AEROSPACE OPERATIONS DIVISION

AIR TRAFFIC MANAGEMENT AND AIRPORTS



NARSIM ATC Radar Simulator



The real-time Radar Simulator for ATM research and training

Are you looking for a real-time human-in-the-loop Radar Simulator that can both be used for research and training purposes and which is fully scalable, configurable and which can be coupled to third party systems?



WHAT YOU NEED

- One cost efficient simulator for all your research and training needs
- Reduced lead times for requested changes in simulation exercises
- Ability to simulate new operational concepts and procedures such as CDOs, Interval Management and Time Based Separation
- CWP displays that can emulate any commercially available inhardware system like R/T and communication panels
- Adherence to industrial interoperability standards

WHAT WE DELIVER

- Ability to simulate future airport operations and controller working positions
- Fully customisable displays
- Ability to integrate third party systems whilst maintaining scalability and performance
- Developed fully in-house with a focus on modularity and configuration
- Ability to integrate Radar simulator with Tower simulator
- From large scale validation trials to small scale (even laptop based) prototyping and visualisation
- High fidelity
- Based on COTS hardware

OUR CAPABILITIES

The in-house developed NARSIM Radar simulator makes use of highly realistic aircraft performance models, validated by numerous ANSPs. NARSIM Radar has a proven track record and has been used as validation platform in European ATM research (SESAR).

CONCEPT DEVELOPMENT AND VISUALISATION

The Linux based NARSIM Radar enables visualisation of new conceptual ideas in a very early stage. Ideas can be quickly evaluated towards operational feasibility and they can be communicated to users and stakeholders in a clear and unambiguous way. Early involvement of the user is generally accepted as the single most important factor for a successful introduction of new or changed ATC system or concept.

TRAINING

NARSIM Radar simulates a realistic environment for the ACC Controller and is used in the development of training as well as in providing of training itself. Training in NARSIM Radar has been provided ranging from basic Introduction to Radar Control to replacing the Radar controller's on-the-job-training. Record and play-back is just one of the training features of NARSIM Radar.

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HMI DEVELOPMENT

NARSIM Radar is highly configurable and well suited for applications where the human aspect plays an essential role, such as development of the Human Machine Interface (HMI). Rapid prototyping allows for fast experimental or pre-operational evaluation of new HMI specifications.

SOFTWARE NARSIM

Radar software is designed around advanced object-based client/ server architecture and is inherently scalable. Its modular design allows running the entire simulation distributed among several independent platforms on a local network or internet in fast-time or real-time. It supports logging and playback on several levels (network messaging, operational parameters, events, audio and video). Multiple instances of the same module can be easily monitored, started, restarted, or relocated whilst running the simulation.

Pricing upon request and depending on the configuration of NARSIM Radar.

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PRODUCTS & FEATURES

NARSIM Radar delivers:

- rapid and flexible scenario generation
- more efficient training exercises
- more efficient simulation exercise
- more efficient validation of new concepts and procedure
- standard H/W interfaces (OLDI, Asterix, CPDLC, etc.)
- industrial interoperability standards (DIS, HLA)
- significant cost savings

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