersive visual environments.

Customized to Meet Specific Training Goals

Tailored to specific training objectives, the system can be outfitted with a wide variety of additional bridge instruments, delivering the highest level of operational familiarization. K-Sim Navigation's flexibility allows for easy expansion at any stage, with options to add new instruments, workstations, or complete integrated bridge systems. It also supports integration with other simulators for seamless Bridge and Engine Room Resource Management training.

24/7 Cloud-Based Training

Many of our simulators are accessible via K-Sim Connect, our cloud-based simulation platform for maritime training. Through cloud-based modules, instructors can manage and assign high-quality simulation exercises to students, enabling them to practice and prepare independently, anytime and anywhere.



User Case: Royal Norwegian Navy

For the Royal Norwegian Navy, we have provided a custom 1:1 simulator of the tactical bridge system aboard the Navy's Skjold class Corvette, one of the world's fastest warships. With a capability of speeds above 60 knots, the bridge team is subject to very strict requirements for safe navigation.

Built on the unique K-Sim Navigation technology, this simulator enables the Navy to train under conditions that would be difficult to replicate in live exercises due to speed and safety considerations, offering both safety and cost-efficiency.

The advanced assessment tools ensure high standards of feedback, helping students achieve optimal learning outcomes.

K-Sim Instructor System

Create and assess training scenarios

The K-Sim Navigation Instructor System is designed to enable instructors to efficiently create, manage, record and review intricate scenarios, leading to higher-quality and more effective training outcomes.

Key Capabilities:

- **Customized Interface:** Personalize menus and pages for an optimized user experience
- **Simplified Geographic Setup:** Use a modified ECDIS chart to quickly create custom exercise areas
- **Intuitive Scenario Building:** Drag-and-drop functionality for selecting ship models and all exercise elements
- **Efficient Route Preparation:** Quick and easy tools for route setup and validation.
- **Dynamic Control of Simulator Events:** Pre-program or adjust simulator conditions in real-time, e.g., weather changes or power blackouts
- **Advanced Environmental Modeling:** Import third-party data (currents, tides, waves, winds) through the QGIS tool and insert local weather conditions to maximize environmental accuracy
- **Student Station Configuration:** Control student access to information based on their assigned role (e.g., restricting radar on a Port Wing station)
- **Guidance & Real-Time Feedback:** Use triggers and e-coach messages for feedback during exercises
- **Detailed Data Logging:** Export session data in Excel/CSV formats with wizards, templates, and customizable parameters
- **3D and Underwater Views:** Monitor hull-seabed interactions, as well as chain, wire, and anchor behavior for comprehensive scenario analysis
- **Scenario Control:** Start, stop, replay, and resume simulations at any point to facilitate in-depth guidance
- **Full Scenario Recording:** Automatically record all aspects of the exercise for playback, debriefing, and scenario refinement

Navigation

K-Sim Navigation offers navigation training at different times of day, geogr. areas, waters and weather conditions.

- Safe navigational watch
- Use electrical navigational aids to determine vessel position
- Full vessel instrumentation, hands- on equipment, replica, touch screen operation and full scenario sound
- Use the ship equipment for safe navigation and anti-collision
- Global and local weather enables realistic scenarios

RADAR/ARPA

K-Sim Navigation can be connected to most commercially available radar and ARPA displays, which will function in the same manner and accuracy as on board. This supports key operator settings, ensuring a realistic training experience meeting performance standards, such as:

- Scan rate
- PRF and pulse lenght
- Beam width and noise
- Offsets and lobe
- Indirect echo

ECDIS

K-Sim Navigation fulfills the requirements of STCW - IMO Model Course 1.27 and accomo- dates ECDIS training such as:

- ECDIS familiarization
- Operating the ECDIS system with all available functions
- Knowledge of the capability and limitations of ECDIS operations and all sub-topics
- Proficiency in operation, inter-pretation, and analysis of inform-ation obtained from ECDIS and sub-topics
- Procedures, system files, data and indicated sub-topics

Communication

K-Sim Navigation is delivered with communication systems for practicing effective comm nication between crew members or towards VTS towers, pilot boarding stations or other vessels. Available systems are: VHF and MF/HF with Digital Selective Calling (DSC), and Inmarsat system to cover sea areas of GMDSS A1, A2, A3 and A4. All intraship communication devices; InterCom, PA systems and UHF radio. All systems are available with any mix of handsets, stalk mic or headsets.

Bridge Watchkeeping

The K-Sim Navigation is designed for watch-keeping training for all bridge personnel. Operational equipment may include wing stations, binoculars with bearing read-out as well as well as a classic Pelorus.

All possible weather conditions are available: day/ night with transition; fog and fog banks, local weather, rain, snow, hail, all including drift and local setting. A quadraphonic sound system enhances the realism.

K-Sim Navigation

Ship Handling and Maneuvering

The K-Sim Navigation bridge can be equipped with all necessary instrumentation and controls to support maneuvering training for various vessels in scenarios like:

- Free maneuvering
- Berthing and unberthing
- Mooring and unmooring
- Maneuvering using anchors, thrustersand tugs
- Maneuvering with mooring lines affixed to jetty, buoy, or platform
- Maneuvering with Dynamic Positioning (DP)

Towing and Tugging

K-Sim Navigation can be configured to support vessel towing in oceans or harbors. The exercises can include one or multiple towing vessels, with a supply or receive configuration of towlines and bridles. Defining student roles allow for scenarios with students placed near tow gear to support sea- manship personnel roles such as the Executive Officer. This allows crew to conduct:

- Procedural and mission rehearsal
- Riskanalysis, emergency response and preparedness
- Cost-efficient mission planning

Pilotage

K-Sim Navigation enables realistic pilot training for guiding vessels safely into or out of ports, or whenever navigation may be considered hazardous due to bad weather or challenging fairway conditions. Both student-to-student tug handling and instructor-controlled automatic tugging are available. Typical training scenarios are:

- Pilotage, ship handling and bridge management
- Effective communication with shore or other vessels
- Port control
- Boarding and boarding emergencies

Team Tactics

K-Sim Navigation exercises allow for the training, development and validation of team tactics and procedures. Teams can practice scenarios in varying environmental conditionssuch as:

- Day/night scenarios
- Benign and foul weather conditions
- Teams can hone their internal and external communications procedures for warnings and force protection in peace support operations

Patrol and Surveillance

The simulator is well suited for coastal surveillance, patrol and border protetion training. Surface vessels and airborne objects along with hostile targets can be used to prepare realistic exercises.
The system enables training such as:

- Formation keeping with multiple vessels
- Severe weather conditions- dual season database
- Communication and reporting
- Multiple instructors for increased stress and object handling

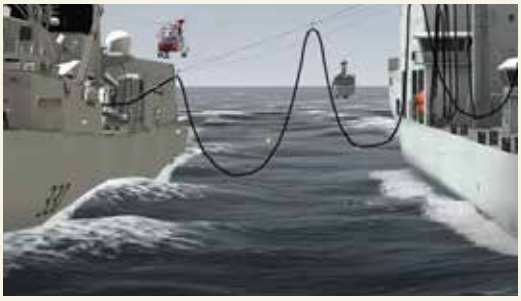
High Speed and RHIB

Configured as a high-speed vessel or a RHIB cockpit, it is the perfect tool for practicing all sorts of operations including law enforcement, emergency, search and rescue and anti-piracy. Examples of training options:

- Launching and recovery of the RHIB
- RHIB handling and maneuvering, and communication
- Mission planning and safety procedures
- Multi-vessel operations including military operations, anti-piracy and interdiction
- Emergency operations, search and rescue

Mission Planning

K-Sim Navigation is ideal for development of courses of action, reducing risk and allowing for mission planning and rehearsal. It enables planning for any operational environment under varying conditions without risk of injury to personnel or damage/loss of assets. It includes celestial and advanced environmental features to assist in determining decision points and key mission success criteria. It support disaster relief (HADR) mission training and provide scenarios to determine crew readiness, ship capabilities and limitations within mission constraints.



Replenishment at Sea (RAS)

K-Sim Navigation provides highly realistic RAS training for both supplying and receiving vessels. Leveraging the hydro-dynamic modelling and physics engine, bridge teams are able to train through the entire sequence of events of an RAS to include:

- Station keeping
- Making an approach (ship-to-ship interaction)
- Passing gear sequence of events
- Effect of tensioning and detensioning the span wire
- Emergency Breakaway

Anti-Piracy/Port Security/Force Protection

To train on anti-piracy scenarios, K-Sim Navigation is provided with a full set of equipment and instrumentation for radar and visual detection, alerting and intervention.

In addition, the simulator includes piracy objects such as Dhow models, RHIB launch, flare effects and advanced tracking devices. Exercise control with objective assessment enables full scenario control and replay of any advanced tactical training.

Search and Rescue (SAR)

K-Sim Navigation facilitates realistic Search And Rescue (SAR) operations including launch and recovery of helicopters from support vessels.

A full range of targets such as damaged vessels, aircraft, oil spills, life- buoys and life rafts, man overboard, buoyant smoke and various other objects can be delivered to conduct SAR training scenarios with maximum realism. A rescue operation center may be added for enhanced realism using multiple instructor stations.

K-Sim Fast Craft

K-Sim® Fast Craft

- the ultimate high-speed tactical training solution

Enhancing Training for High-Speed Tactical Boat Operations

K-Sim Fast Craft Simulator provides an immersive, realistic training environment for high-speed navigation, boat handling, and tactical operations. Engineered to meet the intense demands of high-speed boat operation training,

K-Sim Fast Craft enables safe, effective, and repeatable training sessions, reducing risks to personnel and equipment. The simulator solution supports the full range of training within boat operations; from basic familiarization training to advanced operational related training at the operator, crew, team and squadron levels.

Unparalleled Realism with Advanced Hydrodynamic Modelling

Powered by an advanced physics engine, the K-Sim Fast Craft simulator closely replicates the behavior of high-speed vessels. This cutting-edge simulation technology accurately models boat dynamics, wave interactions, stern wave effects, and impacts with other objects—delivering an authentic training experience that enhances skill development and operational readiness.

Designed to meet the demands of modern naval warfare and law enforcement, K-Sim Fast Craft's near-real environment increases training efficiency and effectiveness, improving crew selection and readiness.

Realistic and Cost-Efficient Training for Tactical Readiness

K-Sim Fast Craft enables highly realistic scenarios-based training that covers essential topics and competencies:

- Basic and advanced high-speed navigation
- Basic and advanced boathandling and maneuvering
- High-speed tactical maneuvering and interception
- Operator and bridge team procedures and communication
- Decision making and development of strategy
- Tactics and procedures
- Validation of concepts of operations
- Mission planning and rehearsal
- Ruels of engagement training
- Davit operations, launch and recovery
- Boarding
- Maritime Interdiction
- Search and rescue operations
- After-action review

Key points

- Enhanced realism in high-speed vessel handling and maneuvering
- Repeatable, cost-efficient training scenarios
- Reduced risk for personnel and equipment

K-Sim Fast Craft

Tactical Training Capabilities

K-Sim Fast Craft simulator is scalable - choose between generic or custom hydrodynamic models, each created from real vessel performance data and validated for accuracy.

Immersive, Realistic Operating Environment

K-Sim Fast Craft can be delivered with or without an advanced motion platform with 3-6 degrees of freedom accurately simulating vessel behavior across speed ranges and sea states. The motion platform is tailored to reflect the boat's propulsion system (water- jet, surface drive, stern drive and outboards) and hull characteristics, providing a lifelike training experience. The visual system can be delivered from 270 to 360 degrees field of view. The low-radius, cylindrical visual projection system offers an expanded field of view, enhancing realism and visual immersion.

The Ultimate Training Environment

The console layout replicates real operator positions, with integration options for authentic controllers, indicators, and displays such as:

- Navigation systems with the same control units as used on-board
- Force feedback steering wheel and propulsion levers
- Engine start/stop switches and monitoring with soundscape
- Electro-optic equipment and search light
- Remotely operated weapon controls
- Communication equipment

Coprehensive Weapons Training

K-Sim Fast Craft includes options for integrated weapons training, supporting multiple weapon types and tactical scenarios. This capability allows maritime organizations to train crews in a wide range of operational tasks, from high-speed navigation to realistic weapons engagement, meeting the full spectrum of mission requirement.

User-friendly Instructor System

The simulator includes an award-winning instructor system, featuring an intuitive, drag-and-drop interface for exercise creation. This advanced tool provides full monitoring and assessment capabilities, enhancing the quality of training with automatic recording for exercise review and feedback.

User Case: Singapore Police Coast Guard

Our largest simulator contract to date was with the Singapore Ministry of Home Affairs, supplying four K-Sim Tactical Boat Handling Simulators to the Singapore Police Coast Guard (SPCG).

These simulators replicate different boat types and integrate weapons capabilities, enabling comprehensive tactical training. SPCG's facility supports fast interception and high-speed maneuvering exercises in a highly realistic simulated environment.

K-Sim® Engine

- maximizes operational performance

"The provision of the Choules model and, in particular, the installation of a K-Sim Engine desktop simulator on board the ship provides the Royal Australian Navy with a significant training capability that will greatly enhance the quality of training that can be provided to the ship's engineering personnel."

Commander Ned Whiteley RAN (retd)
Choules Simulation Project Manager

A More Structured and Efficient Approach to Training

For over four decades, KONGSBERG has provided advanced engine room simulators to naval customers worldwide. Our portfolio includes both generic engine room models for learning system functions and operations, as well as customized replicas of specific naval vessel propulsion plants, allowing for 1:1 familiarization with naval engineering systems.

Basic, Advanced, and Customized Training Solutions

K-Sim Engine simulators offer comprehensive training across all levels, from fundamental engine system operations to advanced, full-scale engine room management. Whether learning basic functions, optimizing operational efficiency, or handling emergencies, naval engineers can practice routine tasks and develop the skills necessary to manage critical, abnormal situations.

Realism Through Dynamic, Real-Time Simulation

All K-Sim Engine models deliver dynamic, real-time simulations based on real engine physics. Sequences, faults, and alarms are automatically triggered in their correct order and duration, ensuring accurate representation of operational conditions. This high level of realism fosters a deep understanding of engine room processes while offering instructors greater control and flexibility in course delivery.

Innovative Use of 3D Technology

Our cutting-edge BigView system enhances K-Sim Engine training with a cost-effective, software-based schematic mimic display. Featuring 3D pop-up windows on touchscreens, BigView offers a full-size virtual engine room simulation, allowing users to interact with and operate equipment in a customizable, virtual environment. This system can replicate various engine room configurations, providing flexibility and enhancing the learning experience.

K-Sim Engine Instructor System

K-Sim Engine Instructor system is designed to enhance the quality of simulation training by providing complete, intuitive and user-friendly control of student exercises. With an automatically recording of all activity during the exercise, a replay function for debriefing and a built-in assessment system, structured training and objective student evaluation have never been easier.

Key points

- Provide basic, advanced and emergency training
- Dynamic real-time process simulation
- Extensive engine model library
- Configuration flexibility
- Integration possibilities
- 3D visulatization
- Built-in assessment system

K-Sim Engine

Adaptable to your training needs

K-Sim Engine offers versatile training solutions that fit any budget, from PC desktop setups to full mission simulators with custom equipment. The desktop system is ideal for engineering studies, while the full mission version provides hands-on experience with a complete engine room, control room, and instructor stations. With flexible configurations, we deliver a cost-effective solution for every training need.

Tailored Training for Specific Requirements

K-Sim Engine can be customized to include all equipment typical of an engine room. Engine subsystems can be managed using interactive mimic panels and consoles, or through local monitor-based stations, allowing for tailored configurations to match training requirements.

Expandable Configurations

Built with maximum flexibility, K-Sim Engine allows seamless system expansion with additional models, panels, and workstations, or even complete integrated engine rooms to support evolving training needs. It can also integrate with K-Sim Navigation for team training or connect with KONGSBERG's real vessel control systems, enhancing realism.

Immersive Training Environment

The full mission K-Sim Engine creates a realistic shipboard environment, complete with the equipment and sounds of an actual engine room, including dynamic audio effects from engine speed changes, pump operations, and safety valves. This immersion prepares trainees for real-world scenarios with unparalleled realism.

Remote Training Anywhere

K-Sim Engine is also available as a cloud-based solution through K-Sim Connect, enabling flexible, self-paced training on personal computers. With instructor-managed access and no on-site hardware needs, this scalable subscription service allows students to train anywhere, maximizing learning flexibility.

Different configurations and solutions are available depending on training requirements.
A combination of both desktop and full mission systems enables training capacity for any level.

Engine room

Engine control room

Instructor room

Emergency generator

Desktop system

Cloud-based solution

User Case: Royal Australian Navy

The Royal Australian Navy's engineering personnel benefit from our customized simulator training solution replicating the CODAG E engine in the Canberra Class Landing Helicopter Dock vessels. Designed to simulate the full range of main and sub-systems in the engine room, this simulator delivers a highly realistic experience that mirrors actual ship operations. Trainees gain hands-on experience in managing the Integrated Automation System (IAS), local and remote control engine-room panels, and bridge control systems, all enhanced with interactive touchscreens and graphical displays.

In addition, we have also delivered an engine simulator training solution for the amphibious Landing Ship Dock HMAS Choules. This customized model simulates the engineering systems onboard including its electric podded thrusters powered by diesel generators. A 3D virtual engine room and realistic dock-flooding effects complete the experience, allowing personnel to practice docking operations safely. This comprehensive training solution enhances operational readiness and supports mission-critical training for the Royal Australian Navy.

K-Sim Engine

Basic Operational Training

K-Sim Engine enables realistic training at any level both for beginners and experienced specialists. Typically basic operational training possibilities are:

- Preparing for getting under way
- Maneuvering to open sea
- Steady steaming
- Approaching harbour
- Finished with engine, routine operations
- Respond to abnormal and emergency situations
- Watchkeeping skills and procedures

Advanced Operational Training

Thousands of variables and hundreds of insertable malfunctions enable realistic scenarios to asses knowledge and management skills. Typically, advanced operational training possibilities are:

- Engineers reaction or response to serious problems
- Crew operation when an abnormal situation develops.
- Tracing and correction of errors or malfunctions within the system
- Restore the engine room systems to normal operation.
- IPMS Operation

Economy and Optimizing Studies

Fuel-efficient vessel operation is a key to reduce operational expenses and impact on the environment. This can be achieved through training scenarios in the simulator such as;

- Factors influencing energy consumption
- Judging the performance of various components.
- Differentiate between external and internal causes of deterioration in performance and how much this will affect the fuel economy
- How can running and tuning of various components or sub-systems influence overall fuel economy?

High Voltage

Provide training on practical procedures and maintenance on marine HV equipment. Typical training possibilities are:

- Understand the HV system and the maintenance of distribution capability, incl. operational and safety features and the function of protection devices
- Management of HV operations, e.g. removing a circuit breaker and correct use of interlock keys according to safety rules, procedures and legislation
- Fault identification, condition monitoring and reconfiguration of the system to maintain electrical supply

Engineering Officer Assessment

The simulator is ideal for assessing senior engineering officers' competence regards employment or promotion. Challenging scenarios can be presented and performance assessed by use of the instructor system. Typically, these main competencies are assessed:

- Leadership and managerial skills
- Situational awareness
- Assertiveness
- Communication, co-operation and team-working
- Planning and decision making skills

Fault tracking and repair

The students either work individually or work in teams and are able to trace faults as causes and consequences within individual or interconnected systems associated with e.g. advanced sea, harbour operation and repairing. The student can gain competency certificates in:

- Maintenance
- Sea Operation
- Watch-keeping
- Harbour Operation
- Overall management of technical integrity

Emergency Response

When an emergency occurs, the on-watch team need to act fast. Whilst specialist teams tackle the fires, it is important that the watch-keeping personnel react instinctively to re-route power, isolate machinery and maintain propulsion at all times.

In order to do this, they need to be well trained and to constantly practice their emergency procedures. K-Sim Engine provides the perfect platform to both achieve and maintain the required standards.

Switchboard Drills

Good power management and power failure response are key skills for engineering personnel to master: however, they can't always be practiced at sea.

Whether you are using a full mission simulator or a desktop environment, K-Sim Engine facilitates the use of touch-screen switchboard panels, which can be quickly configured to suit your training needs. This provides the ideal setting in which to xercise everything from a simple breaker failure to a full ship blackout in a safe environment.

Bunkering and RAS training

Understanding bunker routines, fuel oil transfer system and ship capacity is vital when replenishment and transfer operations is performed. Typical content in training is:

- Communication
- Safety system check and Alarm handling
- Sounding of tanks
- Lining up valves and preparing tanks
- Monitoring pressure and temperature
- FO Sampling and Internal transfer operations
- Load and total quantity calculation

Contact us

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