

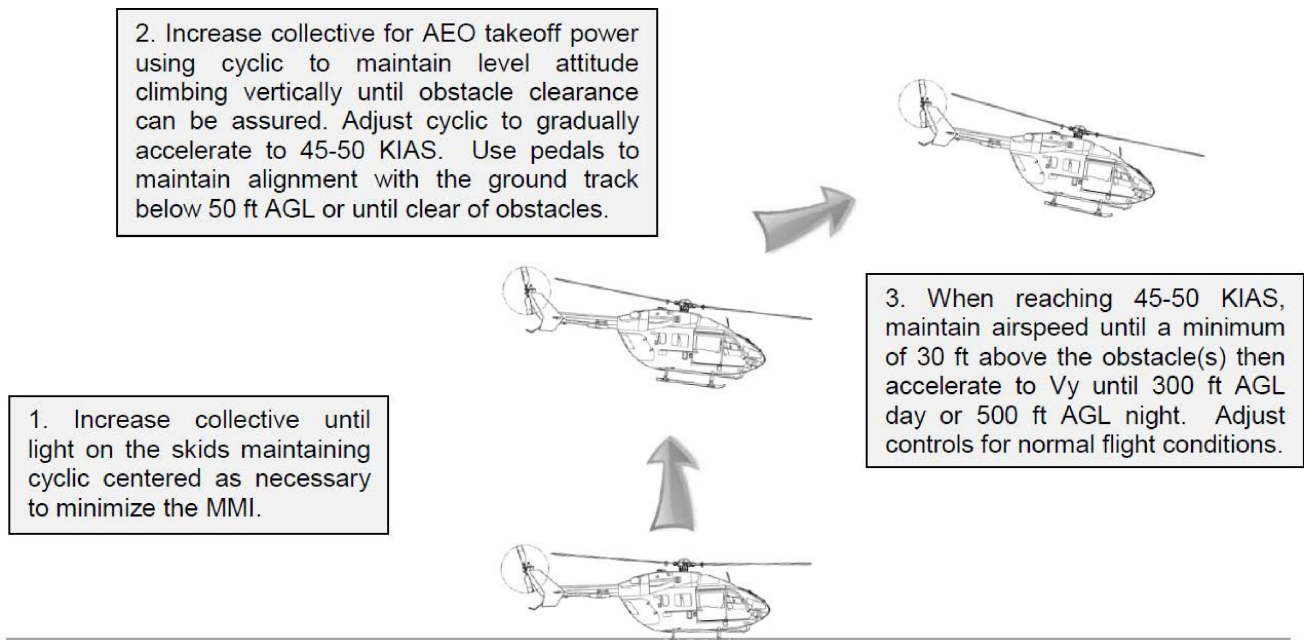
6.11 Confined Area/Pinnacle Operations

6.11.1 Takeoff

Initial Conditions:

1. In a BK117 or BK117 FSTD on the ground aligned with takeoff heading.
2. Before takeoff check: Complete.
3. Area: Clear.
4. Hover Check: Complete.
5. Obstacles: Identified.

Procedure:



Objective: To determine that the pilot:

1. Exhibits knowledge of the elements related to confined area operations.
2. Accomplishes a proper ground reconnaissance.
3. Selects a suitable takeoff point, considers factors affecting takeoff and climb performance under various conditions.
4. Does not exceed AEO takeoff power limitations.
5. Maintains RPM within limits. Utilizes CAT A / 104% mode as appropriate.
6. Maintains an altitude that ensures a minimum of 30 ft. obstacle clearance.
7. Accelerates to recommended airspeed ± 5 KIAS after clearing obstacles.

6.11.2 Landing

Initial Conditions:

1. In a BK117 or BK117 FSTD with before landing check complete.
2. High Reconnaissance: Complete.
3. In flight on final with:
 - a. Altitude: As dictated by terrain and environmental conditions.
 - b. Airspeed: Vy.
 - c. Heading/Track: Aligned with landing area, preferably into the wind.
4. Approach Angle: Allows proper clearance of obstacles while maintaining visual contact with the intended landing area.

Procedure:

1. Adjust the collective to initiate a descent on an approach angle that will allow for a minimum clearance of 30 feet above the obstacles while maintaining visual contact with the landing area.



2. Adjust cyclic to maintain track and, if obstacles allow, ETL until within ground effect. Increase collective to reduce rate of descent no greater than 300 fpm at 300 feet AGL and below. Maintain heading, preferably into the wind with pedals.



3. Adjust cyclic to stop ground speed and establish hover attitude over intended landing area while stopping descent at 3 ft +/- 1/2 hover height or to a landing with the collective. Maintain position over the surface and eliminate drift if landing with the cyclic while maintaining heading desired heading with the pedals.



Objective: To determine that the pilot:

1. Exhibits knowledge of the elements related to confined area operations.
2. Accomplishes a proper high and low reconnaissance.
3. Selects a suitable approach path, termination point, and departure path.
4. Tracks the selected approach path at an acceptable approach angle and rate of closure to the termination point.

5. Maintains RPM within limits. Utilizes CAT A / 104% mode as appropriate.
6. Avoids situations that can result in settling-with-power.
7. Terminates at a hover or on the surface, as conditions allow.
8. Accomplishes a proper ground reconnaissance.

6.11.3 Confined Area Notes

1. Hover OGE power is required for confined area operations.
2. When landing to deep snow, the skids may settle at different rates and will normally terminate in a tail low attitude. If equipped with skis, applying slight forward cyclic will keep the tail elevated; use caution, since the depth of snow is uncertain.
3. Hovering OGE reduces the available ground references and may increase the possibility of spatial disorientation. Be prepared to transition to instruments and execute a takeoff if ground reference is lost.

6.11.4 Confined Area Night/NVG Considerations

1. Confined areas are more difficult to evaluate at night because of low contrast. Success requires knowledge of the various methods of determining the height of obstacles. Pilot shall use external lighting in accordance with the GOM. Before conducting confined area operations, ensure that the searchlight is extended to the desired position. If the landing light / searchlight is used, night vision may be impaired for several minutes. The crew should use proper scanning techniques to avoid obstacles and prevent spatial disorientation.
2. Transitioning from aided to unaided flight, if required for landing, will be no lower than 300 feet AGL or as listed in the aircraft RFMS, whichever is higher.