

On The Fly Aviation Standard Operating Procedures

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##

## Introduction

The policies and procedures listed in this document are to be followed by all Instructors, Pilots, Students, and any other users of OTFA facilities and aircraft. The purpose of this document is to ensure safe operations, while enabling good ADM (Aeronautical Decision Making) on the part of all those involved.

This document is not a replacement for competent flight instruction or formal training. Wherever gaps or contradictions in guidance exist, the FAR’s, AIM, and manufacturer's data supersede this document.

The final section, Explanations, will contain more detailed instruction of the ‘why’ behind certain Operating Procedures.

## Log of Revisions

| **Document Version** | **Description of Changes** | **Date** |
| --- | --- | --- |
| OTFA SOP-1.1 | Added Log of revisions, Block Time, and Check Ride sections. Added MAX Gust Factor to Weather minimums. | March 12, 2022 |
| OTFA SOP-2.1 | Added Squawks, Aircraft Lights, Block Time, C172 and PA28 Fuel Loads. Improved wording for Cancellations, Check Rides, Thunderstorms, SIGMET and Landings. | August 27, 2023 |
| OTFA SOP-3.1 | Added runway length and surface limitations, ground handling rules, insurance deductible rule, and after hours aircraft check-out/in procedures. | November 27, 2023 |
| OTFA SOP 3.2 | Added “Aircraft” to the Scheduling section. | December 14, 2023 |

## Contacts

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KBAZ FBO: (830) 221-4290

##

## Weather and Environmental Limitations

### Weather Minimums and Fuel Reserves

Conditions must meet these conditions at each airport where a landing is anticipated. Operations outside these minimums may be conducted with approval from the Chief Instructor.

| **Operation Type** | **Max** **Wind** | **Max Gust Factor** | **Max****Cross Wind** | **Min****Ceiling** | **Min****Visibility** | **Fuel Reserves** |
| --- | --- | --- | --- | --- | --- | --- |
| **Dual VFR** | 30 KTS | N/A | MAX demonstrated | 1000 Ft | 3 SM | FAR 91.151 |
| **Dual IFR** | 30 KTS | N/A | MAX demonstrated | \* | \* |  FAR 91.167 |
| **Solo Student** | 15 KTS | 7 KTS | 5 KTS | 2000 Ft | 7 SM | 60 Minutes |
| **Solo PPL** | 25 KTS | 12 KTS | 15 KTS | 1500 Ft | 5 SM | 45 Minutes |
| **Solo IFR** | 25 KTS | 15 KTS | 15 KTS | 800 Ft | 2 SM | FAR 91.167 |

\*Must be equal to or greater than *that* required by the highest approach (appropriate to aircraft approach category) at the destination and alternate airport.

###  Runways

1. Aircraft are not to be operated on runways less than 2500’ in length. Landing and departing from grass fields (other than paved surface) is prohibited.

### Temperature

1. Operations must cease if temperature exceeds 115\* Fahrenheit, or measures below 15\* Fahrenheit on the surface.

### Icing

1. Flight Into Known Icing (FIKI) condition is a “No Go” decision at OTFA.
2. Aircraft must be completely free of ice, snow, and frost prior to BOTH: engine start and beginning take off roll.

### Thunderstorms

1. Pilots must attempt to avoid thunderstorms by at least 20 nm from take off to landing, if they are identified as: severe or producing “HEAVY” or “EXTREME” (red or purple) radar returns.
2. Aircraft must be returned to the hangar if thunderstorms are within 10 nm, and expected to reach the field.
3. Flights may be dispatched when thunderstorms are within 10 nm of the field but not expected to reach the field or interfere with the planned flight.

### SIGMETS

Pilots may fly through SIGMETs as long as the actual severe or forecast conditions may be sufficiently avoided. This includes Convective SIGMETS, as long as the above THUNDERSTORM section can be followed.

## Billing

This section describes how aircraft and instructor time will be recorded and charged, and the policies regarding reimbursements and block time. All billable time will be in decimal format (H.h). One tenth of an hour is 6 minutes. Example: 1.7 = 1 hr and 42 min (102 minutes).

1. *Aircraft Time:* The Customer will record the times read from the Hobbs Meter at the beginning and ending of an event involving the aircraft and will be charged the difference between the two. If the meter between two numbers, the higher number shall be recorded. If there is no Hobbs meter installed, or it is inoperative, then Aircraft Time will be computed at Tach Time multiplied by 1.3 .
2. *Instructor Time:* Starts at the beginning of the interaction between student and instructor for the purpose of flight training and ends once the lesson has been fully debriefed and all student logbook records completed. Total instructor time will be divided into Flight Time (equal to Aircraft Time) and Ground Time. Ground time includes the pre/post briefs and any other necessary student/instructor interaction to conduct the lesson. Any time that was spent doing other activities such as: bathroom breaks, solo preflights, phone calls, etc., will be subtracted from total Ground time.
3. *Check Rides:* Pilots taking FAA Check Rides will be charged Ground Time equal to the number of hours the instructor is on site for the checkride event. This includes IACRA, documentation, ground/flight portion stand by, and debrief.
4. *Solo Flights:* Pilots performing supervised solo flights, will be charged Ground Time equal to the number of hours the instructor spent on site, while the solo is taking place.

On The Fly Aviation accepts Visa, MasterCard, American Express, Electronic Funds Transfers, Cash, and Check as forms of payment. NO REFUNDS on Flight Training after the charge has been processed. Credit card transactions are subject to a 3.5% Banking Services fee.

The aircraft owner has the discretion to require the pilot to cover damages incurred during operations. If an aircraft owner requests maintenance to be completed on damages, the pilot will be expected to cover company insurance deductible up to $2,500. Pilots will not be expected to cover damages to aircraft that are pre-existing and/or did not occur during the rental period.

### Block Time

 Reserved.

### Reimbursements

Should personal funds be needed to purchase fuel or oil while away from KBAZ, the following policy will govern pilot reimbursements:

Instructors will be reimbursed upon the following payday.

Renters will have the amount spent on fuel removed from the total of their balance owed at checkout. Example: If a receipt for $97.50 of fuel is returned after a flight, and the total rental came out to $399.50, then the new total owed would be $399.50 - $97.50 = $302.

This same policy will apply for oil purchased by either instructors or renters.

## Scheduling

OTFA is open 7 days a week and on holidays with prior notification, and approval of OTFA instructors if required.

All scheduling will be performed through the Flight Circle software. A Pilot login may be initiated either by themselves, or by OTFA personnel. Once the login is authorized, events may be scheduled either by the pilot or OTFA personnel. If an event is to be scheduled outside the available time of either the instructor or aircraft; permission must be obtained by simply contacting the affected Instructor, Chief Instructor, Dispatcher, or Owners. Flights scheduled overnight must be approved by OTFA management or the Chief Instructor.

### Aircraft

Aircraft available for flight instruction and rental are:

1. N62502, 1981 Cessna 172P Skyhawk.
2. N94ER, 1983 Cessna 172P Skyhawk.
3. N852CP, 1998 Cessna 172R Skyhawk.
4. N90KW, 1981 Beech C24R Sierra. This aircraft is ONLY available for flight instruction, events scheduled solely as rentals are prohibited.

Flights in aircraft meeting the definition of 14 CFR part 61 for ‘Complex’ or ‘High Performance’ are only available when receiving flight instruction.

### Cancellations

If an event is canceled on the same day or within 12 hours prior to the scheduled start time, a fee of $60.00 will be charged to the pilot’s account. Since weather and other factors can change rapidly, discussion between the student and instructor is encouraged, but ultimately the final authority to cancel an event within this window lies solely with the instructor. Exceptions to the cancellation fee are the following:

1. Unsafe weather or conditions outside of minimums listed in these SOP’s.
2. Pilot conditions judged to violate the IMSAFE checklist (cancellations due to alcohol will not be exempt).
3. Maintenance causing the aircraft to be unairworthy.
4. Personal or family emergency (these will be handled on a case by case basis).
5. Any other situation discussed with OTFA and deemed appropriate for last minute cancellation.

All effort will be made to not charge a fee to the pilot’s account, and the exceptions should cover most common cancellation reasons. The majority of the fee goes to the instructor to cover their lost time.

### Check Rides

A Check Ride will not be scheduled for an applicant until they have completed the appropriate FAA written test(s) for their sought rating. Once a check ride is scheduled with the DPE, that applicant who is taking the check ride shall receive priority scheduling to ensure they are prepared.

## Checklists

Checklists will be provided for each aircraft that OTFA operates. Even some procedures not involving the aircraft may have checklists. All pilots and instructors are expected to follow the checklist whenever it is present. Please, pay attention to each item, and perform it correctly. When used correctly, checklists are an enormous tool to help prevent accidents and ensure safe, efficient operations.

## Squawks

1. If a discrepancy (squawk) is discovered prior to or after a flight, an entry in the aircraft’s squawk sheet is to be made. Fill out a work order sheet describing the issue and notify OTFA personnel.
2. No further flight is allowed with an open discrepancy.
3. If a discrepancy is discovered during flight, the aircraft should be returned to KBAZ unless it is judged safe to continue with the planned flight.

## Preflight

1. The requirements of 14 CFR 91.103 must be met prior to flight (NWKRAFT).
2. Do not use the doors frames or armrests as hand holds while entering or exiting the aircraft.
3. Minimum time should be spent with the battery ON during preflight to avoid unnecessary discharge.
4. The tow bar must NOT be left on the nose wheel unless actively towing the airplane.
5. Window cleaner and microfiber towels will be available at OTFA, or in the back of the aircraft, to clean the windows before each flight.
6. All ground handling of OTFA aircraft must be with instructor supervision. Ground handling without an instructor present is prohibited.

## Aircraft Lighting

1. Each aircraft’s beacon light switch should be left in the ON position at all times unless it is deemed by the pilot in command that it would be in the interest of safety to turn it OFF.
2. Care should be taken to use aircraft lighting properly to increase safety but also minimize wear. For these reasons aircraft lights should be used as follows:
	1. Beacon: Always
	2. Strobes: When on a runway or in flight
	3. Landing Light: When on a runway or in the vicinity (~5NM) of an airport
	4. Taxi Light: Between sunset and sunrise as required
	5. Nav (Position) Lights: Between sunset and sunrise

## Startup, Taxi, and Runup

1. Ensure the aircraft is pointed in such a way that the prop blast will not affect any people or property on the surface.
2. Special attention should be given to throttle position during engine start, that RPMs do not exceed 1000 before engine oil pressure is indicated (1).
3. Lean *aggressively* for all ground ops, after start up (2).
4. Perform a *gentle* brake check before taxi.
5. Understand and read back ALL taxi clearances. If any doubt exists, clarify before crossing other taxiways or runways.
6. RPMs must be kept at a minimum. 1000 RPM (generally less) should be the maximum required once rolling. (DO NOT RIDE THE BRAKES)
7. Keep taxi speeds at or below 15 kts ground speed. (DO NOT RIDE THE BRAKES)
8. To slow down the first action should be to reduce throttle. If a complete stop is required the throttle must be reduced to idle before applying brakes.
9. Minimum time should be spent at high RPM during engine run up, and every effort should be taken to keep RPMs as low as possible during ground ops.

## Take Off and Climb

1. Do not delay aircraft rotation once the appropriate speed is reached.
2. Unless an obstacle is present or while training for a specific maneuver, all climbs to altitude should be made at Vy + 10kts or faster (3).

## Cruise, Descent, Landing, and Maneuvers

For the purpose of this section, “landings” (touch and go, stop and go, low approaches, power off approaches, and full stop taxi backs) are considered maneuvers.

1. Checklists for Cruise, Descent, and Landing portions of flight must be completed.
2. All practice/flight training maneuvers should be conducted at an altitude at or above 1000 feet AGL.
3. Ground reference and landings are exceptions to the above restriction.
4. Simulated emergencies should be conducted at or above 500 feet AGL.
5. All maneuvers should be conducted with sufficient altitude that a safe landing can be made in the event of engine power loss. ( FAR 91.119(a) )
6. If practicing or attempting a short field (minimum distance) landing, maximum braking should not be applied until after the flaps have been selected or returned to the UP position. (4)

## Shut Down and Securing

1. Ensure all avionics and electrical equipment are OFF before pulling the mixture to idle cut off.
2. Ensure seatbelts are properly stowed, and not pinched in or hanging outside of doors.
3. If the aircraft is to be left unattended outside for any amount of time the control lock shall be installed.
4. Tie downs will be provided in the back of the aircraft, should there not be any already installed in the parking spot.
5. Install the provided chocks at the nose wheel when securing the aircraft.
6. All ground handling of OTFA aircraft must be with instructor supervision. Ground handling without an instructor present is prohibited.

## After Hours Dispatch Procedures

All ground handling of OTFA aircraft must be with instructor supervision. Ground handling without an instructor present is prohibited.

1. Check-out:
	1. Binders and headsets are kept in Classroom #1.
	2. Check maintenance status of aircraft next to binders and headsets.
	3. Shut the classroom door.

1. Check-in:
	1. Park aircraft on ramp. (DO NOT put the aircraft back in hangar)
	2. Install the control wheel lock, pitot tube cover, chocks at each wheel (3 sets total), close aircraft windows and vents.
	3. Put aircraft binder and headset back in Classroom #1.
	4. Text picture of aircraft timesheet to company phone number.
	5. Shut the classroom door.

## Fueling

1. The standard fuel load for OTFA aircraft will be the following for each aircraft model:
	1. BE23 Sundowner = 30 gal (bottom of tabs)
	2. BE24R Sierra = 30 gal (bottom of tabs)
		1. The slot in the tabs = 40 gal
	3. C172 Skyhawk = 24 gallons (12 per side)
	4. PA28 Cherokee = 36 gal (bottom of tabs)
2. Fueling should be performed as necessary before or after every flight, refilling back to the standard fuel load, unless instructed otherwise by OTFA personnel.
3. Fuel caps should be installed such that the latches fold aft into the stowed position, or are streamlined with the airflow.
4. The purchase of fuel at KBAZ should be made with the FBO fuel truck, (830) 221-4290. If possible, attempt to coordinate fueling for multiple aircraft during one fuel truck visit.
5. If fueling outside of FBO hours or away from KBAZ is necessary with personal funds then see the reimbursement policies in the Billing section. Receipts should be returned:
	1. To office staff or,
	2. To the pouch inside the aircraft rental binder with the purchaser’s name displayed or added in writing or,
	3. By taking a picture and texting it, with the purchaser’s name and date of flight included, to the business phone (830-560-0071).

## Accidents and Incidents

Pilots accept liability for any damage done to the aircraft while in their possession, including the deductible of **$2,500** for On The Fly Aviation’s insurance. On The Fly Aviation strongly encourages all students before their first solo flight and all renters to obtain a secondary renters insurance of choice to assist with the large deductible in the event that it is ever needed. In the event of an accident or incident, pilots must not permit the aircraft to be moved unless expressly authorized by On The Fly Aviation management or local, state, or federal authorities and must do all that they can to protect the aircraft and its equipment from further loss. Pilots must report all accidents, major or minor, to On The Fly Aviation at once, together with the names and addresses of witnesses and involved parties. Refer to the Contacts section for appropriate numbers.

## Explanations

1. If engine speed exceeds 1000 RPM during start up, the throttle was opened too far. Aircraft engines are not equipped with a “choke” like most gasoline engines, and are therefore very sensitive to throttle blade position. Meaning often what the engine needs is more FUEL, not air, during start. When in doubt, keep the throttle out. Rapid throttle movements (“pumping”) during engine cranking generally should NOT be necessary if a proper prime and throttle blade position was achieved.
2. Because engine speed and load are at a minimum while performing most operations on the ground, the mixture control may be placed in any position. Most aircraft fuel systems are set extremely rich in the “Full Rich” position, to provide adequate margin against detonation during high power operations, and to aid in starting. This setting is *too* rich, in fact, for most operations besides startup and when full power is required. The best practice is to lean the mixture as much as possible while conducting ground operations, except during engine start and applying full power for take off. If roughness is encountered during engine run up, the mixture should be richened until roughness subsides.
3. The increase over published climb speed is due to the following reasons: aid in CHT cooling, provide better forward visibility over the nose for spotting traffic and navigation, and give faster ground speed.
4. Flaps increase drag and lift. They effectively change the wing profile (chord and camber), so it can be more efficient at lower airspeeds (takeoff or landing). While advantageous, care must be taken when landing as the wing will continue producing lift well into the ground roll, significantly reducing the weight (and friction) on the wheels. This reduces the force required to lock up the brakes and cause tire skidding. Always apply brakes in a progressive manner (lightly to heavily) up to the maximum required for your landing situation. If sufficient runway remains, consider coasting with only aero-braking until wheel brakes are necessary.