



U.S. Navy MH-60R

CAE is the prime contractor responsible for the design and manufacture of MH-60R tactical operational flight trainers (TOFTs). The MH-60R TOFTs play a key role in the training and mission readiness of flight and sensor operator crews who fly the MH-60R "Romeo" helicopter for the Navy.

The MH-60R, also called the Seahawk, is a multi-mission helicopter used by the Navy for anti-submarine warfare and surface attack. The MH-60R and MH-60S helicopters form the cornerstone of the Navy's Helicopter Master Plan. The two aircraft share a common cockpit and technology. The Navy plans to procure 254 MH-60R and 271 MH-60S helicopters over the next decade. The massive overhaul of the Navy's rotary wing fleet was the catalyst for development of a range of new high fidelity training systems.

CAE began work on the MH-60R training program in July 2006, at which time CAE won a competitive procurement to design and manufacture MH-60R TOFTs. The MH-60R TOFTs include both an operational flight trainer (OFT) and a weapons tactics trainer (WTT) that can operate independently or jointly. CAE is under contract to design and manufacture three MH-60R TOFTs and one SH-60B TOFT. The SH-60B TOFT is being designed by CAE to be easily converted at a later date to an MH-60R TOFT. Prior to CAE's involvement on the MH-60R training program, the Navy had already procured three MH-60R TOFTs (called TOFT1 through TOFT3 by the Navy).

The first MH-60R TOFT currently in development by CAE will be delivered to NAS Jacksonville in May of 2009. The second will be delivered to NAS North Island in late 2009. The third will be delivered to NS Mayport in late 2010. The SH-60B TOFT will be delivered to MCAS Kaneohe Bay in early 2010.



MH-60R OFTs

The MH-60R OFTs are full-mission simulators used to train pilots and co-pilots of the MH-60R helicopter. Two of the MH-60R OFTs and the SH-60B OFT being developed by CAE are fixed-base simulators. The third MH-60R OFT will feature a six degree-of-freedom (DOF) electric motion system. Each MH-60R OFT includes motion seats to provide vibrations and motion onset cues, and includes a 200° by 60° collimated out-the-window visual display that enables use of operational night vision goggles. Each MH-60R OFT includes full mission and weapons system simulation except for acoustics, and employs actual aircraft operational equipment and software to facilitate concurrency with the evolving MH-60R aircraft.





MH-60R WTTs

The MH-60R WTTs replicate the back-end of the helicopter and are used to train sensor operators (SO) and airborne tactics officers (ATO). The MH-60R WTTs feature detailed simulations of the underwater and atmospheric environment and the aircraft weapons and sensors to prepare crew members for anti-submarine and anti-surface warfare missions. Each WTT includes a partially-instrumented ATO station as well as a fully-replicated SO station. The WTT also employs actual aircraft mission equipment and software. It includes an automatic flight capability so that full sensor integration and mission training can be accomplished without a pilot when the WTT is operated independently from the OFT. The systems simulated in the WTT include the acoustic processor, dipping sonar, forward-looking infrared (FLIR), radar, electronic support measures (ESM), radios and datalinks including Link-16, sonobuoys, torpedoes and the Hellfire missile. All simulated systems are fully functional in the WTT and include a high fidelity environment for training.



MH-60R Full Crew Tactical Training

When the OFT and WTT are used in joint mode, they become an MH-60R TOFT to provide the Navy with a comprehensive training solution designed to provide a total aircrew mission training system. With the MH-60R OFT and WTT operating in this mode, the pilot and co-pilot in the OFT and the sensor operator in the WTT can interact in the training scenario in the same way they will need to do during a submarine hunting or surface warfare mission. With the OFT and WTT operating independently, they can simulate two MH-60R aircraft operating in the same environment. In addition, all the MH-60R TOFTs are designed according to the Navy's Naval Air System Master Plan (NASMP). The vision of the Navy is for the seamless integration of all Navy aviation simulation assets in a tactically relevant environment that will meet the fleet's training requirements throughout the entire training continuum.

Canada

Attn: Marketing
8585 Côte-de-Liesse
Saint-Laurent, Quebec
Canada H4T 1G6
Tel +1-514-341-6780
Fax +1-514-734-5718
milsim@cae.com

Germany

Steinfurt 11
D-52222 Stolberg, Germany
Tel +49-2402-106-0
Fax +49-2402-106-270
info@cae-gmbh.de

United Kingdom

Innovation Drive, Burgess Hill
West Sussex RH15 9TW
England
Tel +44 (0) 1444-247535
Fax +44 (0) 1444-244895
cae_plc@cae.co.uk

Australia

Unit 40, Slough Business Park
Slough Avenue
Silverwater, NSW 2128
Tel +61-2-9748-4844
Fax +61-2-9714-0300
caeaus@cae.com.au

United States

4908 Tampa West Blvd.
Tampa, FL 33634
Tel +1-813-885-7481
Fax +1-813-901-6429
cae_usa@cae.com

India

CAE India Pvt Ltd
108, 3rd Floor, Gavipuram Guttahalli
Off Bull Temple Road
Bangalore – 560019
India
Tel +91-80-2625-6000
Fax +91-80-2660-4111

