



AIR CAPITAL AVIATORS CLUB (ACAC)

AIRCRAFT FAMILIARIZATION FLIGHT RECORD (AFFR)/ PILOT OPERATING HANDBOOK EXAM (POHE) (rev 4/2018)

MEMBER NAME: _____ DATE: _____

INSTRUCTOR: _____ **N** _____

AIRCRAFT TYPE: Cessna 172N Skyhawk Cessna 172M Skyhawk Cessna R182 Skylane RG

Prior to acting as pilot-in-command of any club aircraft:

The member must complete Parts I and II of this form. The ACAC approved flight instructor performing the aircraft checkout must review and initial Parts I and II and complete Parts III, IV, and V of this form. Both parties shall then sign where indicated and the flight instructor shall forward the completed form to the ACAC Safety Officer for final approval.

PART I - PILOT HISTORY

| | | |
|---------------------------------|--|--|
| Pilot Certificate(s) Held: | <input type="checkbox"/> Student Pilot | <input type="checkbox"/> Private Pilot |
| | <input type="checkbox"/> Sport Pilot | <input type="checkbox"/> Commercial Pilot |
| | <input type="checkbox"/> Recreational Pilot | <input type="checkbox"/> Airline Transport Pilot |
| Pilot Rating(s) Held: | <input type="checkbox"/> Airplane Single-engine Land | <input type="checkbox"/> Other _____ |
| | <input type="checkbox"/> Instrument – Airplane | |
| Instructor Certificate(s) Held: | <input type="checkbox"/> Flight Instructor | <input type="checkbox"/> Ground instructor |
| Instructor Rating(s) Held: | <input type="checkbox"/> Airplane Single-engine | <input type="checkbox"/> Other _____ |
| | <input type="checkbox"/> Instrument - Airplane | |
| Endorsement(s) Held: | <input type="checkbox"/> Complex - 61.31(e) | <input type="checkbox"/> High-Performance - 61.31(f) |

Date of most recent certificate, rating, BFR, or Wings Phase - 61.56: _____

Date of most recent medical - 61.23: _____ Class: ____ or Basic Med

I have reviewed the certificates, logbooks, and/or records of the member and find the above information to be correct and accurate to the best of my knowledge: _____ (instructor to initial)

PART II – PILOT’S OPERATING HANDBOOK EXAM (Open Book)

- Complete the following questions related to the fuel and fuel tanks of this aircraft:
 - Does this aircraft have STANDARD or LONG RANGE tanks? _____
 - Number of fuel tanks? _____
 - Location of the fuel tanks? _____
 - Fuel capacity? Total gallons: _____ Gallons per tank: _____
 - Useable fuel? Gallons: _____ Weight: _____
 - Recommended fuel? Grade: _____ Color: _____
- To ensure maximum fuel capacity when refueling, what steps must be taken? _____
- In what position should the fuel selector valve be for takeoffs and landings? _____

4. In what position should the auxiliary fuel pump switch be for (R182 only):
 - a. Takeoffs and Landings? _____
 - b. Normal flight? _____
 - c. Changing tanks? _____
5. Complete the following questions related to engine of this aircraft:
 - a. Which company manufactured the engine used in this aircraft? _____
 - b. Is this engine CARBURETED or FUEL INJECTED? _____
 - c. This engine is rated at _____ BHP at _____ RPM, and it has _____ Cylinders.
 - d. Oil sump capacity? _____
 - e. Minimum amount of oil needed to safely operate this airplane? _____
 - f. How much oil should be present for flights of less than 3 hours, to minimize loss of oil through the breather? _____
 - g. Under which conditions should you fill the oil sump to full capacity? _____
 - h. What type of oil is used in this aircraft? _____
6. Complete the following questions assuming the aircraft is operating on a paved field at maximum gross weight, 2000 ft. pressure altitude, temperature 68 °F, and a 9-knot headwind:
 - a. What is the takeoff distance to clear a 50-foot obstacle? _____
 - b. What is the ground roll? _____
 - c. What is the landing distance to clear a 50-foot obstacle? _____
 - d. What is the ground roll? _____
7. Are the Takeoff and Landing Charts based on pressure altitude or field elevation? _____
8. Assume a field elevation of 2000 ft. and a temperature of 95 °F. Prior to takeoff, should the mixture be leaned? _____ Why? _____
9. Complete the following questions assuming the aircraft is at an altitude of 6000 ft., maximum gross weight, recommended lean mixture and standard temperature, what power setting would give:
 - a. Highest cruise true airspeed?
RPM: _____ MP: _____ KTAS: _____ GPH: _____
 - b. Lowest fuel consumption
RPM: _____ MP: _____ KTAS: _____ GPH: _____
 - c. What is the maximum endurance with reserves (**hours and tenths**) at:
65% power: _____ 75% power: _____
10. How do you get recommended lean mixture (**no EGT**)? _____
11. How do you get recommended lean mixture using an EGT? _____
12. Weight and balance: (Use aircraft data below. **NOT** for flight planning purposes.)

| Aircraft | Max. Ramp Wt. | Max. Takeoff Wt. | Empty Wt. | Empty Moment |
|---------------|---------------|------------------|-----------|--------------|
| C-172 N (21E) | 2407.0 | 2400.0 | 1512.67 | 59,361.41 |
| C-172 M (946) | unlisted | 2550.0 | 1479.64 | 63,698.97 |
| C-182R | 3112.0 | 3100.0 | 1794.17 | 75,758.87 |

- a. What is the useful load? _____
 - b. What is maximum landing weight? _____
 - c. What is the maximum number of 170-lb people and pounds of baggage which can be carried with full fuel? People: _____, lbs of baggage: _____
 - d. With all adult seats filled with 170-lb people, what is the maximum amount of fuel that can be carried? Gallons: _____, lbs of fuel: _____
13. List recommended inflation for the following (psi for tires, psi or inches for struts):
 - a. Nose wheel tire: _____
 - b. Main wheel tire: _____
 - c. Nose wheel strut: _____

14. Determine the following speeds (**KIAS, assume maximum grossweight, MPH for N13946**):

- a. V_{SO} : _____
- b. V_S : _____
- c. V_X : _____
- d. V_Y : _____
- e. V_A : _____
- f. V_{LO} : _____ R182 only
- g. V_{LE} : _____ R182 only
- h. V_{NO} : _____
- i. V_{NE} : _____
- j. $V_{FE} (0^\circ - 10^\circ)$: _____
- k. $V_{FE} (10^\circ - 30^\circ)$: _____
- l. Takeoff:
 - i. Normal takeoff:
 - 1. Rotation speed: _____ *N13946
 - 2. Climb speed: _____
 - ii. Short field:
 - 1. Takeoff speed: _____
 - 2. Flap setting: _____
 - iii. Soft field:
 - 1. Takeoff speed: _____
 - 2. Flap setting: _____
 - iv. Safe flap retraction speed: _____
- m. Landing:
 - i. Normal approach speed:
 - 1. Flaps up: _____
 - 2. Full flaps: _____
 - ii. Short field:
 - 1. Approach speed: _____
 - 2. Flap setting: _____
 - iii. Balked landing:
 - 1. Flaps **IMMEDIATELY** to: _____
 - 2. Climb speed: _____
- n. Maximums:
 - i. Window open speed: _____ *N13946
 - ii. Yellow arc speed range: _____ - _____
 - iii. Demonstrated crosswind velocity: _____ *N13946
- o. Emergency airspeeds:
 - i. Engine failure after takeoff (flaps up): _____
 - ii. Engine failure after takeoff (flaps down): _____
 - iii. Engine failure in flight: _____

I have reviewed the answers provided by the member. Incorrect answers have been discussed and corrected as indicated: _____ (instructor to initial)

PART III – PREFLIGHT PHASE (Member and instructor to complete/initial)

1. **Review procedures for the following:**

| | |
|-------------|---------------------------|
| Parking | Local area airspace |
| Scheduling | Accidents |
| Flight log | Airplane/airport security |
| Maintenance | Flying charges |

PART IV – FLIGHT PHASE (Instructor to initial items completed)

1. **Optional Procedures for DAY, VFR:**

| | |
|-------------------------------------|-----------------------------|
| Pre flight | Normal TO & LDG |
| Starting / Taxi | Short Field TO & LDG |
| Avionics operation | Soft Field TO & LDG |
| GPS operation | Slow Flight (MCAS) |
| Intercom/Communication Panel | Stalls (Power on/off, etc.) |
| Steep Turns | |
| Auto-pilot operation (if installed) | Post flight |

2. **General Procedures: (REQUIRED to fly ACAC aircraft DAY, VFR)**

| | |
|---------------------------|---|
| Basic instruments | Unusual attitudes |
| Class C departure/arrival | Emergency procedures Manual gear extension (if applicable) |

3. **Night Procedures: (REQUIRED to fly ACAC aircraft at night)**

| | |
|------------------------------|---------------------------------|
| Simulated electrical failure | TO & LND with landing light off |
|------------------------------|---------------------------------|

4. **IFR Procedures: (REQUIRED to fly ACAC aircraft under IFR)**

| | |
|-------------------------------------|-------------------------------|
| Partial Panel | At least one GPS Approach |
| At least one Non-Precision Approach | At least one Non-GPS Approach |
| At least one Precision Approach | Missed approach |

PART V – AUTHORIZATION

Unless required by ACAC policy or marked “REQUIRED” above, checkout procedures and maneuvers are at the discretion of the instructor.

At the instructor’s discretion, checkout (Parts III and IV) in lesser-powered aircraft may be waived in accordance with the ACAC Rules of Operation. Parts I, II and V of this form must be completed and forwarded to the Safety Officer for each model in which the member seeks authorization to act as pilot-in-command.

Member is authorized to act as pilot-in-command of the following models and in the conditions indicated:

| | C-172 Cessna Skyhawk | C-182R Cessna Skylane RG |
|--------------|-------------------------|-----------------------------|
| VFR | | |
| NIGHT | | |
| IFR | | |

Instructor’s Comments: _____

This AFFR/POHE also satisfies the following requirements: _____ Biennial Flight Review
 (Instructor check and initial if either apply) _____ Instrument Proficiency Check

 Member’s Signature Date Instructor’s Signature Date

 Safety Officer’s Signature Date