



FLIGHT MANUAL

AS 355 F1

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"This Rotorcraft Flight Manual is the translation of an approved French flight manual. The note "DGAC approved" on certain pages means that these pages are an integral translation of the French issue approved by DGAC".

This RFM is CAA approved for UK registered aircraft and consist of all uncoded and coded E pages marked "DGAC approved".

IMPORTANT NOTE

The practical value of this manual depends entirely upon its being correctly up-dated.
The revisions are recorded on the last page. At this revision, the effectivity of the manual is specified overleaf.

THIS DOCUMENT SHALL BE CARRIED IN AIRCRAFT AT ALL TIMES

Normal revision : 2



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SECTION 3.1

EMERGENCY PROCEDURES1 INTRODUCTION

The procedures outlined in this section deal with the common types of emergencies ; however, the actions taken in each actual emergency must relate to the complete situation.

Throughout this section "Land immediately", "Land as soon as possible" and "Land as soon as practicable" are used to reflect the degree of urgency and are to be interpreted as follows :

- Land (on land or water) immediately
- Land as soon as possible : land at the nearest site at which a safe landing can be made
- Land as soon as practicable : extended flight is not recommended. The landing site and duration of the flight are at the discretion of the pilot.

2 AUTOROTATIVE LANDING

The following procedures are to be applied where necessary (unlikely) :

2.1 On land or on water with emergency flotation gear

- Reduce collective pitch to obtain an NR near to the nominal speed (380 to 400 rpm). Do not exceed 425 rpm.
- Fly at an IAS of 65 Kt (120 km/h - 75 MPH) into wind
- Proceed as follows :
 - . Fuel shut-off control levers in closed position) Except if engine
 - . Fuel flow control levers in closed position) re-light is
 - . Booster pumps off) attempted
 - . Master switch (on final approach) off)
- At a height of between 50 and 100 feet (15 and 30 m), depending on the weight and external conditions (wind, terrain), start to flare out to a nose-up attitude of 15 to 20° to reduce the forward speed and the rate of descent. Monitor NR.
- At a height of between 10 and 15 feet (3 and 5 m) reduce the nose-up attitude to approximately 5° and start to apply collective pitch.
- Immediately prior to touch-down apply collective pitch progressively up R to the high pitch stop if necessary whilst holding back slightly on the cyclic pitch control
- After touch-down, reduce the collective pitch slowly to prevent an abrupt stop if any forward speed is present
- Carry out the safety procedures if necessary (master switch, fire extinguisher)
- Apply the rotor brake
- Evacuate the aircraft by jettisoning the doors if necessary.

2.2 On water (without emergency flotation gear)

If an autorotative landing is made on water, apply the same procedures as for landing on ground with the following additions :

- Land into wind
- Jettison the doors before flaring-out
- Allow the forward speed to drop as much as possible during the flare-out
- After touch-down, hold the aircraft level as long as possible by keeping the collective pitch against the high pitch stop
- Release the seat belts when the cabin is submerged
- Evacuate the aircraft and then inflate the life vests (if appropriate)

3 ENGINE FAILURES

3.1 Single-engine failure on take-off

There is no unsafe area up to 7000 feet and 2150 Kg. For heavier weights refer to section 5.1 para. 3.

Depending on the terrain and when applying the take-off procedure defined in section 4, it is recommended to abort take-off if the IAS is less than 30 kts (56 km/h - 35 MPH). At higher speed, the take-off may be aborted if the terrain permits, or it may be continued in which case an IAS of 40 kts (74 km/h - 46 MPH) should be attained for clearing obstacles, observing the restrictions imposed for single-engine flight. As soon as conditions permit, continue to climb at an IAS of 55 kts (102 km/h - 63 MPH) and look for an area to land.

3.2 Single-engine failure in flight

The flight may be continued on one engine ; the flight restrictions must be observed.

The symptoms are :

- Slight jerk in the yaw axis
- Change in the noise level
- Loss of synchronisation of : torques - Ng - Nf - t4
- "GENE" (GEN) light comes on for defective engine
- Drop in oil pressure
- "PH MOT" (ENG OIL PRESS) light, comes on.
- Audible warning operates if NR is 360 rpm or less

Under these conditions :

- On the remaining engine :
 - . Reduce the hot bleed air if appropriate
- On the defective engine, proceed as follows :

Fuel flow control lever -----	closed position gate
Booster pump -----	off
Generator -----	off

If necessary open the fuel tank crossfeed valve

Dependent on the origin of the failure, attempt to re-light the engine in accordance with the normal procedure.

- In order to prevent the turbine turning when the engine is shut down, it is recommended not to exceed 100 kts (185 km/h - 115 MPH).