



FNPT Helicopter Flight and Navigation Procedures Trainer

Developed to meet the requirements of JAR-STD 3H Levels 2 and 3, and MCC, cueSim's Helicopter Flight and Navigation Procedures Trainer (FNPT) provides Helicopter training at an affordable price.

cueSim's modular approach to simulation maximizes the many benefits of the extensive use of Commercial-Off-The-Shelf (COTS) technology whilst maintaining the highest levels of fidelity.

With the entry level simulator providing a completely generic solution specifically to meet JAR-STD 3H, but with the options of type representative enhancements, a cueSim FNPT solution is available to meet all training budgets.

cueSim
cueSim combines COTS technology with innovative software and hardware design to provide truly cost effective, high fidelity simulation products and services.

For more information contact:

cueSim,
Units 2-4, Highfield Parc,
Highfield Road, Oakley,
Bedford, MK43 7TA, UK

Main Switchboard: 01234 828000

Sales: 01234 828002

Fax: 01234 828001

E-Mail: sales@cueSim.com

URL: www.cueSim.com

cueSim is a member of the QinetiQ Group of Companies.





cueSim
cueSim combines COTS technology with innovative software and hardware design to provide truly cost-effective, high fidelity simulation products and services.

FNPT Helicopter Flight and Navigation Procedures Trainer

Introduction

The Joint Aviation Authority has recently introduced a new standard (JAR STD 3H) which describes requirements for a helicopter Flight and Navigation Procedures Trainer (FNPT) level II/III. cueSim has recognised the need for this type of training device to be targeted at helicopter operators looking for cost effective training solutions. This is especially true of operators who require their crews to be Instrument Flight Rated (IFR) without the costs associated with actual flying and the consequent decrease in aircraft availability, necessary to keep crews current.

cueSim's FNPT directly reduces the number of aircraft flying hours that a pilot requires. Pilots can now achieve training credits flying the simulator under the JAR FCL 2 flight crew licensing arrangement.



courtesy of MD Helicopters

The cueSim Helicopter FNPT

In response to the training need, the cueSim helicopter FNPT II/III has been designed to meet, and optionally exceed, the new JAA requirements laid down in JAR STD 3H. It is offered as a generic, or type representative, type II or III and Multi-Crew Co-operation

(MCC) helicopter FNPT. It is typically representative of the 2,500kg – 3,600kg twin turbine helicopter class, which includes aircraft such as the MD902, AS355, EC 135 & 145, Augusta 109 and BK117, but can be supplied for any helicopter type.

Exploiting cueSim's industry-leading approach to simulation, the FNPT simulator combines a Windows-based Instructor Operating Station (IOS), a wide field-of-view multi-channel visual system with the options of active control loading system and 6-DoF electric motion.

cueSim also offers a number of upgrades which, although not part of the formal JAA requirement, allow customers the flexibility to tailor a simulation solution to their specific training needs. For example, type-representative flight decks, with custom-fit avionics representations, can be supplied and visual and sensor databases developed to meet particular roles and missions.

Benefits

The cueSim helicopter FNPT is available at a highly affordable price and because PC-based design maximises the use of commercially available, proven technology, a very low cost-of-ownership is also ensured.

The familiar Windows-based user interface, coupled with virtually maintenance-free operation, allows teams to concentrate on the training, not the equipment.

From the viewpoint of both operator and trainer, cueSim's approach brings significant benefits:

- Training and operating cost savings
- Increased training benefit and flexibility
- Increased aircraft commercial availability
- Reduced training risks
- Future upgrade potential and collective training capability

Training Flexibility

Designed from the outset, in consultation with the UK CAA, to provide maximum training credits and full compliance with JAR-STD 3H, the FNPT is offered with on-board Instructor Operating Systems (IOS) using the latest display technologies. Flight missions can be paused, stopped and replayed at any point within the training sortie, giving the widest flexibility to analyse training performance. Visual and navigation databases are provided to meet specific scenario requirements and a comprehensive instructor station allows complete control of the training environment.



Generic and type representative cockpits are offered

Baseline fit (JAR STD 3H compliant)

- Two crew control
- High resolution edge blended projected displays
- Baseline field of view 150 x 40 degrees
- High-fidelity outside world image generation
- Fully representative LCD based pilot instrument displays
- Fully functioning system panels, including radios, navigation aids, switches and circuit breakers
- Enclosed cabin with operator's console
- Fixed-base (no motion)

The following systems are supported:

- Flight management and control
- Auto Pilot and Auto Stabilisation
- Pilot flight instruments
- Engine systems
- Electrical, hydraulic and fuel systems
- Radio, intercom, navigation and GPS systems
- Sensor displays



High fidelity visual database included as standard

Options

- 6-DOF electric motion platform
- Extended field of view up to 210 x 60 degrees
- Custom flight instrument displays
- Sensor displays and models
- Connection to synthetic environments
- Electric seat shaker(s)
- Electric control loading

Proposed JAR training credits

The helicopter FNPT offers the following training credits under the proposed JAR FCL 2, flight crew licensing for helicopters:

- ATPL Integrated Course 55hrs in FNPT II/III
- CPL Integrated Course 35hrs in FNPT II/III
- CPL Modular Course 10hrs in FNPT II/III
- Single engine I/R Modular 35hrs in FNPT II/III
- Multi Engine I/R Modular 40hrs in FNPT II/III
- MCC 20hrs in FNPT II/III (MCC only)