ACS HELICOPTER MANEUVER SERIES · 3 OF 24

Hover Taxi

Area of Operation IV — Hovering Maneuvers

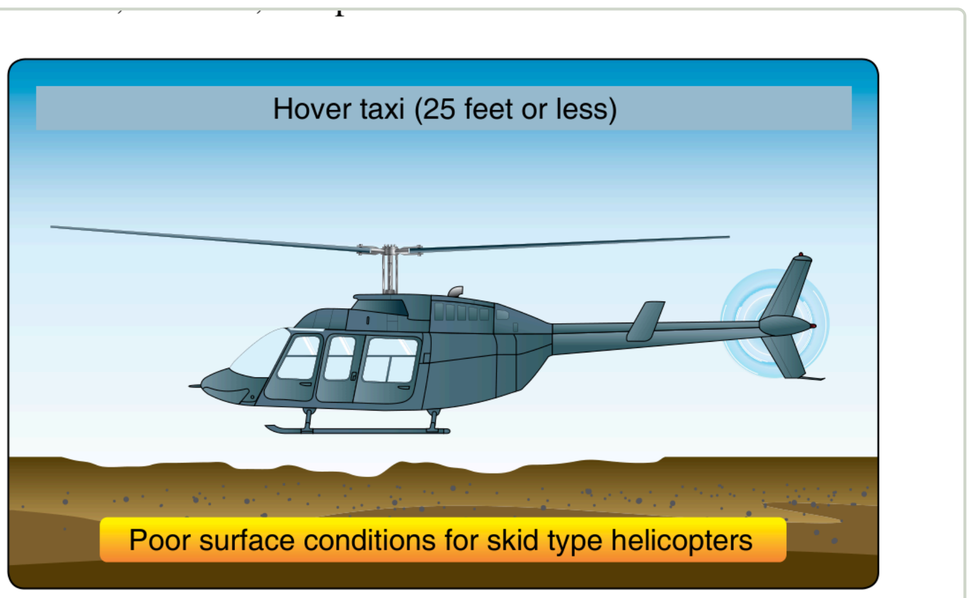
Private Pilot task PH.IV.B **Commercial Pilot task** CH.IV.B

Poster 03 of 24

Objective. To determine the applicant exhibits satisfactory knowledge, risk management, and skills associated with hover taxi operations, including runway incursion avoidance.

HOW IT IS FLOWN

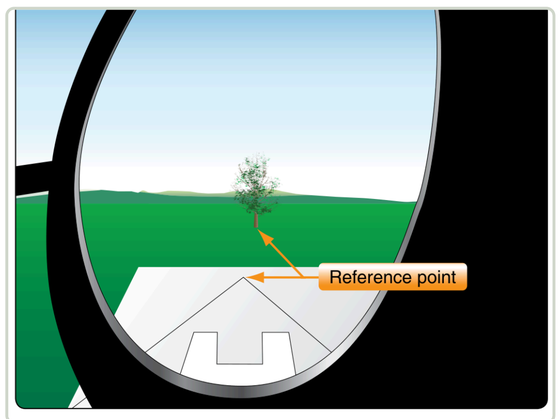
condensed from the FAA Helicopter Flying Handbook, Chapter 9 — Hovering Forward/Sideward/Rearward, Hovering Turn, Hover Taxi



HFH Figure 9-9. *Hover taxi.*



HFH Figure 9-7. *To maintain a straight ground track, use two reference points in line and at some distance in front of the helicopter.*



HFH Figure 9-8. *The key to hovering sideward is establishing at least two reference points that help maintain a straight track over the ground while keeping a constant heading.*

1. Hover taxi = hovering flight below 25 ft AGL, used to reposition on the airport. Technique is forward, sideward or rearward hovering flight.
2. Pick two reference points in line in the direction of travel and keep them in line throughout (Figures 9-7, 9-8).
3. From a normal hover, apply cyclic toward the direction of travel; as movement begins, return the cyclic toward neutral to hold a groundspeed no faster than a brisk walk.
4. Hold constant groundspeed and track with cyclic, heading with pedals, height with collective, rpm with throttle. Pedal changes alter rpm — correct with collective/throttle.
5. To stop, apply opposite cyclic until motion stops, then neutralize before it reverses. Rearward: clear behind first, use a slightly higher hover height, guard the tail rotor.
6. Hovering turn: pedal starts the turn; use cyclic (usually into the wind) to stay over the spot. Left turns need more power. Expect the pedal load to change through the crosswind and downwind portions — anticipate opposite pedal as the tail weathervanes.

COMMON ERRORS — HFH LIST

- Exaggerated cyclic → erratic movement over the surface.
- Improper pedal use → excessive heading change.
- Failing to hold hover height or rpm.
- Failing to hold a slow, constant rate of turn or position over the pivot point.
- Not clearing the area (and the tail rotor) before starting.

SKILLS — THE STANDARD

the applicant exhibits the skill to:

	PRIVATE · ACS-15	COMMERCIAL · ACS-16
S1	Complete the appropriate checklist(s).	
S2	Receive and correctly read back clearances/instructions, if applicable.	
S3	Use an airport diagram or taxi chart during taxi, if published, and maintain situational awareness.	
S4	Comply with airport/heliport taxiway markings, signals, and signs.	
S5	Maintain powerplant and main rotor (Nr) speed within normal limits.	
S6	**Maintain a straight ground track within ±4 feet of a designated ground track.**	**Maintain a straight ground track within ±2 feet of a designated ground track.**
S7	Maintain recommended hovering altitude, **±1/2 of that altitude** within 10 feet of the surface, if above 10 feet, **±5 feet**.	
S8	Hover taxi over specified ground references, demonstrating forward, sideward, and rearward hovering and hovering turns.	
S9	Maintain a constant rate of turn at pivot points.	
S10	**Maintain a position within 4 feet of each pivot point during turns.**	**Maintain a position within 2 feet of each pivot point during turns.**
S11	Make a 360° pivoting turn, left and right, stopping **within 10°** of a specified heading.	
S12	Make smooth, timely, and correct control application during the maneuver.	

▢ Shaded rows are where the Commercial standard is tighter than Private. Unshaded rows apply to both certificates.

KNOWLEDGE

PH.IV.B.K1–K11 · the applicant demonstrates understanding of:

- Current airport aeronautical references and information resources such as the Chart Supplement, airport diagram, and Notices to Air Missions (NOTAMs).
- Hover taxi instructions, clearances, and limitations.
- Airport/heliport/helipad/landing area, signs, markings, and lighting.
- Visual indicators for wind.
- Aircraft lighting, as appropriate.
- Procedures for:
  - a. Pilot activities during taxiing
  - b. Safe hover taxi at towered and non-towered airports/heliports/helipads/landing areas
  - c. Entering or crossing runways
- Height/Velocity (H/V) considerations.
- Aircraft operating limitations.

RISK MANAGEMENT

PH.IV.B.R1–R8 · identify, assess and mitigate risk associated with:

- Distractions, task prioritization, loss of situational awareness, or disorientation.
- Reduced visibility or night taxi operations.
- Runway incursion.
- Other aircraft, vehicles, persons, and hazards.
- Hazardous effects of downwash.
- Main rotor, tail rotor, and tail strike hazards.
- Height/Velocity (H/V) considerations.
- Confirmation or expectation bias as related to taxi instructions.

Standards: FAA-S-ACS-15 Private Pilot Helicopter and FAA-S-ACS-16 Commercial Pilot Helicopter (text reproduced from the current ACS). **References:** AC 91-73; AIM; Chart Supplements; FAA-H-8083-2, FAA-H-8083-21, FAA-H-8083-25; POH/RFM.
Figures and technique: FAA Helicopter Flying Handbook, FAA-H-8083-21B — figures reproduced unmodified. Always confirm tolerances against the ACS in force on your checkride date and procedures against the R44 POH/RFM.

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