### ADVANCED SLING LOAD OPERATIONS – GROUND INSTRUCTION

#### OM/SOP
- Content of OM including relevant SOPs
- Flight and duty times
- Max. cycles / day
- Min. and max. fuel
- Refuelling procedures
- Radio communications / hand signals
- Human factors / CRM / nutrition
- Safety equipment / operational briefing
- Pilot / task specialist responsibilities

#### Aircraft Flight Manual
- Limitations
- Mass and balance
- Abnormal and emergency procedures
- Performance / HOGE
- Cargo hook supplement

#### Flight Procedures
- Airspeed selection with load
- Flight path selection (3rd party)
- Bank / load factor / load drag
- Load stabilisation techniques / hover & in-flight
- Downwash / load rotation
- Visual hover reference
- Rotor clearance
- Environment / slope / forest / canyon
- Manual & electrical load release
- Decision / exposure time

#### Load Rigging Techniques
- Vertical loads
- Horizontal loads
- Light, bulky and combined loads
- Nets & bags

#### Worksite Preparation
- Worksite layout
- Fuel area designation and access
- Ground personnel safe area
- Safety measures / traffic control

#### Special Equipment
- Concrete bucket / Water bucket
- Load lifting attachments (line, net, bag, IBC, FIBC)
- Slinging equipment (round sling, chain, shackle, etc)
- Load lifting means (cargo hook, remote hook, etc.)
- Load meter / printer
- Mirror
- Bubble window / vertical reference
- Audio / vibration warning

#### Emergency / Limitations
- Flight control stops
- Tail rotor failure
- Engine failure / OEI operation
- Height velocity diagram / exposure time
- Emergency procedures in sling ops
- Review of sling ops. accidents

#### Dangers / Hazards
- Flights in valleys / cables / wires
- Flight over congested areas / roads / 3rd party
- Airflow / up and downdrafts
- Sun / shadow / snow / rain / static electricity
- Settling with power / vortex
- Emergency load release

#### Minimum requirements before starting practical HESLO 4 instruction:
- 1'000 flight hours on helicopters
- 2'000 HESLO cycles incl. experience as unsupervised PIC in HESLO 2 or HESLO 3
HESLO 4

FLIGHT INSTRUCTION

Applicant’s licence number: _______________________ 

Conditions:
- 1 Task specialist (with radio) at pickup point
- 1 Task specialist (with radio) at drop off point
- Helicopter equipped with:
  - additional mirror(s) and/or video camera(s)
  - a bubble window

Definitions:
Vertical References: The trainee must be able to perform a stabilized hover flight by means of vertical references without any external cargo attached to the helicopter prior to commencing training with external loads.

Mission: One mission is a HESLO flight or series of HESLO flights, conducted from site A to site B, for a particular customer, on a particular day.

Cycle: A cycle is a flight from site A to site B with an external load and subsequent return to site A.

DC

Cycles as relevant to the activity: (every square is 1 cycle)

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Date training started: ...........................................

SOLO

Flight instruction solo with on site supervision / missions as relevant to the activity: (every square is 1 mission)

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Date training started: ...........................................

Pilot proficiency has been assessed as sufficient for the intended operations and environment. The trainee's logbook has been endorsed with 'HESLO Level 4 satisfactory completed'.

Date training ended: ........................................... 

Signature HESLO instructor: ..........................................................................

Additional requirements before acting as unsupervised PIC for HESLO 4:
- CPL(H) or ATPL(H) ........................................................... 
- HESLO level 2 or 3 completed ...........................................
- HESLO 4 ground instruction completed ..............................
- Task specialist syllabus / SOPs reviewed ............................
- Type rating completed ...................................................
- Practical load preparation training ......................................
- Minimum 10h on helicopter type .................................
- At least 15h on helicopter type, performing HESLO 1 and HESLO 2 operations ....................................................

Sign-off by the operator

Last name: _______________________________ First name: _______________________________ Licence No: ___________________

Function: ____________________________ Signature: ____________________________ Date: ________________________