


MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Change #1 to the Initial Entry Rotary Wing (IERW) Aviator TH-67 Primary Phase, Flight Training Guide (FTG) dated April 2008

1. This change is at the request of 110th AB Standards. It combines Task 1074.01, *Perform a Power Recovery* with Task 1074, *Respond to Engine Failure at Cruise Flight* and clarifies the actions of the Instructor Pilot and the Pilot on the Controls.
2. The following changes are approved.
 - a. Pen and ink changes:
Delete task 1074.01 from pages 13, 15, and 23.
 - b. Remove Pages Insert Pages
69/70 69/70
3. These changes are effective upon receipt.
4. Place this page with the document as authority/approval for the change.
5. 110TH AB POC is Mr. Franks, x-2666.

FOR THE COMMANDER:


JENNIFER K. S. BAILEY
MAJ, AV
Brigade S3

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DESCRIPTION:

1. Crew actions.

The IP will confirm suitability of the landing area and comply with Army regulations and local requirements prior to initiating the maneuver. The IP will announce "SIMULATED ENGINE FAILURE" and retard the throttle to engine idle. The IP will monitor the position of the aircraft and take corrective action if necessary.

b. Upon detecting simulated engine failure, the pilot on the controls (P*) will focus outside the aircraft and adjust the flight controls as necessary to land.

c. The pilot not on the controls (P) will assist the P* as directed.

2. Procedures. Upon detecting simulated engine failure, the P* will lower the collective to maintain rotor RPM within limits while simultaneously adjusting the pedals to trim the aircraft. The P* will select a suitable landing area. The P* will also use turns and vary the airspeed (between minimum rate of descent and maximum glide), as necessary, to maneuver the aircraft for a safe landing at the intended landing area. The final approach should be generally into the wind. The P* will call out rotor RPM, N1 stabilized, and aircraft in trim. The P* will complete or simulate emergency procedures outlined in TH-67 Operators Supplement Checklist or TH-67 Operators Supplement Checklist or TH-67 Operators' Supplement. If time permits, the P* will direct the IP to simulate transmitting a Mayday call on GUARD frequency, setting the transponder to 7700, turning the ELT on, and locking the shoulder harness inertia reel. The crew should plan each simulated forced landing as continuing to the ground. With the aircraft in a safe autorotative profile, the IP will smoothly advance the throttle to the full open position (POWER RECOVERY and TERMINATE WITH POWER), and prior to descending below 400 feet above ground level (AGL) state one of the three commands described below.

a. "POWER RECOVERY". Upon receiving the command "power recovery," the P* will maintain trim with pedals and continue autorotative descent as the IP confirms normal operating RPM by throttle pressure and by visually checking that the N₂ RPM is at 100 percent. When operating RPM has been confirmed, the P* will apply sufficient collective to establish a 500 FPM climb and adjust airspeed to 60 KIAS. Perform clearing turns during the climb to cruise altitude. Clear overhead and in the direction of the turn during the climb. The P* will complete the recovery and shall have a climb established prior to reaching 200 feet AGL.

b. "TERMINATE WITH POWER". Upon receiving the command "terminate with power," the P* will continue the autorotative descent. The IP will confirm normal operating RPM with throttle pressure and by visually checking that the N₂ RPM is at 100 percent. The P* will trim the aircraft with the pedals, and continue autorotative descent. During the final portion of the approach, the P* will apply sufficient power and collective pitch to decrease the rate of descent to zero at 3 to 5 feet AGL with the aircraft in a landing attitude. The airspeed at this point should be the same as if an actual touchdown were to be effected. The P* will maintain proper trim throughout the maneuver with the pedals, and maintain an altitude of 3 to 5 feet until the aircraft is brought to a stationary hover.

c. "TOUCHDOWN". The IP may elect to continue the maneuver and terminate with a touchdown autorotation. (Emergency procedure training criteria outlined in AR 95-1 and steady state autorotation criteria from TASK 1082 must be met before performing touchdown autorotations.)

Note 1: If time permits, the IP will announce, "THROTTLE CONFIRMED" during POWER RECOVERY and TERMINATE WITH POWER when certain that the engine is back to operating RPM.

Note 2: It is the IP's responsibility to manipulate the throttle during this task. However, provisions should be made during the crew briefing to allow the P* (as a back-up) to verify the throttle is full open. (IP candidates will be briefed and trained to restore the throttle to the full open position).

REFERENCES: AR 95-1
FM 3-04.203
TH-67 Operators Supplement
TH-67 Operators Supplement Checklist

TASK: ~~PERFORM A POWER RECOVERY.~~

1074.01

CONDITIONS: ~~In a TH-67 helicopter or a TH-67FS, with an instructor pilot, in the local flying area, or at an approved touchdown area.~~

STANDARDS:

- ~~1. RPM 100 percent.~~
- ~~2. Climb power.~~
- ~~3. Climb airspeed (60 KIAS) \pm 10 KIAS.~~
- ~~4. "S" type clearing turns on climbout.~~
- ~~5. Maintain trim.~~

DESCRIPTION: ~~The purpose of a power recovery is to return to powered flight following an autorotative descent. A power recovery is performed following a simulated engine failure at altitude or whenever an autorotation at a stagefield is to be aborted.~~

~~a. Power recovery from a simulated engine failure: The power recovery must be initiated at an altitude that will enable the pilot to establish normal operating RPM and advance the throttle to the full-open position prior to descending below 200 feet AHO. At a minimum, the recovery will be initiated by 400 feet AGL.~~

~~(1) Upon receiving the command "Power Recovery," smoothly advance the throttle to the full-open position. Monitor N2 and rotor RPM. Apply collective pitch as necessary to avoid exceeding maximum rotor or N2 speeds. After the throttle is full open, verify engine and rotor RPM at 100 percent.~~

~~(2) To initiate the climb, increase collective to adjust torque to the last known hover power. Adjust airspeed to 60 KIAS. Once the climb is established, adjust to a 500 FPM rate of climb. Perform clearing turns during the climb to cruise altitude. Clear overhead and in the direction of the turn during the climb.~~

~~b. Power recovery from an autorotation at a stagefield: The procedure is the same as described in paragraph a (1) above. However, a termination with power or a go-around may follow the recovery. No clearing turns will be performed within a stagefield traffic pattern. Climbs will be straight-ahead unless turns are required to avoid other traffic.~~

C1/07/09