CAE Brunei MPTC S-70i Black Hawk Training

The state-of-the-art CAE Brunei Multi-Purpose Training Centre (MPTC) is a joint venture between CAE and the Government of Brunei Darussalam established in 2012. The CAE Brunei MPTC is focused on being a world-class training systems integration provider while partnering with other best-in-class organizations to deliver a range of training solutions. Located in Brunei near the Brunei International Airport, the CAE Brunei MPTC provides comprehensive simulation-based training solutions for a range of market segments, including defence, aviation, emergency/crisis management, healthcare, and others.

The Royal Brunei Air Force and the S-70i Black Hawk

In 2011, the Brunei Ministry of Defence signed a contract with Sikorsky, now a Lockheed Martin company, to provide a fleet of S-70i Black Hawk helicopters to the Royal Brunei Air Force. Deliveries of the S-70i Black Hawk to Brunei began in late 2013 and the Royal Brunei Air Force now operates a fleet of 12 S-70i Black Hawk helicopters, which can be used for multiple roles such as search and rescue, humanitarian relief, troop transport and medical evacuation.

S-70i Ground School and Classroom Training

The CAE Brunei MPTC is fully equipped with leading-edge simulation-based technologies, learning management systems, courseware and instructor-led courses, and multimedia classrooms to provide a high quality training experience. The initial ground school and classroom training curriculum provide the basic understanding, skills and knowledge required to operate the S-70i helicopter. Some of the topics covered during ground school and classroom training include:

- Aircraft performance
- Aircraft systems
- Airframe and airframe fuel
- Auxiliary Power Unit (APU)
- Avionics
- Basic mission training
- Computer display unit
- Communication and navigation
- Checks and system checks
- Check ride
- Electrical
- Emergencies during flight
- Engine and engine control
- Flight controls and instruments
- Fuel/Engines
- Hover work
- Hydraulics
- Instruments Flight Rules (IFR)
- Landings
- Landing gear and brakes
- Navigation (NAV)
- Night Vision Goggle (NVG) basics and emergencies
- Principles of flight
- Start
- Taxi and Take-Off
- Visual Flight Rules (VFR) circuit work
- Warning systems
CAE 3000 Series S-70i Full-Mission Simulator

The CAE Brunei MPTC houses a state-of-the-art CAE 3000 S-70i full-mission simulator. The CAE 3000 Series S-70i simulator provides an immersive training experience for the full range of pilot training requirements on the S-70i Black Hawk. The simulator offers a direct projection 12-foot dome display and high-fidelity CAE Medallion-6000 image generator to provide an extreme field-of-view visual system delivering a highly realistic synthetic environment. The CAE 3000 Series S-70i simulator also features chin window coverage, high resolution projectors, support for night vision goggle (NVG) flying, full six degree-of-freedom (DOF) electric motion system and a 3-DOF vibration system to provide realistic cues to the pilots. The CAE 3000 Series S-70i full-mission simulator at the CAE Brunei MPTC is equivalent to a U.S. Federal Aviation Administration (FAA) Level D standard for flight simulators.

Enhanced Mission Training

The highly realistic S-70i full-mission simulator is ideal for performing mission training and rehearsal, including search and rescue, firefighting, NVG flying, formation flight, winching and stretcher lift, mountain flying, shipboard landings, oil rig platform landing, over water flight, and special missions. Simulation-based training helps reduce training cost and increase safety and efficiency by enabling aircrews to perform manoeuvres or emergencies not suitable or possible in an actual aircraft. Training at the CAE Brunei MPTC centre will provide maximum training value and enhance crew mission readiness.

Other Training Programs Offered at the CAE Brunei MPTC

The CAE Brunei MPTC has been built with modern classrooms and infrastructure along with multiple simulator bays. The facility incorporates industry-leading modelling and simulation technologies, learning management systems, courseware development and training support services for rotary-wing (S-92, S-70i), fixed-wing (PC-7) and emergency/crisis management training programs. Future developments at the CAE Brunei MPTC will focus on meeting the training requirements for the energy, aviation and healthcare market segments, in addition to further defence-related training programs.