

PRIVATE PILOT

II. AREA OF OPERATION: PREFLIGHT PROCEDURES

F. TASK: BEFORE TAKEOFF CHECK

OBJECTIVE

To determine that the applicant:

1. Exhibits knowledge of the elements related to the before takeoff check. This shall include the reasons for checking each item and how to detect malfunctions.
2. Positions the airplane properly considering other aircraft / vessels, wind and surface conditions.
3. Divides attention inside and outside the cockpit.
4. Ensures that engine temperature and pressure are suitable for run-up and takeoff.
5. Accomplishes the before takeoff checklist and ensures the airplane is in safe operating condition.
6. Reviews takeoff performance airspeeds, takeoff distances, departure and emergency procedures.
7. Avoids runway incursions and / or ensures no conflict with traffic prior to taxiing into takeoff position.

ELEMENTS

1. Use the manufacturer's recommended before takeoff checklist.
2. The before takeoff check is normally performed in a "runup" area near the takeoff end of the runway.
3. Position the airplane clear of other aircraft and ensure there is no debris below the airplane and nothing behind the airplane that could be damaged by prop blast.
4. The airplane should be headed as nearly as possible into the wind to minimize engine heating during runup.
5. After positioning, ensure the nose or tailwheel is aligned (not turned to one side).
6. While performing the engine runup, divide attention inside and outside the airplane (the airplane can move forward unnoticed if attention is fixed inside the airplane).

COMMON ERRORS

- a. Failure to properly use the appropriate checklist.
- b. Improper positioning of the airplane.
- c. Improper acceptance of marginal engine performance.
- d. Improper check of flight controls.
- e. Failure to review takeoff and emergency procedures.
- f. Failure to avoid runway incursions and to ensure no conflict with traffic prior to taxiing into takeoff position.

REFERENCES

1. FAA-H-8083-3A, Airplane Flying Handbook, Chapter 2.
2. POH / AFM, Pilot Operating Handbook / FAA-Approved Airplane Flight Manual.