HATSOFF – turnkey helicopter training in the heart of Asia

Whether your rotary wing training requirements are for high mountain operations or the desert, military or civil, flight or maintenance, basic or advanced, the HATSOFF Helicopter Training Centre is designed to provide your helicopter crews with a superior learning experience and the highest-quality helicopter training.

HATSOFF is a joint venture between one of the world’s premier defence and aerospace companies, Hindustan Aeronautics Limited (HAL) of India, and CAE, a global leader in simulation and integrated training solutions. The joint venture company is known as the Helicopter Academy to Train by Simulation of Flying (HATSOFF).

HATSOFF offers training for Bell 412/212 and Eurocopter Dauphin N/N1/N2/N3 operators on a Level D full-flight simulator (FFS) and Level 2/3 flight training device (FTD), both approved by the UK Civil Aviation Authority (CAA) and India’s Directorate General Civil Aviation (DGCA). Training for operators of the HAL-built Dhruv helicopter in the civil/conventional variant on a DGCA-certified FFS and FTD are also available. In addition, complete training on the Dhruv military variant with glass cockpit will be ready in 2014.

Training capabilities at HATSOFF encompass the latest technologies, including a full-mission simulator featuring CAE’s revolutionary roll-on/roll-off (RORO) platform so cockpits for each helicopter type can be used in the full-mission simulator. The facility also has a docking station to allow each cockpit to be a flight training device of JAA Level 2/3 standard when not in the RORO platform. Both the FFS and FTD have an on-board instructor station, while the Dhruv military cockpit will also have an off-board instructor operation station to support the creation and enacting of complex military scenarios. The facility has computer-based training with eight multimedia classrooms, brief/debrief rooms, and training management information system. The HATSOFF campus also provides a 10 room four-star standard accommodations with dining facilities.

The HATSOFF Helicopter Training Centre leverages the collective and proven experience of both HAL and CAE in delivering comprehensive, cost-effective and customised instruction to produce safe, proficient and mission-ready crews.
An accessible, vibrant location, the HATSOFF Helicopter Training Centre is situated in rapidly growing South India, convenient to Australia, the Pacific Rim, the Middle East, Africa, and Europe. The new Bengaluru International Airport (BLR) at Devanahalli features direct flights to most major cities, including London, Paris, Frankfurt, Dubai, Bangkok, Kuala Lumpur, and Singapore.

Bangalore is known as the ‘Silicon Valley of India’ and home to numerous aerospace, telecom and software companies, as well as national research and defence organizations.

It is also referred to as the ‘Garden City’ for its abundance of parks, gardens, temples, and centuries-old landmarks. The shopping scene offers modern malls and traditional markets, and the restaurants serve a cornucopia of regional and international cuisines.
Training for the aircraft types represented at the HATSOFF Helicopter Training Centre can be customized for numerous civil and military missions such as search and rescue, medical airlift, disaster response, homeland security, offshore operations, geological survey, VIP transport, law enforcement, high-altitude operations, and various military tactical scenarios.

### Rotary wing training tailored to your needs

**FLYING TRAINING (ON FFS AND FTD)**

- Extension of Type Rating
- Recurrent Training
- Critical Emergencies
- Instrument Flying Practice
- Proficiency and Route Checks
- Extension of Instrument Rating
- Offshore, Hill Operations Training
- HEMS & External Load Operations Training

**TRAINING ON DHUUV MILITARY VARIANT**

- Nap-of-earth (NOE) Flying Training
- HPS, EW, EO Pod Training
- Simulated Weapon Firing (Turret Gun, Rockets, Air to Air Missiles, ATGM)
- Tactical Training Using Computer Generated Forces (CGF)
GROUND TRAINING

- Theoretical knowledge and examination for type rating courses
- Recurrent Training
- Special VFR Courses
- Ground Refresher Courses
- Crew Resource Management
- Dangerous Goods Course (orientation)
The HATSOFF Helicopter Training Centre incorporates the most advanced technologies available for rotary wing aircraft training. The primary components include a full-mission simulator, flight training devices, multimedia classrooms, computer-based training, brief/debrief rooms, courseware, curricula, and training management information system. Our expert instructors are qualified for the aircraft types and missions they teach, and undergo regular training to keep their knowledge current.

**TRAINING DEVICES**

**Level D Full-Flight Simulator (FFS)**

The full-mission simulator complex consists of a “mothership” with RORO platform and the following cockpit modules:

- HAL Dhruv (Indian Army / Air Force glass cockpit variant) by 2014.
- HAL Dhruv (Civil / conventional cockpit variant) (DGCA approved)
- Bell 412 / 212 (UK CAA and DGCA approved)
- Eurocopter Dauphin N3/N2/N1/N (UK CAA and DGCA approved)

**Level 2/3 FTD**

The same cockpits are connected to the ‘Docking Station’ with $150 \times 40$ Deg FOV and used as a FTD.
TECHNOLOGY
The mothership simulator platform encompasses a common motion system (six degree-of-freedom), vibration platform, and visual display system. The visual system is five-channels with a 220-degree horizontal by 60-degree vertical field of view. Liquid Crystal on Silicon (LCoS) projectors relay the out-of-the-window (OTW) scenes from a CAE Medallion-6000 image generator. Databases representing areas of India and other mission locales specified by HATSOFF customers provide realistic, mission-specific training.

The RORO cockpit modules each contain, appropriate to the aircraft being simulated, a window package, main instrument panel, pedestal (inter-seat console), overhead panel structure, cyclic and collective, rudder pedals, all other primary and secondary flight controls, aircraft-specific furnishings and parts, pilot seats, and on-board Instructor Operator Station (IOS).

MISSION PREPARATION AND REVIEW
The off-board tactical operation station enables an instructor to rehearse a mission, control the execution of a tactical scenario, or monitor training. The brief/debrief rooms enable the instructor to prepare and review training sessions and mission rehearsal exercises. The debrief room features a large Smartboard screen on which the instructor can display (in multiple windows) all of the information relevant to mission preparation or review of a completed exercise (tactical map, cockpit video, stealth view, cockpit video and communications). The debrief room also has its own stealth view display (SVD) and tactical map, allowing the instructor to pre-fly a mission or to observe an exercise.

AMENITIES
HATSOFF is focused on making your overall training experience as comfortable and pleasant as possible. That is why we have provided on-site amenities for your comfort and convenience.

- Eight multi-media classrooms
- Total of ten rooms, each a four-star standard accommodation within the complex, including:
  - Internet
  - Dining Facilities
  - Gymnasium
  - Entertainment Room
  - Terrace Lounge