Flight School
Policies & Operations
Manual

GREATER BUFFALO INTERNATIONAL AIRPORT
50 NORTH AIRPORT DRIVE
BUFFALO, NEW YORK 14225-1490 716-633-1000

The following information should not be considered an all-inclusive list of rules and regulations, but the beginning of a minimum set of standards that you will build upon to ensure and promote your efforts in attaining the safety of flight.

Revision 6 2/12/2019
STATEMENTS OF ASSURANCE

... The programs, curriculum, and instruction are consistent in quality, content, and length with similar programs in public and private institutions in the New York State, with recognized standards.

... The institution has adequate space, equipment, instructional materials, and instructor personnel to provide training of good quality.

... Education and experience qualifications of administrators, faculty and instructors are adequate.

... The institution maintains a written record of the previous education and training of the eligible person or veteran that clearly indicates that appropriate credit has been given by the institution for previous education and training, with the training period shortened proportionately.

... A copy of the course outline, schedule of tuition, fees, and other charges, regulations pertaining to absences, grading policy, and rules of operation and conduct will be furnished the veteran or eligible person upon enrollment.

... The institution keeps adequate records, as prescribed by the State Approving Agency, to show the progress and grades of the eligible person or veteran and to show that satisfactory standards relating to progress and conduct are enforced.

... The institution complies with all local, city, county, municipal, state and federal regulations.

... The institution is financially sound and capable of fulfilling its commitments for training.
... The institution will not utilize advertising of any type which is erroneous or misleading, either by actual statement, omission, or intimation.

... The institution will not exceed its enrollment limitations as established by the State approving agency.

... The institution does not provide any commission, bonus, or other incentive payment based directly or indirectly on success in securing enrollments or financial aid to any persons or entities engaged in any student recruiting or admission activities or in making decisions regarding the award of student financial assistance.

... The institution will meet additional reasonable criteria as may be deemed necessary by the State approving agency.

... It is understood and agreed that charges for services and articles, if applicable, for veterans and other eligible persons are not in excess of charges made for other regular students pursuing the same or similar programs.

... The institution will not accept the enrollment or reenrollment of a student under Title 38 U.S.C. and Chapter 1606, Title 10 U.S.C. when more than eighty-five (85%) percent of the students enrolled in the course(s) are having all or any part of their tuition, fees, or other charges paid to or for them by the school or the Department of Veterans Affairs. The 85/15 ratio applies to each course individually.

CERTIFICATION UNDER OATH

I, the undersigned, certify that:

A. I am an officer or official of the institution named in the application and I make this certification under the authority of the named institution.
B. Notwithstanding any other provision of law, the institution will make available for examination by duly authorized representatives of the government during normal business hours, without prior notice, any records and accounts of the institution pertaining to persons who received educational assistance under Title 38, U.S. Code, as well as the records of other students which are necessary to ascertain that the institution is complying with the requirements of Title 38.

C. The institution will adhere to the Statements of Assurance identified in this application for approval as a condition of continued approval.

D. I have read and completed this application for approval under Title 38, U.S. Code, including all statements and materials submitted with the application.

E. I certify that the answers, statements and materials submitted as part of the application are, to the best of my knowledge, true and correct in content and policy.

___________________________________
Name of School Official (please print)
Title

___________________________________
Signature of School Official
Date
## Record of Revisions

<table>
<thead>
<tr>
<th>Revision #</th>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>12/20/2010</td>
<td>Original</td>
</tr>
<tr>
<td>2.</td>
<td>12/21/2013</td>
<td>Revision</td>
</tr>
<tr>
<td>3.</td>
<td>11/01/2014</td>
<td>Revision</td>
</tr>
<tr>
<td>4.</td>
<td>01/20/2016</td>
<td>Add Diamond airplane</td>
</tr>
<tr>
<td>5.</td>
<td>07/01/2018</td>
<td>Eliminated physician list, weather reports, appendices</td>
</tr>
<tr>
<td>6.</td>
<td>02/12/2019</td>
<td>Change Maintenance Record Keeping</td>
</tr>
<tr>
<td>Subject</td>
<td>Page Number</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>Flight Training Staff</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td><strong>Enrollment</strong></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Certificate of Enrollment</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Flight Training Curriculum</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Lesson Preparation</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Payment</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Medical</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Medical Examiners</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>Procedures &amp; Practices</strong></td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Dispatching Procedures</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Redispatching Procedures</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Discrepancies/Return to Service</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Rental</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Keys and Logbooks</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Student Solo</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Scheduling</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>No-Show Policy</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Securing Aircraft</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Fuel Reserves</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Oil</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Safety</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Weather Minimums</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Collision Avoidance (Ground and Air)</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Minimum Altitudes</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Practice Area Description</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Preflight Planning</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Preflight Inspection</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Ground Operations</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Starting and Taxiing</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Fire Precaution and Procedures</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Clearances</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Takeoff Brief</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>
The flight training at Prior Aviation Service is conducted by our professional flight instructors and is directly overseen by the Chief Flight Instructor.

We want you to think of this as your flight school and feel comfortable to bring to our attention any item you feel could enhance the quality of our training. We strive for our flight school to be an efficient and enjoyable way to learn all aspects of becoming the safest pilot possible.

In the event that a problem should arise, or you feel we are not performing to your standards, please bring it to the attention of any of the instructors or the Chief Flight Instructor.
**Enrollment**

**Certificate of Enrollment**

Each student will be provided with a certificate of enrollment containing the name of course and the date enrolled.

**Flight Training Curriculum**

Prior Aviation consults the Jeppesen Syllabus for organization of the flight-training curriculum. This syllabus is used to provide the student with an outlook on the upcoming flight and ground lessons and assures that all requirements for the issuance of the certificates or ratings will be met.

Continuity of training is extremely important for the effective, efficient completion of the flight course. Continuity refers not only to the order in which flight and ground lessons must be completed, but also to the regularity of scheduled activities.

**Lesson Preparation**

Prior to each flight lesson, your instructor will assign material for you to study. In order to benefit from each lesson, be sure to arrive prepared and have the assigned material read.

During the preflight briefing, you and your instructor will discuss the details of the lesson. Pay close attention to the information provided from your instructor. Question any point that is not completely clear. Your instructor has the background and experience to correctly answer your questions; however, pilots with years of experience and thousands of hours of flying time are still asking questions and still learning. If your instructor does not know the answer, he/she will admit to it and find the answer with you.

At the completion of each flight, your instructor will conduct a post flight briefing. This is your chance to have any questions answered and to learn correct procedures. Never leave the flight school without completely understanding each element of the lesson. The best time to ask questions is immediately after the flight when all details of the flight are easily remembered. After completing a solo flight, debrief yourself and make notes on your performance and items learned. This will help to reinforce the material learned from previous flights with your instructor.
Show your initiative, resourcefulness and interest by being alert and totally prepared. If you are eager and enthusiastic, your flight will be enjoyable and rewarding. Don’t plan on being just a pilot - be the safest and best pilot.

**Student Progress**

The Chief Flight Instructor monitors all student progress. Any substandard performance will be brought to your attention immediately. Each course has progress stage checks, which are administered by either the Chief Flight Instructor or the Assistant Chief Flight Instructor. Successful completion of these checks is required to proceed to the next level of flight.

**Course Completion**

After successfully passing the final progress check and meeting all course completion standards, your instructor will sign-off your folder and logbook. Prior to scheduling the check ride with an appropriate examiner, the Chief Flight Instructor will review the required paperwork.

**Payment**

Payment is expected at the completion of all service. Payment may be made by cash, check, American Express, MasterCard, Visa or Discover. Past due invoices will be charged 1.5 percent interest per month in addition to the principal amount outstanding. Further flying will not be permitted until the account is up to date.

A credit account can be prearranged with Prior Aviation through our Accounting Department. The amount of money kept in the account is up to the account owner. Flight training and rental will be deducted from the account following each flight.

**Medical-General**

Flying demands top physical condition because of constant stresses. Do not attempt flight training with any physical deficiency or serious emotional problems. It is important to stay focused when flying. Inform your flight instructor of any condition that could affect your flying. Even a minor head cold will become more severe the higher you climb. This could become a major distraction and seriously affect your performance.
Smoking:
Smoking has an adverse effect on your physical and mental condition. Smoking is both a fire hazard and a distraction.

Smoking is not allowed in the terminal building, during flight, on the ramp, or in the hangars.

Drugs and Alcohol:
Students are not permitted to fly while under the influence of either alcohol or any other drug that would affect their performance in a way contrary to safety. Almost all prescription drugs and most over-the-counter drugs adversely affect your faculties.

Consumption of alcoholic beverages and drugs is extremely dangerous and could easily contribute to an accident. Anyone found operating an aircraft or vehicle belonging to Prior Aviation Service under the influence of drugs or alcohol will immediately be terminated from the program and the offender could face prosecution from both the FAA and/or Prior Aviation.

All students/renters will comply with 14 CFR 91.17

Medical Examination & Student Pilot Certificate
At least a third class medical examination is required from a FAA appointed Aviation Medical Examiner (AME). The Student Pilot Certificate and Medical Certificate are normally one document.

Students will be expected to secure their student pilot/medical certificate within 30 days from the date of enrollment or by completion of flight lesson five (5).

Make sure you have the appropriate certificate from the doctor. New student pilots should request at least a third class medical. These certificates, along with your logbook, must be carried on all solo flights.
A student pilot certificate does not expire. A third class medical is valid for five (5) years for those people less than forty years old and for two (2) years for those people forty years and older.

Aviation Medical Examiners
A list of local Aviation Medical Examiners can be found at the web site: www.faa.gov. Search for aviation medical examiners.
Procedures & Practices

Dispatch Procedures:

All flights, local or cross-country, will comply with Prior Aviation Flight dispatching procedures. All private solo flight training is strictly supervised. Instructors will issue the keys and aircraft flight book for all flights.

A plastic aircraft identification card is assigned to each training aircraft and kept with front counter personnel.

At the time the aircraft is checked out, the time out, the expected time of return and destination will be recorded on the card. The card will remain on file at the front counter.

Front counter personnel will monitor the card and report any aircraft overdue by more than 30 minutes to the Chief Flight Instructor or their supervisor. Supervision will contact authorities.

All pilots or instructors returning late are to contact Prior aviation on frequency 131.75 or by telephone to update their return time.

All instrument flight will be dual. For commercial flights, your instructor does not have to be present, but his/her authorization, adherence to Prior Aviation weather minimums, and the syllabus is still required.

Redispatch Procedures (on or off airport):

In the event of an unplanned landing at another airport, Prior Aviation will be contacted by the pilot. Customer service personnel will contact the appropriate Prior personnel (instructor, maintenance) for approval to redispacht.

Discrepancy/Return to Service Procedure:

All discrepancies require a "write up" in the aircraft discrepancy log and notification of aircraft maintenance. Anyone who suspects an aircraft problem, may "ground" an airplane. Bring any discrepancies to the attention of an instructor and the maintenance department. The counter personnel will fax the write-up sheet to maintenance. When an aircraft is grounded for
maintenance, a pink card with the aircraft’s registration number will be hung over the keys in the key lockbox. Only Prior Aviation or authorization by Prior Aviation maintenance personnel may return an aircraft to service. After maintenance to remove the discrepancy is completed, maintenance personnel will indicate the maintenance performed and sign the discrepancy log for a return to service.

If a discrepancy is noted while on a cross-country flight, contact Prior Aviation for further assistance and direction.

**Aircraft Maintenance:**

All aircraft will be registered and maintained in an airworthy condition by Prior Aviation Service, Inc. as per Part 91, Subpart E. Per company policy, aircraft log books will be maintained for each aircraft by the maintenance department showing a record of all required maintenance and inspections. The aircraft discrepancy logs will reflect a record of all aircraft discrepancies and their resolution.

Aircraft flight logs are maintained for each aircraft and stored in the flight training office. Each flight logbook displays the following on the cover: Tachometer time to the next 100 hour inspection and dates for the next required inspections.

The tachometer and Hobbs time will be recorded for each flight and maintained in the aircraft flight log in order to track maintenance requirements.

A weekly aircraft maintenance report shows current tachometer time and balance of hours before the next required maintenance inspection.

In the event that repairs are required during cross-country flights, contact Prior Aviation to receive authorization from the Director of Maintenance. If no one is available, contact the President of the company in order to obtain permission.

Any aircraft operated under lease back agreement will be maintained and inspected by Prior Aviation maintenance personnel.
**Obtaining keys and aircraft flight log book**

Keys and the aircraft flight logbook will be obtained from a flight instructor. If an aircraft is to be flown outside of normal hours or when an instructor will be unavailable, arrangements must be made ahead. Aircraft keys and flight logbook will then be obtained from the front counter personnel. If for any reason you cannot keep your reservation, contact Prior Aviation as soon as possible so someone else may use the aircraft. An aircraft may be reassigned to another student if no word is received within 15 minutes of scheduled time.

The pilot is responsible for the security of the aircraft and the equipment installed in the aircraft. On overnight flights, secure the airplane with tie-downs, install the control lock (if available), and lock the airplane.

Enroute changes are not authorized. If a diversion to an alternate airport is necessary due to weather, a sick passenger, or anything pertaining to the safety of flight, contact Prior Aviation Service and give the name of the airport, Fixed Base Operator, and telephone number where the aircraft is located. Include the telephone number and place where you are staying.

Every effort should be made to ensure returning on time. Use your radio or telephone and advise the company of an estimated time of arrival if you fall behind schedule. Prior Aviation FBO frequency is 131.75 and telephone, 716-633-1000.

**Student Pilot Solo:**

The Student Pilot Logbook must be endorsed before local solo or solo cross-country flight operations. Your logbook must also be endorsed at least every 90 days for solo flight and for every solo cross-country. In addition, a dual training flight must have been completed within the preceding 30 days. Your logbook, student pilot certificate, and photo ID must be carried on board. Additional dual arrangements can be made for further instruction prior to soloing.

Student pilots always have to check with an instructor, who is present at the airport, for approval prior to solo on the day of the flight. All available information regarding the safety of the flight must be gathered. Weather must be verified and the flight service station contacted.
Solo flights will remain in the local practice area until your instructor endorses a cross-country flight. Landings at an airport other than Buffalo International require authorization from your flight instructor for the specific airport on the particular day.

Weather minimums are to be adhered to for all flights. In order to practice emergency landings, an instructor must be on board the aircraft. Stalls must be performed above 2500 feet AGL during initial entry. Spins are not permitted. Night solo is not authorized for student pilots.

**Student Pilots Solo Requirements**

**Local Area:** A student pilot must have the following:
- Student pilot logbook endorsed
- Students may solo for only 90 days at a time
- A current medical examination
- Flown with an instructor within the past 30 days
- No passengers, including animals
- Fuel tanks must be full

**Cross Country Solos:** All local requirements and the following:
- Logbook endorsed and dated for the day of flight
- Flight plans and weather must be verified by an instructor
- VFR flight plan on file and activated with Flight Service
- Fuel tanks must be full

**Scheduling - Training Flights & Rental Flights**

**General:**

You are responsible for scheduling all dual and solo flight training periods through flightschedulepro.com. Set your training schedule as far in advance as possible to assure your reservation of an aircraft and instructor.

In order to obtain the desired proficiency, schedule as often as practicable. The more frequently you fly, the less review time that will be required. You will then have more time and cost effective learning, saving money in the long run. Recommended scheduling is three times per week. Alternating a flight lesson and a day to study normally provides the best performance.

All training flights will originate from KBUF using Prior Aviation Service Facilities unless permission is granted by the Chief Flight Instructor.
Scheduled take-off and arrival times must always be adhered to.

Most flights are scheduled tightly together, please be considerate of the next instructor/pilot scheduled after you. Return the aircraft on time. Prior Aviation Unicom frequency (131.75) should be notified of any delay from expected time of arrival. If you cannot meet your planned departure schedule, always call ahead. We will do our best to arrange a more suitable time for you. Any pilot 15 minutes late for a scheduled lesson or departure time runs the risk of having the aircraft assigned to another student.

Scheduling Solo Flights:

Private and instrument student scheduling will be coordinated through your instructor. The pilot may schedule commercial flights. All aircraft are scheduled on a first come basis. A passenger manifest form must be left at the front counter whenever passengers are taken along.

Scheduling – Cross Country Flights:

The instructor’s authorization and signature on the cross-country solo flight form and endorsement on your student pilot certificate and logbook are required for each solo cross-country flight.

No Show Policy

We ask that if you are unable to make it to a session that you have scheduled, that you cancel at least three hours in advance. Any student who has scheduled a training session with an instructor and does not show up without any notice may be charged one hour of ground time. This charge may be waived if there is a reasonable explanation for the absence. A second no-show for a schedule lesson may result in a one-hour charge for the instructor and the aircraft time.

Navigation Charts:

All renters must have current sectional/terminal charts. Outdated charts or texts (A/FD) are not allowed in the aircraft. Electronic Flight Bags and charts are authorized. A backup device must be current and available.
Securing of Aircraft:

At Prior Aviation:

After returning to Prior Aviation ramp, secure the airplane in the designated parking area. Leave the brake off so Prior Aviation can move the airplane as needed. Perform a post flight inspection of your aircraft.

At other airports:

When arriving at another airport, if you have not been able to secure hangar space, lock, chock, and tie-down the aircraft as appropriate when leaving it.

Overnight Procedures:

During flights, in which an overnight stay is required, secure airplane with tie-downs, install the control lock (if available), and lock airplane. The security of the aircraft in your possession is yours. Any overnight expenses are the responsibility of the student/renter, and not the responsibility of Prior Aviation.

Customs, landing, hangar, and parking fees are the responsibility of the student or renter. Fees may not be charged to Prior Aviation at any time.

Fuel Requirements and Reserves:

Be certain to check for sufficient fuel and oil. Check the fuel tanks visually, as fuel indicators are not always reliable. The tanks must be at least at the tabs for local dual instructional flights, and completely fueled for all solo and all cross-country flights. Fuel used in Prior Aviation Trainers should be 100LL (Blue). Flights should be planned so that a minimum reserve of 60 minutes is always maintained.

At no time should aircraft fuel gauges be relied upon to check the aircraft fuel supply. Pilots are required to visually confirm fuel levels. No flight may be dispatched with less than 17 gallons per tank (Tabs). A minimum fuel reserve of 1 hour must be maintained on all flights. If fuel is required to maintain the minimum reserve, then the pilot will be required to plan a fuel stop and purchase the necessary fuel to return to Prior Aviation.
Oil Requirements:

For all airplanes, oil quantity should be no lower than 6 quarts for local flights and 7 quarts for cross country flights. The maximum oil quantity is 8 quarts.

Safety Procedures and Practices

Weather General

Weather will be reviewed prior to each flight. The student gathers all current weather information pertaining to each flight utilizing Flight Service, Duat(s) or other authorized providers. The student will gather and evaluate the weather data and its possible impact on the schedule flight. The instructor will verify the data and the student’s evaluation. Other flight or weather scenarios will also be discussed to show how the present situation could be affected. Based on the evaluation, a go/no-go decision will be made.

Dual/Solo/Renter Weather Minimums:

Local solo flights will not be released unless your instructor verifies the student’s weather information that the weather is within safety margins.

<table>
<thead>
<tr>
<th></th>
<th>Ceiling</th>
<th>Vis.</th>
<th>Winds</th>
<th>Crosswind</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross Country</td>
<td>3000 ft</td>
<td>10 SM</td>
<td>Primary: 12 kts Advanced: 20 kts</td>
<td>Primary: 8 kts Advanced: 15 kts</td>
</tr>
<tr>
<td>Local</td>
<td>2000 ft</td>
<td>8 SM</td>
<td>Primary: 12 kts Advanced: 20 kts</td>
<td>Primary: 8 kts Advanced: 15 kts</td>
</tr>
</tbody>
</table>

Solo Flights are not permitted when Current or Forecast Conditions Calling For:

Wind gusts  Wind shear  Turbulence (Mod. – Sev.)  Drizzle
Thunderstorms  Icing  Freezing Rain  Snow

These minimums apply to all Prior Aviation solo flights – students and renters.

Deteriorating weather has been the primary cause of most aircraft accidents.
If you encounter deteriorating weather while on a local flight, either return to Buffalo International, if able, or proceed to a nearby alternate airport. Notify Prior Aviation of your diversion to avoid weather. If you encounter
deteriorating weather on a cross-country flight, land at the nearest suitable airport and contact Prior Aviation.

**Weather Minimums: Dual Flights**

Dual flights under visual flight rules will not be released unless the ceiling is at least 1,000 feet and the visibility at least 3 miles.

Dual flights under instrument flight rules will not be released unless the forecast weather is expected to meet IFR takeoff, landing and alternate weather requirements at all airports of intended use including departure airports. Specifically, that means the weather must be at least 600 and 2 if an ILS is available and 800 and 2 for non-precision availability.

If minimums are questionable sometimes the safest decision is to put off the flight and wait for improved weather conditions.

**Better to be on the ground wishing you were in the air, than in the air wishing you were on the ground.**

**Collision Avoidance (Ground and Air)**

**Towered Airports:**

When taxiing, use runway incursion avoidance techniques. Students are required to brief the taxi route using a current airport diagram or safe taxi display.

When flying in the traffic pattern of a controlled airport, follow the instructions of the control tower. A pilot must monitor ATC communications for potential traffic conflicts with their aircraft, especially when on active runways and/or when conducting a final approach to landing.

Position lights and the landing light are required to be used on the ground and in flight during times of reduced visibility, and/or from sunset to sunrise. Maintain surveillance of other aircraft - on ground and in flight. Do not assume that air traffic control will always provide separation. In visual flight conditions, it is the pilot’s responsibility to provide visual separation.

If it is impossible to follow the instructions, if the instructions are not in the interest of safety, or if there is an emergency situation, inform the controller as soon as possible and advise your intentions. Do not make any maneuvers, such as a 360-degree turn, without the permission of the controller. There may
be another airplane unseen in the pattern. If it is necessary to make such turns, or use a nonstandard pattern, advise the controller of your intentions.

In the event of a radio failure once communication has been established with ATC, circle the control tower 500 feet above pattern altitude and comply with light gun signals.

**Non-towered Airports:**

During traffic pattern operations it is essential to watch closely for other aircraft. Do not assume that other aircraft are at traffic pattern altitude, using the appropriate entry procedure and runway, or that they see you. Additionally, while at not-towered airports, do not assume everyone is making radio communications.

**General:**

Prior to starting any flight maneuver, make certain there is sufficient altitude and clear the area by making at least two 90-degree clearing turns. Clear the area after recovery from any maneuver and before entering the next maneuver or part of the maneuver.

Since an aircraft is most difficult to spot when flying straight and level, occasionally make turns to clear the practice area. This is especially important during slow flight when the airplane is in a nose-high attitude. Before turning, raise or lower your wing, as appropriate for your aircraft, to clear the area.

During climbs and descents it is wise to do alternating shallow clearing turns. This serves three purposes; it provides an opportunity to cover blind areas makes you more visible to other aircraft and allows you to practice aircraft coordination.

During all simulated emergency landings, keep the engine warm and cleared. Either the instructor or pilot should have complete control of the throttle. There must be no doubt as to who has control. Use of the manufacturer’s recommended emergency checklist is required.
**Minimum Altitude Limitation:**

- Recovery from stall maneuvers must be completed at least 2000 feet AGL.
- Private ground reference maneuvers should be completed at least 1000 AGL.
- Commercial ground reference maneuvers must be completed at least 800 feet AGL. Other commercial maneuvers must be completed at least 2000 AGL.
- Simulated emergency engine out maneuvers should be completed no lower than 500 feet AGL unless incorporated with landing practice with an instructor. See Page 53 (Emergency Approach and Landing).
- During all simulated emergency landings, keep the engine warm and cleared. Avoid rapid throttle movements.

**Practice Areas Overview:**

Confine all training maneuvers to the outlined practice areas. Become thoroughly familiar with them and outline them on your sectional. Use of the West Practice Area requires an open, active flight plan with radar flight following.

Your instructor will acquaint you with the local training area and its boundaries. Flight by a student pilot out of this designated area is prohibited unless specific approval is obtained from your instructor.

Minimum Enroute altitudes to the practice area must adhere to Part 91 section 119.
Not to be used for navigational purposes.

North Practice Area Enlarged
Boundaries:  
North side: Lake Ontario  
South side: Lockport, Erie canal  
West side: line running south from the Wilson harbor to the Pendleton water tower  
East side: line running south from the Somerset power plant to the Erie Canal
West Practice Area Enlarged

Boundaries: North side: line extending west from the southern tip of Grand Island, parallel to the Niagara River to the Welland Canal
South side: Lake Erie
West side: Welland Canal
East side: Niagara River
South Practice Area Enlarged:

Boundaries:  
North side:  line running east from the East Aurora to near Warsaw  
South side:  line running east from near Chafee to Pike  
West side:  line from East Aurora southeast to near Arcade (D23) airport  
East side:  line running south from Warsaw to Pike
Preflight Planning Procedures

Preflight Actions

A thorough preflight action is necessary for the safety of the flight and adherence to Federal Regulations. In accordance with 14 CFR 91.103, each pilot in command shall, before beginning a flight, become familiar with all available information concerning that flight. This information must include:

For all flights:
- Runway lengths must be checked
- Takeoff and landing distance information obtained
- Fuel requirements
- Weather reports and forecasts obtained
- Check all NOTAM’s, including TFR’s

For a flight under IFR or not in the vicinity of the airport:
- Alternatives available if the flight cannot be completed as planned
- Any known traffic delays of which the PIC has been advised

A completed departure clearance sheet will be completed for all flights which will ensure that you have all the information and a weight and balance check for your airplane.

Specific checklists for the Prior Aviation fleet are provided in the aircraft. All P.O.H. procedures must be followed.

Weather information may be attained from a number of sources, including: Aviationweather.gov and flight service. Flight Service should be used to request a standard weather briefing and to get current NOTAM’s and TFRs. Pilot reports for the areas in which you plan to operate may be useful.

Talk to pilots from recently returning flights and obtain a pilot report from them. They will be able to provide you with the most current conditions in the local area. Their experience and suggestions could be very valuable to your flight.

Frequent reference is made to preflight preparation and planning. A careless pilot may place himself, his crew, passengers and/or fellow pilots in jeopardy by neglecting to make thorough preparations. Any item overlooked in preflight preparation could easily become a life-threatening mistake. Allow sufficient time, so that you will not be rushed.
Preflight Inspection - General:

After all preflight planning has been completed; obtain the aircraft flight log and the keys from the flight instructor. A pink status tag posted with the aircraft number over the aircraft key in the key lockbox is an indication the aircraft is grounded. For information regarding the grounded airplane, refer to the aircraft discrepancy book at the counter.

A thorough preflight inspection will be made prior to each flight. This inspection should include a check of the aircraft discrepancy log for open “write ups”. No aircraft will depart before it is found to be in airworthy condition.

Be thorough when performing a preflight. Use your checklists.

Preflight Inspection - Aircraft:

The pilot in command is responsible for determining the airworthiness of the aircraft. Each pilot shall complete a preflight inspection prior to each flight. Instructors should verify that the preflight of the aircraft by the student has been completed satisfactorily. If the flight includes a stop at another airport, perform a thru-flight inspection consisting of walking around the aircraft, checking the fuel and oil levels and checking for fuel contamination if the aircraft was refueled. A full preflight takes only a few minutes and is strongly recommended.

While approaching the airplane make an overall check of the aircraft for prominent damage, soft/flat tire, or hydraulic leaks. Look for objects on the ground, which could be picked up by the propeller or run over when taxiing the airplane. Also, check that the appropriate documents (ARROW) are on board including: the pilot’s personal documents (logbook and certificates), currency of all charts, approach plates, and publications.

During the preflight inspection, use a written checklist to be certain no items are overlooked. If there is any damage to the airplane, if any documents are missing, or if any discrepancies are found, contact aircraft maintenance.

Make sure that during winter flying the aircraft is free of ice and frost. Also check the windshield for any frost or dew that would restrict the pilot’s visibility from the cockpit. Paper towels and cleaner can be obtained from line service or ask a flight instructor.

If a portion or the entire flight is to be conducted at night, all lights (interior and exterior) should be checked as part of the preflight inspection. Although
it is not specifically mentioned in the regulations, common sense tells you to bring a flashlight with a red and white lens.

Complete passenger briefing prior to contact clearance or moving the aircraft to a run-up area. Takeoff brief may also be completed at this time or just before takeoff.

**Ground Operations**

**Ramp Safety:**

A safe flight begins with safety on the ground. Airport ramps are full of activity such as fuel trucks, aircraft tugs, taxiing aircraft, people, etc. Due to the constant movement and noise you must watch continuously and be alert.

When on the ground, a rotating propeller can be extremely dangerous. Always give it your complete respect. Do not approach a propeller closely unless you personally know the switches are off. Hang keys on a panel knob during preflight walk around. **Do not place keys in the ignition.** Do not allow anyone to sit in the cockpit until the flight is ready to start and until after the preflight check. Never allow anyone around the airplane with the engine running. Always stop the engine before loading or unloading passengers.

Under some light conditions, it is difficult to see a rapidly revolving propeller. Never let your mind stray while walking around the ramp. Walk behind any aircraft on the ramp and most importantly, **STAY ALERT!**

**Starting Procedures:**

1. Before starting engine – **Beacon light/Fin Strobe ON**
2. Starting procedures should be accomplished using the aircraft checklist.
3. A flight instructor will be in the airplane for all pre-solo starts.
4. After starting, **All Lights ON**

Prime the engine by use of the primer, **not the throttle.** This results in flooding the carburetor and fouling the spark plugs. Additionally, there is the possibility of engine fire.

Never start the engine without first determining that the prop blast could neither damage property nor injure anyone. The airplane must be in a safe spot to start the engine, with the beacon or fin light on, and from sunset to sunrise, the position lights on. Always look completely around the airplane and yell, “**Clear,**” before starting the engine. The propeller is prone to pick
up loose gravel and can seriously injure anyone or anything behind the airplane.

**Hand propping is not authorized at Prior Aviation.** If needed, our facility is able to provide a power cart. For low battery, contact Prior Aviation for assistance.

**Taxi Procedures:** Have the airport diagram ready and available.

1. Use extreme caution when taxiing aircraft to and from the Prior ramp.
2. Before crossing taxiways & runways – **VERIFY** clearance & **SCAN** for traffic, i.e. left, center, right
3. Crossing runways - **EXPEDITE**
4. Arrival at the active runway - **HOLD SHORT** of holding position
5. When ready for takeoff – **ADVISE** tower
6. Before entering active runway for takeoff – **READBACK** clearance & **SCAN** runway for conflicting traffic
7. After lining up for takeoff, verify **Compass, Heading Indicator & runway assignment agrees.**
8. After landing **FOLLOW** tower instructions
9. **EXPEDITE** leaving active runway until your aircraft is clear of runway
10. **READBACK** taxi clearance to ramp area

Moving automobiles, parked aircraft and personnel can be hazardous. After starting the engine and with your clearance, taxi your aircraft out of tie-down space/ramp area as soon as practicable to avoid damage to other aircraft. Exercise extreme caution and have an outside observer watch your wingtips when you are required to taxi through a tight area.

Taxiing will be confined to paved areas and along the routes assigned by ground control. Remember to properly position the flight controls for crosswind situations. Proper use of aileron and elevator deflection is required even in a light wind situation.

While taxiing, remember to use the throttle to control speed. Do not ride the brakes. Taxi speed should allow turning and stopping should it become necessary. In a congested area and especially around other aircraft, taxi speed should be no more than a fast walk.

Become familiar with the airport diagram in order to avoid confusion with ATC instructions.
Aircraft Run-up:

Aircraft run-ups will be in the run-up area, not on the ramp. Bring the aircraft to a complete stop at an appropriate run-up area while checking the aircraft systems according to the checklist.

Fire Precaution and Procedures

Service personnel should properly ground the airplane and the truck when the airplane is being fueled. Do not or allow anyone to sit in the airplane while servicing is in progress.

Engine Fire:

An engine fire can be caused by items accidentally left in the engine compartment, a bird’s nest or by ruptured fuel and oil lines. A thorough preflight check can minimize the possibilities. If an engine fire is encountered, follow the recommended procedure outlined in the Pilot’s Operating Handbook.

If an engine fire does occur on startup, move the mixture to the idle-cutoff position and the throttle full open; continue cranking the engine until the fire is extinguished. Consult the emergency checklist for further procedures. Fire extinguishers are located in the aircraft, on the fuel trucks and in the hangars. Care should be taken to avoid over-priming in cold weather.

Electrical Fire:

In the event of an electrical fire, turn off the electrical system (not the magnetos), and follow the manufacturer’s recommended procedure.

Ground Fire:

Fire encountered while on the ground should be reported immediately.

Fire extinguishers are located in the hangars, on the fuel trucks and in the Warrior III, Arrow and Diamond aircraft. If you are not at Buffalo Airport, once the fire is extinguished, call Prior Aviation Operations for further instructions.
**Clearance:**

At a controlled airport, contact clearance delivery or ground control to obtain your clearance prior to taxi. If there is an ATIS on the field, listen to the information and write it down before communicating with clearance delivery or ground control as appropriate.

When contacting ground for taxi instructions, provide them with your aircraft identification, aircraft position, and intentions. If you are a student pilot on a solo flight also state you are a student pilot. (For example: Buffalo Ground, this is student pilot Cherokee 8334Y, at Prior Aviation, ready to taxi with information ‘Alpha.’)

Clearance to taxi to a runway will include a clearance to taxi onto or to cross the first runway encountered. Further crossings, if required, will be issued. If the clearance cannot be complied with, if any part of the instructions is not clear, or if any other problems are encountered, you should convey them to the controller.

When operating at a non-towered airport, tune the radio to the proper Common Traffic Advisory Frequency (CTAF), complete a radio check, and then broadcast your position and intentions. Other aircraft may be taxiing, taking off, or landing in other directions, so be especially alert. Conform to all general operating procedures at uncontrolled airports established by the FAA in the Airman’s Information Manual (AIM). Student pilots must be endorsed to land or takeoff at all airports.

Compliance with control tower instructions is mandatory, except in an emergency. For further information on radio communication procedures, consult pages the AIM.

**Takeoff Brief:** A takeoff brief will be completed prior to takeoff to include but not limited to the following emergency items-engine failure during takeoff run, engine failure after takeoff with runway available and without available runway, landing zone considerations, altitude to consider before attempting to return to the field and opening door before touchdown.

**Instrument Approach:** On instrument approaches, a chart briefing will be conducted to include all items on the chart briefing strip, along with profile and missed approach procedures and complied with in a timely manner.
Night Operations

Prior Aviation prohibits night rentals unless the pilot has an instrument rating and is night current with respect to takeoff and landings.

Night flight instruction will be given during nighttime as defined by 14 CFR Part 1. Although night currency requirements must be met within the time of one hour after sunset to one hour before sunrise, all solo flights by student pilots will terminate 30 minutes BEFORE sunset.

Prior to commercial solo night flight operations, the student must demonstrate knowledge of the environment and special considerations associated with night flight. The pilot must also demonstrate the required skill for normal and emergency flight operations within the past 30 days. Instructor authorization is required. Be sure to have the necessary equipment (flashlight, flight materials) easily accessible to you in flight.

During the preflight inspection, be sure to test the cockpit, navigation, landing and anti-collision lights for proper operation.

Cross Country Operations

Cross-country flights must include a point of landing at least a straight-line distance of more than 50 nautical miles from the point of departure.

Your cross-country flight training provides the adventure of flying to new and exciting places while building valuable experience. This training has been carefully organized to develop the skills necessary to operate aircraft safely and efficiently in a variety of situations and locations. It is also an opportunity to apply knowledge gained from previous lessons.

Preflight Planning for cross country flight:
When planning your cross-country flight, follow only the routes and utilize only the airports specified by your flight instructor (except in an emergency). A list of pre-approved cross-country destinations used from Prior Aviation can be found on page 36 of this manual. Use of an airport not on this list and any overnight flights require special authorization from the Chief Flight Instructor.

For your day cross-country flight, arrive early so as to allow sufficient time for your planning, preparation, and preflight before your departure time. Departures must be made to allow return to Prior Aviation Service no later than 30 minutes BEFORE sunset.
All solo cross-country flights must be approved by your flight instructor who will review your flight planning, check the weather, check your equipment and endorse your logbook and certificate.

Make sure you have your student pilot certificate, photo ID, and logbook on board and it is signed for each point of landing designated by your instructor. In order for the flight to be considered as a cross-country flight, a landing must be made over 50 nautical miles from point of departure.

A VFR flight plan must be filed and activated for all cross-country flights – day and night. File only the leg you are flying. “Round Robin” flight plans are not to be used.

During the preflight inspection, be sure the fuel tanks are full and the oil level is above the minimum required. See fuel/oil requirements found on page 15.

A minimum fuel reserve of 1 hour must be maintained on all flights. Prior Aviation will issue full credit for the purchase of sufficient fuel or oil on cross-country flights to ensure maintaining the 1 hour reserve.
Cross Country Flight Procedures

The key to conducting a successful cross-country flight is prioritization.
1. Aviate - Fly the airplane, course and altitude
2. Navigate - Where am I and where am I going
3. Communicate – Who you are, where you are, and your intentions

Cross-country flight requires a continuous division of attention. You will be required to complete multiple tasks simultaneously in order for the flight to be successful. If your workload becomes too strenuous, remember the three basic priorities listed above.

Departure Procedure:
1. You must have good cockpit management procedures. Everything should be in its proper place and readily available.

2. When talking to Buffalo Clearance, you should tell them that you are VFR, what your destination is and the altitude you would like to fly at. For example: “Buffalo Clearance, Cherokee 4182J, request VFR to Akron Airport at 6500 feet with information “Bravo” request flight following.

3. After your preflight ground check is completed and just before contacting the tower for takeoff, request a frequency change to contact Flight Service to open your flight plan. If unable to contact Flight Service on the ground, then you will have to activate your flight plan in the air. (See #6.)

4. When you are cleared for takeoff, write down your time off. Also write down your estimated time of arrival (ETA) to your first checkpoint.

5. After takeoff, request your on course heading as soon as possible. Look for your first checkpoint and proceed to it.

6. When clear of the departure airport, request a frequency change to contact Flight Service to activate your flight plan. When calling Flight Service you must tell them what frequency you are operating on. For example: “Buffalo Radio, Cherokee 4182J on 122.60. “

If you are using a VOR to talk to Flight Service, you must indicate the frequency you are transmitting on and the VOR you are listening to. For example: “Buffalo Radio, Cherokee 4182J on 122.60, and receiving 116.4”
Tell FSS you would like to open your flight plan to the destination at airport at your time off. For example: “Buffalo Radio, Cherokee 4182J would like to open my flight plan at 1830 Zulu.”

7. You should reestablish communications with departure and request VFR Flight Following to your destination.

If contacting an ATC facility from an airport other than Buffalo for VFR Flight Following, the following information should be transmitted:

- Aircraft call sign
- Type of aircraft
- Altitude requested
- On course heading
- Destination

**Enroute:**

Open and close your flight plan with Flight Service (FSS). Weather updating may be obtained enroute by calling Flight Service (FSS). Refer to your chart for the appropriate frequency or contact the FSS’s “Flight Watch” on 122.0. Confess a difficult situation to an ATC facility or the Flight Service to get additional aid in handling the situation. Air Traffic Control or a flight Service can only help when they understand the problem.

Monitor the appropriate AWOS or ATIS frequency and record the pertinent information, including winds, altimeter, and runways in use when approaching an airport. Contact approach control within 20 miles of a towered airport and inform the controller of your intentions and that you have the current information by using the appropriate code (EX: “Alpha”). Advise the controller when the destination airport is in sight. At locations without an approach control, call the tower 15 miles out. For further information on radio procedures from Buffalo International Airport, refer to page 48.

Should you encounter excessive enroute delays, deteriorating weather, become disoriented, or an emergency situation arise that requires you to land at an unauthorized airport, notify the flight service of the change in flight plan and request them to forward the message to the school. Call Prior Aviation Service operations at (716) 633-1000 after you are on the ground and the aircraft is secured. Refer to the Redispatch procedures.

Sometimes delays will occur which will not allow you to return to Prior Aviation on the time for the next person. Contact one of the instructors or the Chief Flight Instructor through the counter personnel at Prior Aviation. Due to changing weather or other related factors, it may be necessary to receive another flight release before continuing your flight.
In the event of either enroute delays or weather, which would cause the flight to be completed after sunset, the flight should be terminated at a suitable airport. Safety should be the deciding factor in all cases. Overnight expenses are your responsibility.

When you arrive at your first checkpoint, write down your actual time of arrival (ATA) and your actual time enroute (ATE). If you are more than a couple of minutes off, recalculate your groundspeed. Subtract your actual time enroute figure from the fuel remaining time. Lean the mixture. There will be considerable savings in fuel and your calculated fuel burn is based on a lean mixture. As you proceed along your flight, continually reference your current position using your Nav. Log and sectional. If your cross-country flight is a significant distance, call Flight Service or Flight Watch (if above 5000 feet), to obtain your enroute and destination weather.

**Cross Country Flight Procedures - Arrival**

1. Plan to descend at a rate in which you will arrive at the airport at traffic pattern altitude. A good rule of thumb is to multiply the number of feet to lose by 4. For example: You are at 4,000 feet. You want to descend to 1,000 feet. You should begin your descent about 12 NM from the airport.

   1. 4,000 feet - 1,000 feet = 3,000 feet (or 3)
   2. 3 x 4 = 12 NM out

2. When arriving at your destination airport, obtain the ATIS/AWOS/ASOS within 20 NM and establish contact with ATC no less than 15 NM from the airport. This will give you sufficient time to position the aircraft for pattern entry.

   Some uncontrolled airports have weather information, while others do not. When arriving at an uncontrolled airport with weather, listen to the AWOS/ASOS within 15 NM. Contact UNICOM 10 NM from your destination airport to receive an Airport Advisory. When arriving at an uncontrolled airport without weather information, contact UNICOM for advisories.

3. Always use proper pattern procedures and altitudes and plan ahead.
**Post-Flight Procedures:**

The pilot should complete a post flight inspection of the aircraft. This will include, but is not limited to, a walk around inspection. The pilot should inspect the fuel level, landing gear, propeller and any evidence of bird strikes. The pilot/renter has full responsibility to secure the aircraft at the termination of each flight.

All items that do not belong in the aircraft and trash must be removed. Please neatly arrange the seat belts, put the checklist in its appropriate pocket, and install the control lock/cowl plugs. At Buffalo, the parking brake should be left off. Ground personnel routinely move aircraft. When at an airport other than Buffalo, tie the aircraft down appropriately.

After each flight, pilots will enter Hobbs and tachometer time in the aircraft flight log. All entries must be entered legibly and in ink. If it is required to move the aircraft, use a tow-bar to steer only. Pulling or pushing the aircraft is to be accomplished by pushing on the aircraft nose (not the spinner) or pulling on the propeller near the hub only, not the tips.

Complete your training record folder.

**Post Flight Cross Country:**

When arriving at your destination, if you have not been able to secure hangar space, we suggest you lock, chock, and tie-down the aircraft when leaving it at an airport other than Buffalo. Customs, landing, hangar, and parking fees may not be charged to Prior Aviation at any time. Fees are the responsibility of the student or renter.

*Close your flight plan with flight service after landing.*
<table>
<thead>
<tr>
<th>Airport Name</th>
<th>I.D.</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashtabula County</td>
<td>7G2</td>
<td>Ashtabula, OH</td>
</tr>
<tr>
<td>Link Field</td>
<td>BGM</td>
<td>Binghamton, NY</td>
</tr>
<tr>
<td>Chautauqua Co.</td>
<td>JHW</td>
<td>Jamestown, NY</td>
</tr>
<tr>
<td>Dansville Municipal</td>
<td>DSV</td>
<td>Dansville, NY</td>
</tr>
<tr>
<td>Elmira-Corning Reg.</td>
<td>ELM</td>
<td>Elmira, NY</td>
</tr>
<tr>
<td>Erie International</td>
<td>ERI</td>
<td>Erie, PA</td>
</tr>
<tr>
<td>Bradford Region</td>
<td>BFD</td>
<td>Binghamton, NY</td>
</tr>
<tr>
<td>Olean Municipal</td>
<td>OLE</td>
<td>Olean, NY</td>
</tr>
<tr>
<td>Oswego County</td>
<td>FZY</td>
<td>Oswego, NY</td>
</tr>
<tr>
<td>Penn Yan</td>
<td>PEO</td>
<td>Penn Yan, NY</td>
</tr>
<tr>
<td>Syracuse-Hancock Int.</td>
<td>SYR</td>
<td>Syracuse, NY</td>
</tr>
<tr>
<td>Tarantine Field</td>
<td>ELZ</td>
<td>Wellsville, NY</td>
</tr>
<tr>
<td>Watertown Int.</td>
<td>ART</td>
<td>Watertown, NY</td>
</tr>
<tr>
<td>Williamson-Sodus</td>
<td>SDC</td>
<td>Sodus, NY</td>
</tr>
</tbody>
</table>
In-Flight Emergency Procedures

During your training, your instructor will discuss several emergency situations. A good knowledge of your aircraft systems helps prevent many emergency situations. Your Pilots Operating Handbook will provide procedures for emergency situations. In most emergency situations, time is a factor; therefore you should know the procedures from memory and, time permitting, double check yourself with the checklist. All unclear procedures should be discussed with your instructor.

In an emergency situation, a pilot’s primary objective is to fly the airplane, i.e., maintain aircraft control. In a forced landing situation, a controlled, planned approach, and landing, using established procedures, is almost always survivable. Investigate the problem, check for fuel problems, carburetor ice and system malfunctions. Many problems can be corrected by using common sense and by maintaining emotional control.

During a forced landing, notify ATC if currently in contact or use 121.5. Use a precautionary landing procedure when continued flight is not advisable. If anyone on board is injured during the landing or if the aircraft is located in a remote area, stay near the aircraft. This will aid search and rescue aircraft.

Aircraft Malfunction or Damage

If any malfunction or damage is encountered, return the aircraft to the ramp and notify the aircraft maintenance. If an event is encountered in flight and the aircraft cannot be returned safely, land as soon as practicable and contact Prior Aviation. Should damage occur during landing, do not attempt another takeoff.

If you notice any discrepancies during your flight, bring them to the attention of the aircraft maintenance. Instructions for contacting them and writing up a discrepancy are found in the aircraft discrepancy book located behind the counter. In order to keep the trainers safe and comfortable to fly, all pilots need to communicate any items that require the attention of our mechanics.

Aircraft Incident or Accident

In the event of an aircraft incident or accident, contact Prior Aviation Service as soon as possible. We will notify the FAA Flight Standards District Office. Do not provide any details to anyone other than school officials. Give all relevant facts and policies to the FAA but not the newsmen. The school officials will make all statements and/or announcements.
All rules pertaining to the notification and reporting of aircraft accidents, incidents, overdue aircraft, and preservation of aircraft wreckage and records can be found in Part 830 of the Federal Aviation Regulations. In the event of an accident or incident, these regulations must be complied with.

**Land and Hold Short operations:** Land and Hold Short Operations (LAHOSO) are not authorized. Airport operational procedures are addressed on each flight during taxi operations.

**Controlled flight into terrain (CFIT):** Minimum safe altitudes and obstruction clearances are covered in Ground Lesson 4 under Aeronautical Charts and Airspace and found in Jeppeson's Private Pilot Manual Chapter 4. Persistent and constant vigilance must be maintained throughout the training flights with adherence to all minimum safe altitudes.

**Cockpit Management**

Cockpit management is a method of arranging your flight materials in a manner that make them easily available to you in flight. Each pilot should develop his/her own means of organization. The following are some examples that pilots should consider when preparing for a flight.

**Procedure:**
1. Be certain that all materials that will be needed for the flight, such as operations manual, current charts, cross-country materials, checklist, airplane certificates, etc., are present.
2. Arrange materials appropriately so that they may be readily available during flight.
3. Be sure that seats and belts do not restrict the pilot in a manner that would limit the use of the flight controls.
4. For situations where two appropriately rated pilots are at the controls, determine who will be PIC, and the co-pilot’s expected duties.

**Aircraft Trim Control**

Trim control assists in holding an airplane in steady flight. Apply control pressure to the yoke to establish the desired attitude, airspeed, or altitude, as required, and then adjust the trim so that the airplane will maintain the desired flight condition without control pressure in “hands-off” flight.

**Procedure:**
1. Establish the desired power setting.
2. While you are holding either forward thumb pressure or back finger pressure, to establish desired flight configuration, rotate the trim wheel forward or back, until control pressure is relieved.
3. The trim wheel should only be used to relieve control pressure.

When the aircraft is properly trimmed, the pilot should be able to fly “hands off” in all flight situations, although positive control of the aircraft should be maintained at all times.

Trimming an airplane is a continual process. Monitor and adjust as necessary throughout the flight to maintain a constant altitude, airspeed, or rate of climb.

**Fuel Management:**

**Cherokee Warriors / Piper Arrow**
Always remember that the fuel pump should be turned "On" before switching tanks and should be left on for a short period thereafter. A check of the fuel pressure gauge should be made before, during and after switching tanks to insure good fuel pressure. In order to keep the airplane in best lateral trim during cruising flight, the fuel should be used alternately from each tank. It is recommended that one tank be used for one-half hour after takeoff, and then the other tank be used for one hour. Alternate fuel tanks after another hour, and use the fullest tank for landing. Do not run tanks completely dry in flight.

The Electric Pump should be turned "Off" after starting so that a malfunction of the engine driven fuel pump is immediately apparent. If signs of fuel starvation occur at any time during flight, fuel exhaustion should be suspected at which time the electric fuel pump switched to the "On" position and the fuel selector should be immediately positioned to the other tank. Normal flight operations do not require the use of the fuel pump.

**Diamond DA40 XLS**
The fuel selector should be in the fullest tank position for takeoff, climb, descent, landing, and maneuvers. Maximum fuel split is 8 gallons.

**Mixture Control**
Proper leaning of the mixture increases engine performance by getting a more efficient, complete fuel burn for a given altitude. Leaning the mixture also prevents fouling of the spark plugs, which degrades the combustion process and engine efficiency.
Refer to the aircraft flight manual for the manufacture’s recommended leaning procedures. The Cherokee Warriors are leaned above 5000 or in extended cruise flight.

In general, the mixture control should be leaned after takeoff to achieve best cruise performance. The full rich position should be used for takeoff and landing. Some weather conditions may require leaning while taxiing.

**Procedure:**

1. In cruise configuration, to obtain the fuel burn figures in the Flight Manual, lean the mixture until peak RPM or engine roughness, then enrichen to achieve engine smoothness.

2. For an aircraft equipped with Exhaust Gas Temperature (EGT) gauge, use the following procedure:
   - Lean the mixture to establish peak EGT
   - Adjust the mixture to 50 degrees rich of peak EGT

3. For descent, progressively enrichen the mixture to full rich.

4. Prior to landing, mixture should be full rich.

**Weather Briefing**

<table>
<thead>
<tr>
<th>Phone: 1-800-WX-BRIEF</th>
<th>EST+5 = UTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-800-992-7433</td>
<td>EDT+4 = UTC</td>
</tr>
</tbody>
</table>

Each pilot will obtain a standard weather briefing prior to each flight. This includes flights in the traffic pattern, practice area and dual instructional flights.

Before canceling a flight, contact the flight school and discuss with your instructor any alternatives available for training. A weather briefing can be obtained on a weather-briefing sheet or a blank sheet of paper. The important thing is for your notes to be organized so that you are able to interpret the information after writing it down. An example of Prior Aviation’s Weather Briefing Sheet can be found below.

Provide the briefer with the following background information of the flight:

1. Pilot Qualifications (Student, Pvt., Instrument, Etc.)
2. Type of briefing (Standard, Abbreviated, Outlook)
3. Type of flight (VFR/IFR)
4. Aircraft N-Number or Pilots name
5. Aircraft type
6. Departure point
7. Route of flight and duration
8. Destination/Alternate
9. Flight altitude(s)

The following guide is meant to be used as a start for your briefing.

FLIGHT PRECAUTIONS (AIRMENTS)

RADAR SUMMARY:
METARs/SAs:
TAF’s:
AREA FORECAST:
NOTAMs:
TEMP/WINDS ALOFT:
PILOT REPORTS:
TFR’s:

Radio Procedures

Contact Air Traffic Control on current appropriate frequencies for:
Consult your airport diagram, Airport/Facilities Directory, Sectional Chart

ATIS,
CLEARANCE DELIVERY,
GROUND CONTROL
TOWER
APPROACH CONTROL - DEPARTURE, / ARRIVAL

Always be ready to tell:  **Who** are you?
  **Where** are you? (position and altitude)
  **What** are your intentions?

Know what ATC’s expected response will be and read back pertinent instructions, ending with your aircraft number. Write down clearance and ground instructions. When reading back ATC instructions -
  “TELL THEM WHAT YOU ARE GOING TO DO”.

42
The following are some techniques recommended by the Aeronautical Information Manual (AIM) for radio procedures:

1. **Test** the radio with squelch prior to transmitting.
2. **Listen** before you transmit. You don’t want to cut somebody off.
3. **Think** before keying your transmitter. Know what you want to say.
4. **Speak** in a normal conversational tone with the microphone directly in front of your lips.
5. **Wait** a few seconds before trying to call again. Controllers may be busy on another frequency or telephone.
6. **Be alert** to the sounds or lack of sounds from your receiver.

### Radio Failure Procedures

In the event of a radio failure:

1. Check the avionics master and circuit breakers.
2. Ensure you have the correct frequency set.
3. Be sure the volume knob is turned up.
4. Ensure the selector is set to speaker or headset as appropriate.
5. If using a headset, be sure it is plugged all the way in.
6. Check to see if you have a stuck microphone switch.
7. Change back to the last frequency that worked.
8. Try another radio if you are equipped with two.

If none of the above measures work, assume you have a radio failure. If you are outside of controlled airspace:

1. Select an uncontrolled airport.
2. Observe the flow of traffic by flying 500 ft above TPA.
3. Enter the pattern and land.
4. Contact Prior Aviation by telephone once on the ground (633-1000)

If radio failure occurs after establishing radio communications with one of the controlled airports:

1. Squawk 7600 on your transponder.
2. Continue with the last instructions received from the tower.
3. Watch for light-gun signals from the tower.

If you do not see any light gun signals prior to reaching the pattern, circle around the control tower at least 500 feet above the traffic pattern altitude.
When you observe signals, rock your wings and/or flash your landing light and comply with the instructions given.

**Air Traffic Control Light Gun Signals**

<table>
<thead>
<tr>
<th>Color of Signal</th>
<th>On Ground</th>
<th>In Flight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steady Green</td>
<td>Cleared for Takeoff</td>
<td>Cleared to land</td>
</tr>
<tr>
<td>Flashing Green</td>
<td>Cleared to Taxi</td>
<td>Return for landing</td>
</tr>
<tr>
<td>Steady Red</td>
<td>Stop</td>
<td>Give way to other traffic, continue circling</td>
</tr>
<tr>
<td>Red and Green</td>
<td>Use extreme caution</td>
<td>Use extreme caution</td>
</tr>
<tr>
<td>Flashing Red</td>
<td>Taxi clear of runway</td>
<td>Airport unsafe, do not land</td>
</tr>
<tr>
<td>Flashing White</td>
<td>Return to start point</td>
<td>N/A</td>
</tr>
</tbody>
</table>

The following pages outline a general description of common and basic maneuvers and procedures. Please refer to the Appendices at the end of this manual (or the POH) for aircraft specific speeds, procedures and checklists.

**Traffic Pattern Operations-Landing:**

The traffic pattern is established to provide an orderly flow for arriving and departing traffic. Standard traffic is left hand turns (left traffic) but occasionally an airport will have right hand turns (right traffic, RP) for noise abatement purposes, conflicting runway traffic obstacles, etc. The entry procedure discussed here is a standard traffic pattern. Traffic pattern altitude is normally between 1000 feet AGL. Nonstandard traffic pattern altitudes will be listed in the Airport Facility Directory. When arriving or departing from an airport with an operating control tower, procedure may require alteration according to ATC’s instructions.

**Procedures for arrival at an uncontrolled field – Normal Landing:**
1. Within 20 NM determine the runway in use by obtaining ATIS, airport advisory or over-flying the field (500ft above TPA) to find the wind direction. Begin traffic calls 10 miles out.
2. Complete the descent checklist.
3. Position the aircraft to enter on a 45-degree angle to the mid-field downwind leg at traffic pattern altitude.
4. Upon arrival on the 45-degree entry descend to traffic pattern altitude and perform a pre-landing checklist. Your target airspeed is 85kts (Cherokee) 90kts (Diamond). Make the appropriate radio call.
5. Turn the airplane onto the downwind leg approximately 1/2 mile from the runway in use. Apply appropriate amount of crab angle to maintain proper ground track. Apply first notch of flaps, and **retrim** for level flight.
6. Once abeam your touchdown point, reduce power to begin a 500 ft/min decent.
7. Once you are at a 45 degree angle to the touchdown point, or down 200 feet, begin your turn to base leg. Make the appropriate call. Put in your second notch of flaps, and **retrim** for a constant descent rate. Your target airspeed is 75kts, 85kts Diamond.
8. Prior to the aircraft reaching the extended centerline of the runway check for traffic. Your turn in should allow enough room so that you do not overshoot the runway. Make the appropriate call.
9. On final, increase your flap setting to the third notch and **retrim**, if necessary, for an airspeed of 70 kts, 75kts Diamond. Adjust your flight path as needed with power and adjust airspeed for gust factors.
10. Once over the threshold, reduce the throttle to idle and begin to flare.
11. Landing, focus on the far end of the runway during the flare. Land on the main gear and hold the nose wheel off the runway.

**TARGET AIRSPEEDS:** Full flap configuration, add ½ gust factor if needed
- Warrior II N8334Y 70 KIAS
- Warrior III N4182J/N5323X 70 KIAS
- Diamond DA40 N616ML 75 KIAS
- Arrow N47985 75 KIAS

**Traffic Pattern Operations-Departure**

**Procedures at an Uncontrolled Field:**
1. After takeoff, maintain runway alignment and appropriate climb airspeed (Vx if obstacles are present otherwise Vy).
2. After reaching a safe airspeed and altitude, retract the flaps if extended.
3. If remaining in the traffic pattern, commence a turn to crosswind leg beyond the departure end of the runway, approximately 300ft below traffic pattern altitude.
4. If departing the traffic pattern, continue straight out, or exit with a 45-degree turn (to the left when in a left-hand traffic pattern; to the right when in a right-hand traffic pattern) beyond the departure end of the runway, after reaching pattern altitude. Make sure to state your intentions on the frequency.
Normal and Crosswind Takeoff and Climb

During this maneuver, the pilot will safely manipulate the controls to lift the aircraft off the ground regardless of the wind’s position to the runway. After the pre-takeoff checklist has been completed and a takeoff clearance has been received, position the aircraft on the centerline of the runway.

Procedure:
1. Set flaps as required for takeoff, check for traffic and after clearance has been obtained, position the aircraft onto the runway.
2. Place the ailerons into the wind, leave the elevator/stabilator neutral and apply full power.
3. As the airplane accelerates, verify that the engine instruments are in the green, maintain runway centerline with rudder and reduce the aileron input as required to control drift.
4. At Vr, begin to apply backpressure to the yoke. If a significant crosswind exists, the airplane should be kept on the ground slightly longer than normal. Keep in mind that in a crosswind situation the downwind main gear may lift off the ground first. Rotation speed or Vr is:
   - Warrior II N8334Y 55 KIAS
   - Warrior III N4182J/N5323X 55 KIAS
   - Diamond DA40 N616ML 59 KIAS
   - Arrow N47985 65-75 KIAS
5. Establish the appropriate climb pitch attitude, which will produce an airspeed of Vx orVy as appropriate.
6. Maintain the runway extended centerline by applying a crab angle into the wind.
7. Upon reaching a safe speed and altitude, retract flaps (if extended) and gear, establish Vx or Vy as appropriate.

Completion Standards: Airmen Certification Standards.
Normal and Crosswind Approach and Landing

Landings are best made when the aircraft is stabilized prior to 300 feet AGL. During each landing, a pilot should always predetermine an aiming point. This results in a more stabilized landing, develops your visual cues for landing, and aids in learning aircraft control and judgment.

Procedure:

1. Select a specific touchdown point on the runway.
2. Establish a stabilized power on approach prior to descending below 300 feet AGL.
   - Warrior II       N8334Y             70 KIAS
   - Warrior III      N4182J/N5323X  70 KIAS
   - Diamond DA40    N616ML             75 KIAS
   - Arrow           N47985             75 KIAS
   
   **NOTE:** Add half the wind gust factor when appropriate.

3. In order to maintain glide path use pitch and power to control rate of descent. On strong wind days, extra power may be required to maintain airspeed.
4. In order to correct for drift, use the ailerons to maintain alignment with runway centerline, use rudder to align the airplane’s longitudinal axis with the runway centerline.
5. At the appropriate flare altitude, begin reducing the throttle to idle while increasing pitch attitude.
6. After touchdown, gradually increase aileron deflection into the wind as the aircraft is brought to a stop.
7. Slow the airplane to a normal taxi speed before clearing the runway.
8. Clear the runway and come to a complete stop before initiating the after landing checklist.

Completion Standards: Refer to the Airmen Certification Standards.
**Short Field Takeoff**

The Short Field Takeoff is used when departing a shorter than usual runway or a runway with an obstacle at least 50 feet or higher. During this maneuver the pilot will practice utilizing the maximum performance of the aircraft on a takeoff. The Aircraft Information Manual for your airplane outlines the procedure and speeds to be used when performing this maneuver. Prior to takeoff, review the Manual to ensure the airplane is properly configured. Refer to the power setting sheet appropriate for your aircraft to determine correct V-speeds.

**Procedure:**

1. Set wing flaps to proper takeoff position.
2. Position the aircraft for maximum utilization of the runway.
3. With brakes applied, add full power, verify full power, and engine instruments in the green. Divide attention inside and outside of the cockpit to ensure the aircraft is at a complete stop.
4. Verify that the engine gauges are in the green and release the brakes.
5. Once the aircraft reaches rotation speed (Vr), rotate to a Vx pitch attitude.
6. When obstacles are clear or 50 feet above the surface, lower nose to a Vy pitch attitude.
7. At a safe altitude retract flaps.
8. Maintain a pitch attitude which produces the Vy airspeed until reaching a safe altitude (normally 500 feet AGL), then accelerate to cruise climb while setting climb power as appropriate.

Completion Standards: Refer to the Airmen Certification Standards.
**Short Field Approach and Landing**

The Short Field Approach and Landing is used when flying into an airport with obstacles on the approach path, a minimum runway length, unfavorable runway gradient, required downwind landing, high density altitude, or a combination of these factors. During this maneuver the pilot will practice techniques to land the aircraft with precision and bring it to a stop in the shortest distance as possible.

**Objective:** Refer to the Airmen Certification Standards

**Procedure:**

1. Select a specific touchdown point on the runway.
2. Establish a stabilized power on approach prior to descending below 300 feet AGL with full flaps.
   **NOTE:** Add half the wind gust factor when appropriate.
3. In order to maintain glide path use pitch and power to control rate of descent.
4. At the appropriate flare altitude begin slowly reducing power at a rate in which it will reach idle at touchdown.
5. After touchdown retract the flaps, apply maximum braking (simulate by tapping brakes during practice) without skidding the tires, and full back elevator pressure.

**Completion Standards:** Refer to the Airmen Certification Standards.
**Soft Field Takeoff**

The Soft Field Takeoff is used when departing on a grass strip or contaminated runway. During this maneuver the pilot will manipulate the controls in a nose high pitch attitude during the takeoff roll, in order to transfer the weight of the airplane to the wings and then lift off in the shortest distance possible. After liftoff the airplane is flown in ground effect until a safe climb out speed is obtained.

**Procedure:**

1. Set wing flaps to proper takeoff position.
2. Maintain full back elevator pressure at all times.
3. Check for traffic and keep the airplane moving at a brisk pace onto the runway. Do not stop unless it is necessary.
4. Smoothly apply full power and check engine instruments.
5. Hold full back elevator pressure until the nose begins to rise.
6. As your airspeed increases your pitch must decrease.
7. As the pitch attitude approaches approximately Vx, hold Vx pitch attitude until liftoff.
8. Once airborne, reduce pitch attitude to maintain ground effect until reaching Vx or a safe climb airspeed.
9. Climb at Vx or Vy as appropriate to maintain a positive rate of climb.
10. Once clear of all obstacles, pitch for Vy as appropriate and retract the flaps.

**NOTE:** Release elevator backpressure as the aircraft accelerates to minimize the potential for over rotation.

**CAUTION:** Be careful not to strike the tail of the aircraft as a result of an excessive use of backpressure.

Completion Standards: Refer to the Airmen Certification Standards.
**Soft Field Approach and Landing**

The Soft Field Landing is used when landing on a grass strip or contaminated runway. During this maneuver, the aircraft should be brought to the runway surface with a minimal descent rate and forward movement by adding power just prior to touchdown. The purpose is to keep the weight of the aircraft on the wings as long as possible resulting in a gentle touchdown which will minimize sinking into the ground.

**Procedure:**
1. Select a specific touchdown point on the runway.
2. Establish a stabilized power on approach prior to descending below 300 feet AGL.
   **NOTE:** Add half the wind gust factor when appropriate.
3. In order to maintain glide path use pitch and power to control rate of descent.
4. At the appropriate flare altitude, begin to increase back pressure to the touchdown attitude. Add a small amount of power just prior to touchdown to make the landing as soft as possible. This keeps the weight of the aircraft on the wings and off the wheels as long as possible.
5. After touchdown, maintain back pressure on the control yoke to keep the nose wheel off the ground as long as possible.
6. Use power as necessary to taxi.
7. Use brakes only when absolutely necessary.
8. Slow the airplane to a normal taxi speed before clearing the runway.
9. Clear the runway and come to a complete stop before initiating the after landing checklist.

Completion Standards: Refer to the Airmen Certification Standards.
Emergency Approach and Landing (General Considerations—See Appropriate POH for Specific Procedures)

Modern aircraft engines are very reliable. Most engine failures can be attributed to pilot error, specifically fuel mismanagement and lack of situation awareness. During this maneuver the pilot will develop the skill and proficiency necessary to accomplish a power-off emergency approach and landing at the best available site.

First you should establish best glide speed. By obtaining the best glide speed you will be covering the most horizontal distance with the least vertical distance lost. Once you have trimmed for and established best glide speed, go directly to your intended landing area. Do not spend time circling at a distance from your field. Remember that during an engine failure once altitude is lost it cannot be regained, therefore if you make an error in judgment you could end up landing well short of your intended landing strip.

The procedure outlined below is used for an engine out scenario. Some keys to making a successful forced landing are:
- To make a quick analysis of the situation
- Execute the correct emergency procedure
- Use good judgment when selecting a field and making an approach to that field
- Divide your attention
- Practice, Practice, Practice

Procedure:

1. Pitch and trim for best glide speed.
   - Warrior II N8334Y 73 KIAS*
   - Warrior III N4182J/N5323X 73 KIAS*
   - Diamond DA 40 N616ML 76 KIAS *
   - Arrow N47985 79 KIAS*

2. Select an appropriate landing field (considering size, wind direction, obstructions, terrain, etc.), and turn toward it. Try to make the landing as normal as possible.

3. See appropriate aircraft POH for proper troubleshooting procedures.

*Speed designated for max gross weight.
**Lost Procedures**

If during flight you find yourself off course and unfamiliar with your position, there are several procedures that are available to help you determine your position. In order to simplify the process, when you think you are lost, refer to the “4 Cs”.

1. **CALM**: Being lost is not an emergency. If you are lost, remain calm and maintain aircraft control.

2. **CLIMB**: Altitude enables you to see further and provides better reception of communications. Keep in mind the possibility of overlying airspace or cloud cover.

3. **COMMUNICATE**: Contact the nearest ATC facility. Controllers are there to help you. Contact the nearest tower or FSS for a DF Steer. Your heading and location can be determined by transmitting a steady tone for 10-20 seconds after being told to “transmit for homing” by the DF facility. A bearing can be obtained on your airplane in a short while. You can also try to establish communication on the last frequency that you were communicating.

4. **COMPLY**: Everyone will be willing to cooperate at helping you in the most efficient way. Work with the controllers and adhere to their advice.

**Procedure:**
1. Reset the heading indicator to the magnetic compass.
2. Look outside for any prominent landmarks and try to locate them on your sectional chart.
3. Tune and identify any available VOR or NDB stations.
4. Determine direction from a VOR by centering the needle with a FROM indication. Distance can be determined using DME if available, by locating a prominent landmark on the radial, or by cross checking with another radial from another VOR.
**Diversion**

Some situations occur during flight that would require a pilot to change his/her plans and divert to another airport. These situations could include a change in weather, a system malfunction, or a sick or injured passenger. The following procedure is a method of completing the necessary steps to arrive at the new destination in an efficient manner.

Procedure:
1. Determine present position and the new destination location on your sectional chart.
2. Determine an approximate heading and point the aircraft in the proper direction.
3. Plot the new course on the sectional chart and note the current position and time.
4. Determine distance and magnetic heading.
5. Compute ETE, ETA, fuel required and compass heading.
6. Amend your flight plan with Flight Service and get an updated weather briefing for the new route and destination.
## References

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAA-S-8081-14AS</td>
<td>Private Pilot Airplane Single-Engine Land and Sea Airmen Certification Standards</td>
</tr>
<tr>
<td>FAA-S-8081-12B</td>
<td>Commercial Pilot Airplane Single-and Multiengine Land and Sea Airmen Certification Standards</td>
</tr>
<tr>
<td>FAA-H-8083-3</td>
<td>Airplane Flying Handbook</td>
</tr>
</tbody>
</table>