



# Beverly Flight Center, Inc.

## Flight Safety Procedures and Practices

### I. General

All training flights are conducted as dual or solo as defined in CFR 14 FAR Part 61. All students shall be familiar with the Flight Safety Procedures and Practices prior to solo flight. No smoking is permitted in our buildings, the flight contractor's building, classrooms, or on the ramp.

- a. Students should obtain an appropriate class FAA medical as soon as practical in their training to ensure there are no potential medical issues that would impact their training.
  - i. All students should reference 14 CFR Part 61.15(c)(d)(e)(f) regarding motor vehicle violations related to operation of a motor vehicle while intoxicated by alcohol or a drug.
- b. Part 141 Students should at a minimum obtain an FAA 3<sup>rd</sup> Class medical prior to enrolling in the Part 141 program. If you intend to exercise the privileges of the ratings you are pursuing you should obtain the minimum class of medical required to exercise the privileges of those ratings prior to enrolling in the Part 141 program.

### II. Ramp Safety

Students should familiarized themselves with AC 00-34A Aircraft Ground Handling and Servicing.

#### Parked Aircraft

When an aircraft is parked, flight control locks should be used. In addition, the parking brake should be set. If applicable pitot static covers should be placed over the pitot tubes, and prop locks securely locked on the propeller (seasonal). Use of prop locks is in place from March through November. If the aircraft is a Piper Sport or a Cessna 172, then it should be properly tied down as well.

#### Propeller Safety

Rotating propellers and Helicopter rotor blades are invisible under certain lighting conditions. Several injuries and deaths have occurred on ramp areas caused by people walking into turning propellers or rotors. Many people have been injured by propellers in a moment of carelessness. When it becomes necessary to position propellers, they should be handled as if the engine is going to start. Before moving a propeller, always check to be sure the ignition switches are in the **off** position, and the throttle and mixture control levers are in the **closed** position. Always stand clear of propeller blade path, particularly when moving the propeller, because of a possible inadvertent engine start. Particular caution should be practiced around warm engines. Props locks must be properly removed from the propeller during the pre-flight.

#### Cell Phone Usage

During operations on the ramp, cell phone **USAGE** is not permitted. **No exceptions.**

### III. Aircraft Fueling

All aircraft shall be properly secured with engines and electrical equipment off. No persons shall be in the aircraft during fueling. No smoking is permitted on the ramp. Cell phones shall be off in the vicinity of aircraft being fueled. All aircraft shall be properly grounded prior to being fueled.

Improper fueling procedures may cause aircraft accidents' and in-flight incidents. All student pilots, pilots, NSCC faculty and staff should be familiar with the fuel requirements for the models and types of



aircraft they operate. The following paragraphs contain a description of problems that may be encountered in fueling aircraft and recommended procedures for combating these problems.

### Water in the Fuel

Water occurs in aviation fuels in three forms:

- a) Dissolved water occurs similar to the humidity in the atmosphere that converts to droplets and settles out as the fuel temperature decreases during flight.
- b) Suspended water appears in the form of droplets that reflect light. High concentration of droplets will cause fuel to have a cloudy or hazy appearance.
- c) Solid bodies of water may be caused by leakage of storage tanks, leaking filler neck seals, or the settling out of suspended water droplets.

### Accumulation of Water

There is no way of preventing the accumulation of water formed through condensation in fuel tanks. The accumulation is certain, and the rate of accumulation varies; so it is recommended that aircraft fuel tanks be checked before each flight for the presence of water. Any water discovered should be REMOVED immediately. Do not pour fuel back into the fuel tank after testing as this only allows water and sediment to accumulate in the tank. Fuel should never be dumped on the ramp after testing for the presence of water. Environmental containers are available for fuel drained from sumps.

Because of the high lead content, direct fuel contact with skin or the wearing of fuel saturated clothing should be avoided. Skin irritation or blisters may result from direct contact with fuel. Immediate medical attention should be sought if fuel enters the eyes.

In the event of fuel spillage, notify the office, and stop all operations until the spill can be removed, using proper safety and environmental precautions.

## **IV. Fire Precautions and Procedures.**

### A. Airplane

- 1. Extreme care should be taken to avoid over-priming in cold weather.
- 2. Pre-heat should be used if temperatures warrant. Pre-heat shall be performed by authorized personnel only.
- 3. Should a fire start, complete the procedures as specified in the Pilot Operating Handbook which should include the following:

Starter	<b>Continuous Cranking</b>
Mixture	<b>Idle Cutoff</b>
Throttle	<b>Full Open</b>
Electric Fuel Pump	<b>Off</b>
Fuel Selector	<b>Off</b>
If Fire Continues	<b>Abandon</b>
Master	<b>Off</b>
Ignition / Mags	<b>Off</b>

Should the aircraft in use not have an established procedure, initiate the steps listed above.

Contact the nearest personnel to notify them of the fire and alert emergency personnel. If you can safely do so get a fire extinguisher and discharge it into the engine air intakes. Do not open the cowling unless you are certain the fire is extinguished,

Do not attempt to operate the airplane until it has been inspected and returned to service by an authorized mechanic.



## B. Building

1. In the event of a fire all students are expected to evacuate the building immediately and file into the parking area in an orderly manner. Fire extinguishers are positioned strategically about the ramp, hangar, and office areas.

## V. Aircraft Operating Procedures and Practices.

### Weather Minimums:

#### A. Private Pilot Students (Student Pilots)

1. Dual (VFR) Local, forecast weather within 2 hours of the flight. Basic VFR weather minimums unless a special VFR is requested. The maximum crosswind component is not to exceed the demonstrated crosswind component of the aircraft.
2. Dual (VFR) Cross Country, forecast weather along the entire route of flight extending 4 hours from ETD of the flight. Basic VFR weather minimums and the maximum crosswind component is not to exceed the demonstrated crosswind component of the aircraft. .
3. Solo (VFR) Traffic Pattern, forecast weather for duration of flight and 1 hour after the ETD of the flight. 2,000 ft. ceiling; 5 SM visibility. The maximum crosswind component is not to exceed the demonstrated crosswind component of the aircraft and subject to flight instructor approval and more restrictive limitations.
4. Solo (VFR) Practice Area, forecast weather for the duration of the flight and 2 hours after ETD of the flight. 3,000 ft. ceiling, 8 SM visibility. The maximum crosswind component is not to exceed the demonstrated crosswind component of the aircraft and subject to flight instructor approval and more restrictive limitations...
5. Solo (VFR) Cross-Country, forecast weather along the entire route of flight for the duration of the flight extending 5 hours from the ETD of the flight. Ceiling 1,000 ft. above the highest planned altitude, 8 SM visibility. The maximum crosswind component is not to exceed the demonstrated crosswind component of the aircraft and subject to flight instructor approval and more restrictive limitations.
6. Night Flight: No students are permitted to conduct solo night flights without an instrument rating and meeting the night experience requirements of FAR Part 61.57 (b).
7. Student pilots are prohibited from operating the aircraft on top of a layer of clouds. They may not use special VFR procedures.



8. Student pilot weather minimums policy for Dispatchers dispatching students solo without a specific limitations log book endorsement from the primary Certificated Flight Instructor or direct Certificated Flight Instructor supervision available on site are:

Practice Area

Clouds: 2500' AGL minimum cloud base  
Visibility: 8SM minimum  
Wind: 15kt maximum headwind component  
10kt maximum crosswind component  
Utilize the maximum gust for wind calculations.

Traffic Pattern

Clouds: 500' minimum above Traffic Pattern Altitude  
Visibility: 5SM minimum  
Wind: 15kt maximum headwind component  
10kt maximum crosswind component  
Utilize the maximum gust for wind calculations.

Cross-Country

Clouds: Minimum ceiling 1000' above the maximum altitude planned along the route of flight  
Visibility: 8 SM minimum along route  
Wind: 15kt maximum headwind component at departure and destination  
10kt maximum crosswind component at departure and destination  
Utilize the maximum gust for wind calculations.

To conduct a solo cross-country flight the student must:

- 1.) Adhere to weather and operational limitations stipulated by the student's instructor
- 2.) Get a Weather Briefing via telephone and copy down information
- 3.) Create a Navigation Log
- 4.) Create a Flight Plan
- 5.) Complete a Weight and Balance form
- 6.) Have weather briefing, navigation log, flight plan, and weight and balance reviewed by an authorized flight instructor, and receive an endorsement to conduct the flight.
- 7.) Fill out the flight school cross-country log
- 8.) File and operate under an active flight plan

B. Instrument Pilot Flight Training.

1. No forecast of icing conditions or convective activity in the vicinity of the route of flight.
2. The ceiling and visibility must be great enough to execute a safe landing upon breaking out of the clouds in the event of an emergency.
3. The maximum crosswind component is not to exceed the demonstrated crosswind component of the aircraft.
4. No aircraft doing Instrument pilot flight training may depart IFR if ceiling and visibility are below landing minimums for that airport and runway of intended use.
5. Simulated instrument failures will not be carried out in actual instrument conditions.

C. Commercial Pilot Flight Training.



1. No commercial pilot students will be allowed to conduct solo VFR flights or solo VFR cross country flights when the ceiling and / or visibility is below VFR weather minimums for the area in which they will be flying.
2. A commercial pilot student may not begin a cross country flight if the ceiling is forecast to be less than 1000 ft. above the highest planned altitude and the visibility is less than 3 SM.
3. No commercial pilot students are permitted to use special VFR procedures.
4. The maximum crosswind component is not to exceed the demonstrated crosswind component of the aircraft.

#### Aircraft Starting:

A flight instructor will be in the airplane for all engine starts by students who have not been authorized to fly solo. A fire extinguisher will be available for all starts. The parking brake should be used in accordance with all check lists. The area around the airplane shall be visually cleared and a verbal call of clear prop shall be given prior to engine start.

The aircraft will be preheated when the ATIS temperature is reported at or below 0C/32F degrees.

The airplane cockpit shall never be left unattended while the engine is running. The airplane engine must be shut down before the pilot permits any passengers to board or exit the plane. Avoid starting the aircraft in front of hangars; blowing debris may cause damage to other aircraft as well as injury to persons in the area. Whenever possible, avoid operating the engine at high RPM power settings while in the ramp area (keep power below 1,500 RPMs for Warrior, Archer, Arrow, C172 aircraft) to minimize blowing debris.

Customers are **not** permitted to hand prop airplanes. Only qualified personnel, trained and signed-off by the flight school management, shall consider hand prop starting an airplane. In most circumstances, if the electric starter is not functioning properly, the aircraft shall not be operated.

#### Taxi Procedures:

Taxiing on taxiways will be no faster than a fast walk. Do not taxi with the brakes on. Do not try to maneuver through a tight area without an outside observer watching the wing tips. All taxiing shall be done on designated taxiways. Use of airport taxi diagrams at KBVY and away airports, when available, are required. A diagram for KBVY is available at the main desk.

#### Re-Dispatch Procedures:

A schedule of aircraft and instructors is provided for the orderly flow of student training and aircraft rental. This schedule is adhered to as closely as possible. Exceptions are allowed for changes in weather, flight conditions, or aircraft equipment failure which would affect flight safety. Should any student be forced to land at an airport due to mechanical trouble or weather, they are required to contact the flight school as soon as practicable by phone. The main number for the Beverly Flight Center is (978) 774-7755. In addition each student will be provided with a contact number for the instructor on duty prior to all solo flights. A company official at the flight school will determine the course of action to be followed. Should the aircraft require repairs, none will be initiated without the consent of the management of the flight school. Should the aircraft stay at the unscheduled airport, the student will ensure that it is securely tied down and chocked to prevent wind damage.



### Reporting Aircraft Discrepancies:

An aircraft status board is located in the main office. This board displays the dates and tach times for future maintenance on each aircraft. Current tach times on each aircraft are updated daily.

Students and/or their instructors that find a discrepancy with the aircraft should verbally communicate that discrepancy to the dispatcher on duty. The dispatcher has the responsibility of recording that discrepancy on the appropriate form. The Chief Instructor shall forward the problem to the maintenance department for correction. Access to keys for grounded aircraft will be limited to authorized personnel only. Upon completion of all discrepancies, the aircraft will be returned to service by an authorized mechanic.

### Securing Aircraft:

When not in use the aircraft will be parked, with the doors shut. When parked at an airport other than the home base, the aircraft shall be locked. A control lock should be installed as well as a Pitot tube cover and a propeller lock.

### Fuel Reserves:

#### A. Local Flights

1. Student solo flights should depart with full tanks whenever possible - unless weight and balance constraints dictate less fuel be carried. Fuel levels will be confirmed by visual inspection of the fuel tanks.
2. All aircraft will land with no less than 1 hour fuel reserve.

#### B. Cross Country

1. Flight will begin with full fuel confirmed by visual inspection of the fuel tanks unless weight and balance dictates less fuel be carried.
2. All flights shall land with no less than one hour fuel reserve.
3. Fuel stops shall be incorporated on cross country flights as necessary.
4. Fuel purchases shall be reimbursed towards the rental cost of that flight per the policy of the flight school.
5. Students are only allowed to fly to airports with paved surfaces and a maintenance facility.

### Collision Avoidance:

Proper surveillance of other aircraft shall be maintained on the ground or in flight by both the instructor and student. Clearing turns are mandatory prior to any practice of flight maneuvers. Proper traffic pattern procedures shall be followed. Anti-collision lights will be used any time the aircraft engine is running. Landing lights shall be on in the traffic pattern as required for increased visibility.

### Land and Hold Short Procedures (LAHSO):

Student pilots are prohibited from using land and hold short procedures. All student pilots must include the phrase "student pilot" in their initial call to Air Traffic Control. Commercial Pilot students may participate in land and hold short procedures if they have determined they may do so safely.

### Practice Area:

The practice area is depicted on the chart in the flight planning room.

## BEVERLY PRACTICE AREA PROCEDURES

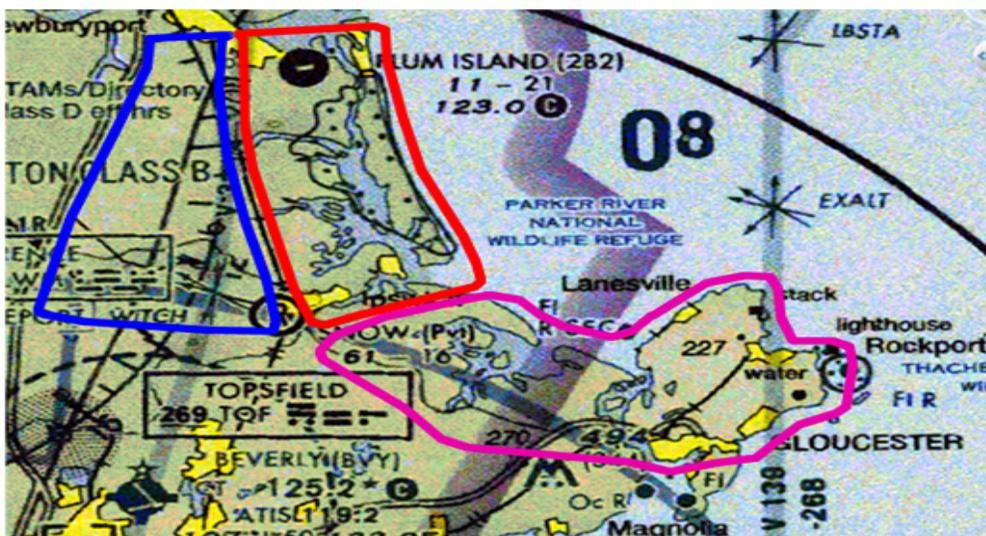
Please review the following practice area procedures. If you have any questions, please don't hesitate to ask any instructor or dispatcher!

- When departing Beverly enroute to the practice area, please use an altitude of either 1,500 ft. or 2,500 ft.
- When returning to Beverly from the practice area, please use an altitude of 2,000 ft.
- Use the frequency 122.75 when in the practice area to inform other aircraft of your intentions. Ex: "Warrior 2159H will be practicing steep turns over Ipswich at 2,500 ft"
- If practical, try to stay in 1 of the 3 designated areas for all of your maneuvers. (see image below)

**Area A:** Gloucester/Cape Ann area, toward southern portion of Ipswich.

**Area B:** Ipswich to Plum Island, and as far west as the railroad tracks.

**Area C:** Northern boundary of Plum Island, southern boundary of Ipswich. From railroad tracks to western boundary of Route 95.



### Minimum Altitude Limitations:

All students shall use the designated practice area for stalls and flight maneuvers. All maneuvers and stalls will be completed at an altitude no lower than 1500' AGL with exception of ground reference maneuvers and simulated emergencies which will be conducted in accordance with the Airmen Certification Standards (ACS). When practicing emergency landings the recovery shall begin prior to 500' AGL or higher as specified and required by 14 CFR 91.119. Instructors shall take control of the aircraft during the recovery from simulated emergency landings. There shall be no solo student practice of off airport emergency landings. Solo power off landings will only be conducted at an airport in an approved traffic pattern. Clearing turns will be executed prior to each maneuver. The clearing turn may be two 90 degree turns of a full 180 degree turn.

### Run-Up Advisory:



All students are required to perform their run-ups short of the runway hold line or in the run-up area if one is designated. The airplane shall be facing into the wind as nearly as possible. A thorough check of oncoming traffic is to be made prior to taxiing onto the runway or crossing any runway. A radio call on CTAF advising the tower or area traffic of your intentions is required.

#### Off-Limit Areas / Airports:

The aircraft are off-limits to spectators unless prior permission has been received from company officials. No unauthorized person may be on the ramp unless accompanied by company personnel. All airport security policies and procedures must be adhered to. Landing at any airport that does not have paved runway surfaces and maintenance facilities will only take place with a flight instructor on board. (e.g. Plum Island, Hampton, Marlboro, Shirley, etc.)

#### Miscellaneous Rules:

1. Simulated off-airport forced landings outside of an approved traffic pattern will only be practiced with an instructor on board.
2. Solo power off landings will only be conducted at an airport in an approved traffic pattern.
3. No stalls or maneuvers will be performed below 1500' AGL, near congested areas, or on an airway.
4. No student pilot may start a solo flight until the flight has been approved by a Beverly Flight Center flight instructor. A Beverly Flight Center flight instructor must be present at the airport whenever student solo flights are in progress.
5. All students shall perform a pre-flight inspection.
6. All ice, snow, and frost shall be removed from the aircraft prior to flight. Students must be familiar with proper procedures in AC 91-13C Cold Weather Operations of Aircraft.
7. The use of checklists is mandatory for each flight.
8. Knowledge of the fuel system, capacity, and consumption is required by for each aircraft make and model flown.
9. Knowledge and compliance with all FAA Air Traffic Rules and noise abatement procedures is mandatory.
10. Regardless of weather, if a student cannot make a scheduled flight appointment they must contact the flight dispatcher at the flight school desk and if possible their flight training instructor.
11. All checklists and the Pilots Operating Handbook must be onboard for all flights.
12. All students will have stage checks performed for pre-solo, solo cross country, Private Pilot, Instrument Rating, Commercial Pilot and Multi Engine Rating during their training.
13. Pilots checking out in Cirrus Aircraft will follow the Beverly Flight Center Cirrus Training Center policy and procedures and Cirrus Aircraft's transition, currency and recurrency recommendations.
14. Pilots flying from the right seat of the aircraft must be checked out and signed off by a Beverly Flight Center Certificated Flight Instructor or be current Certificated Flight Instructors.



15. The aircraft will be preheated anytime the ATIS temperature is reported at or below 0C/32F degrees.
16. Flight operations will be temporarily suspended if ATIS temperatures are reported at or below -18C/0F degrees or above 38C/100F degrees.

## **VI. Accident Reporting Procedures**

In the event of an accident or incident the PIC will comply with all FAR and NTSB 830 requirements and notify Beverly Flight Center immediately.

In the event of an aircraft accident or incident involving a student, renter, or staff, Beverly Flight Center shall be notified immediately.

Any communication regarding an accident or incident involving a student, renter, or staff member shall be provided by a spokesperson of Beverly Flight Center. Students, renters, or staff are prohibited from speaking with any persons regarding an accident or incident until cleared by Beverly Flight Center or the Beverly Flight Center legal counsel.



## Record of Revisions

Original	2016-07-16	
Revision 1	2016-12-27	
Revision 2	2017-03-03	Dispatcher weather policy. Stage check policy. Cirrus check out and currency policy.
Revision 3	2017-04-07	Sign off required or a current CFI for flying from the right seat of the aircraft.
Revision 4	2018-12-09	Preheat for aircraft required at or below 0C/32F degrees. Flight operations are temporarily suspended at or below -18C/0F degrees or at or above 38C/100F degrees.