SAFETY INFORMATION NOTICE

SUBJECT: HYDRAULIC POWER

Reminder concerning the emergency procedure in the event of hydraulic failures on EC120 B and AS350 B3e helicopters (AS350 B3 equipped with Arriel 2D)
ATA: 00

For the attention of

AIRCRAFT CONCERNED                  |        | Version(s)        |
--------------------------------------|--------|-------------------|
                                      | Civil  | Military          |
EC120                                 | B      |                   |
AS350                                 | B3     |                   |

Airbus Helicopters has been informed of some non-fatal accidents which occurred during emergency procedure training for hydraulic failures. These events are the consequence of non-compliance with certain basic aeronautics rules and best practices necessary to the safe performance of this training.

The purpose of this Safety Information Notice is:
- firstly to give pilots and instructors details concerning modifications made to the Flight Manuals for compliance with the hydraulic failure emergency procedure and training for this procedure,
- secondly to remind you of the recommended training conditions when instructing.

The purpose of the revision to the Flight Manual issued in 2015 (EASA certification) for the EC120 B and AS350 B3e helicopters is to harmonize the emergency procedure for a hydraulic failure with the procedures implemented on the latest Ecureuil helicopter versions.

Recommendations according to flight phase:
- if there is no hydraulic assistance, Airbus Helicopters requests that you do not taxi, perform hover flights or any form of low speed maneuvers,
- the emergency procedure for hydraulic failures now recommends a very low speed running landing (approximate ground speed of 10kts) for the helicopters concerned by this Safety Information Notice, which limits interaction with the controls and facilitates landing without hydraulic assistance.

Performing the emergency procedure (FLM §3)

Emergency procedures must be concise and simple. For this reason, Airbus Helicopters does not intend to add additional emergency procedures to the Flight Manual. However, Airbus Helicopters wishes to remind you of the contextual recommendations for hydraulic failures and associated training on helicopters with a single hydraulic system:
- terrain with a surface suitable for running landings should be favored, and soft or excessively rocky ground must be avoided,
- approach must be flat and into the wind,
- it is necessary to control the running ground speed during training procedures without exceeding 10kts (between walking and running speeds),
- it is recommended to land with the nose tilted very slightly upwards to ensure the skids touch the ground first,
- it is imperative that the collective pitch stick is not lowered suddenly during a running landing.
In addition, Airbus Helicopters strongly advises against performing any taxi or hover flight maneuvers without hydraulic assistance.

**Emergency procedure training**

The latest revision of the Flight Manual for these helicopters also introduces a supplement for hydraulic failure training which includes a reminder of the recommendations to comply with during training:
- the hydraulic failure training procedure must be carried out in an area suitable for running landings,
- carry out an evaluation of the condition of the terrain prior to any running landing (excessively soft or rocky terrain is to be excluded),
- it is the instructor's duty to carry out this training in appropriate weather conditions,
- it is the instructor's duty to interrupt the exercise if the actual landing position is located outside the area evaluated,
- it is recommended to carry out the training with a reduced weight because the control loads increase with the weight,
- the failure simulation must be initiated at stabilized cruising speed,
- hydraulic assistance can be reactivated at any moment but in this case be prepared for a significant reduction in loads on the cyclic and collective sticks,
- at the end of the exercise, check the position of the hydraulic cut-off switch and hydraulic accumulator test button.

In addition, during standardization of instructor training, specific additional recommendations are provided such as performing an evaluation of the site and a risk evaluation prior to the training flight. Integrating these practices is the operational responsibility of each ATO.

The purpose of modifications to these recommendations and procedures is to reduce the risk of losing control (linked to excessively low speed), tipping (linked to excessively high speed or unsuitable terrain) or incorrect sequencing of actions to be carried out when complying with the emergency procedure following hydraulic failure. This harmonization improves the coherence, understanding and, therefore, compliance with this procedure on all these helicopters.