

GT Aviation, LLC

Pilot and Student Handbook

*Containing Rules, Procedures and Operational Limitations for
Flying in GT Aviation Aircraft*

This manual belongs to: _____

Certificate No. _____

Phone No. _____

Pilot / Student Manual Table of Contents

I. Introduction

- a. Title Page
- b. Table of Contents

1 Safety

- 2. Safety Culture Commitment
- 3. Aviation Flight Safety Program
- 4. GT Aviation Staff Training Program
- 5. Occurrence Reporting and Documentation
- 6. Accident / Incident Response Plan
- 7. Emergency Contact Numbers

8 Rules and Regulations

- 9. Student Expectations
- 10. Drug and Alcohol Policy
- 11. Aircraft Priority Policy
- 12. Solo Flights
- 13-14. General Operational Limitations
- 15-16. Weather Limitations
- 17. Insurance Requirements
- 17-18. Unplanned Maintenance

19 Aircraft Operations

- 20. Fuel Management
- 21. Fuel Conservation and Mixture Leaning Procedures
- 22. Light Twin Operating Procedures Specific to Potomac Airfield (KVKK)

23 Procedures

- 24. Aircraft Scheduling and Dispatch Procedures
- 25. Starting Procedures
- 25. Taxiing Procedures
- 25. Fire Precautions
- 25. Redispatch Procedures
- 25. Aircraft Avoidance
- 25-26. Minimum Altitudes
- 26. Tie Down and Parking Procedures
- 27. Potomac Airport Traffic Procedures
- 28. Security Procedures
- 29. Local Practice Area
- 30. Winter Operations
- 31. Procedures for Approving Solo Cross Country Flights

Flight Safety Program

At

GT Aviation

SAFETY CULTURE

All GT Aviation students, pilots, instructors and other employees must commit to operating GT Aviation aircraft in a manner consistent with the highest possible level of safety. This commitment encompasses individual as well as observed operations conducted by all persons regardless of experience. Safety needs to be at the forefront of every operation. Safety at GT Aviation will be approached proactively, rather than reactively. All personnel involved with GT Aviation should continually strive to eliminate all accidents, incidents and occurrences. This is the industry standard.

CORE VALUES

The following are the core values of GT aviation. They are to be observed at all times by all personnel associated with GT Aviation, including students, pilots, instructors, office, and maintenance personnel.

- Safety is foremost
- Professional behavior
- Accountability
- Respect other people
- Lifelong learning
- Rewarding exceptional ground and flight safety performance

SAFETY COMMITMENT

GT Aviation will hold all individuals accountable for their safety performance. GT Aviation will strive towards a “zero fail” commitment towards its operations. Each individual must accept responsibility for their own safety and the safety of others around them. To ensure the highest possible safety level, there will be an open safety culture at GT Aviation. All persons are encouraged to communicate openly about safety related incidents and should share any lessons learned with others. Should someone observe an unsafe situation, it should immediately be communicated, before an accident or incident occurs. All persons associated with GT Aviation must be aware of all safety rules and procedures as well as their personal responsibility to observe them.

All GT Aviation rules and procedures are developed to enhance safety. Compliance with, and complete knowledge and understanding of all the rules and procedures, unless otherwise stated, is **MANDATORY**. Failure to follow rules and procedures contained herein may result in immediate suspension of flight privileges. All students and pilots must comply with the instructions of GT Aviation staff, unless the instructions would create an unsafe situation, or require a violation of the law. If a student or pilot is unable to comply with a GT Aviation rule or procedure, they must report deviation as soon as

possible to a GT Aviation employee. If a person cannot comply with an employee instruction, they must report it immediately to the employee that made such an instruction.

SAFETY CULTURE

Aviation safety at GT Aviation is a culture and an attitude that must permeate the entire organization. Safety is the responsibility of every individual associated with GT Aviation. "Safety" is an overall philosophy that is a proactive approach to reducing or eliminating accidents or incidents. It is not a reaction to an incident or accident but a means of preventing them. GT Aviation strives to eliminate all accidents and incidents.

The GT Aviation Safety Program Includes:

- A safety officer with defined duties and responsibilities
- Initial and recurrent training of all employees
- A reporting and documentation system of all safety rule deviations and any safety related occurrences
- Acceptance and investigation of anonymous reports
- This policy and procedures manual
- Routine staff meetings
- An annual internal safety assessment
- A public procedure for reporting potential unsafe conditions

Safety Officer Responsibilities

GT Aviation will maintain a specific instructional staff member who will be designated as the Safety Officer. The duties and responsibilities of the safety officer will be:

1. Conduct a yearly audit of GT Aviation safety policies and procedures and any problems encountered during the previous year
2. Prepare a yearly "Report on Safety" detailing any safety problems encountered during the previous year and any corrective actions taken.
3. Recommend any policy or procedure changes relative to the safety program.
4. Generate a safety news letter
5. Respond to the concerns or suggestions of GT Aviation students, pilots, instructors, staff, or other interested persons.
6. Counsel students, pilots and/or instructors who have been involved in any accident, incident, or other occurrence that effects the safe operation of the GT Aviation program, including referrals from Air Traffic Control.
7. Organize an annual safety related meeting/seminar to present to the GT Aviation / Potomac Airport community to promote the GT Aviation safety program.
8. Disseminate safety related information from other sources such as Potomac Airport, ATC, FAA, NTSB, AOPA, or other organizations.
9. Create and manage an ongoing safety promotion program.

Staff Training Program

All GT Aviation employees will receive initial training related to their duties and responsibilities. This will include:

ALL STAFF

- GT Aviation Employee Responsibilities
- Review of GT Aviation Policies and Procedures
- Review of GT Aviation and Potomac Airport security protocol
- Completion of TSA required security awareness training
- Emergency and security reporting procedures
- Review of GT Aviation Policies and Procedures Staff Supplement

INSTRUCTORS

- Initial aircraft checkout / differences training
- Local airport and airspace policies
- SFRA/FRZ rules and procedures
- Instructor Responsibilities
- GT Aviation record keeping and student flight syllabus
- Recurrent and flight proficiency training
- Yearly Instructor Standardization (141)

MAINTENANCE

- Local program indoctrination

Occurrence Reporting and Documentation

It is essential, in order to reduce and eliminate accidents and incidents, that they are reported and documented. Any occurrence will be reported to GT Aviation staff immediately. The safety officer will collect any relevant details and ensure appropriate documentation is completed and any steps are taken to prevent a similar situation. A safety reporting form is available on the GT Aviation website. Anonymous reports are accepted.

It is the pilot's responsibility, however, to report any incident or accident as defined by the NTSB in part 830, or to make any reports required by ATC or the FAA. Completion of a NASA Aviation Safety Reporting System Report is highly recommended, but is the pilot's ultimate responsibility

Categories of occurrences are as follows:

- A. An accident as defined by the NTSB
- B. An incident, other than aircraft damage
- C. Illegal operation, such as departing past an inspection interval or AD
- D. Runway / Taxiway incursions
- E. Communications errors or failure to follow an ATC instruction
- F. Error in judgment or decision making
- G. Failure to follow security protocol or
- H. Failure to follow GT Aviation safety rules or policies

GT Aviation Accident / Incident Response Plan

GT Aviation is committed to providing the safest flight training experience possible. However, there is an unavoidable possibility that an accident or incident may occur. In order to reduce confusion in a crisis, fulfill obligations and responsibilities and provide compassion for affected individuals, this accident / incident response plan has been developed.

All people involved with GT Aviation, particularly staff should be familiar with all aspects of this plan.

In order to ensure only accurate information is disseminated, **contact with the media should only be accomplished by the GT Aviation CEO or his designee.** Inquiries from interested parties should be referred to the GT Aviation CEO or public affairs officer.

1. If necessary for safety, to prevent fire, or to provide medical services, contact 911 and request the appropriate fire and medical response.
2. If an accident as defined by NTSB has occurred, contact the State Police
3. Contact the GT Aviation on duty / on call representative if not already accomplished, this person will make additional notifications as appropriate.
4. Contact the GT Aviation CEO Tim Poole
5. Contact the Director of Maintenance
6. Contact the Safety Officer
7. Contact the Chief Flight Instructor

Any additional notifications or actions will be taken by the CEO or his representative only.

Aircraft Relocation Plan

In the event a situation arises that necessitates relocation of the aircraft such as a natural disaster, approaching severe weather, or airspace or airport closure, the CEO or his representative will make arrangements to move GT Aviation aircraft or other resources to safety. As each situation will dictate different actions be taken, it is impossible to write a plan for every event. Pilots and staff should use their best judgment if faced with a emergent situation and they cannot contact the CEO or his designee.

GT Aviation Emergency Contact List

Fire / Rescue / EMS	911
Maryland State Police Forestville Barrack	301-568-8101
GT Aviation President / CEO Tim Poole	Home 301-645-3260 Cell 301-642-0535
GT Aviation Vice President Karen Poole	Cell 301-653-9403
Chief Flight Instructor Single Engine Larry James	Cell 202-507-1417
Chief Flight Instructor Multi Engine Dr. Bill Tuccio	Cell 202-527-5729
Director of Maintenance Matthew Adams	Cell 240-925-1180
Safety Officer Larry James	Cell 202-507-1417
FAA Washington Dulles FSDO	703-230-7664
National Transportation Safety Board Ashburn VA Office	571-223-3930
AOPA GA Secure	1-866-GA-SECURE
Potomac Airport Manager	Office 301-248-5720

GT Aviation

Rules and Regulations

Student / Pilot Expectations

1. Students are expected to attend all scheduled flight, ground or simulator sessions.
2. Students / Pilots must notify GT Aviation or their instructor as soon as possible if they will be unable to attend their scheduled session. This will allow the aircraft or simulator and the instructor to be available for other students.
3. Pilots should notify GT Aviation as soon as possible if they desire to cancel due to weather. Students should make this decision along with their instructor.
4. Students are expected to arrive early for their scheduled sessions.
5. Students are expected to return to Potomac 15 minutes before the end of their scheduled session. This allows time for post flight fueling, parking, post flight inspection and debriefing before the aircraft or instructor will be needed for the next session.
6. All pilots must follow FAA regulations and GT Aviation Operating Procedures contained in this manual.
7. All pilots are expected to use proper aircraft handling and servicing as specified in the aircraft Pilot Operating Handbook (fuel, oil, windshield cleaning, preflight, tie down and covers, etc.)
8. All pilots are expected to sign out the aircraft only for the time they expect to fly the aircraft. Do not sign out a 6 hour block when you only intend to fly 2 hours, just because you don't know when you are going to fly.
9. Pilots are responsible for the condition of the aircraft upon its return. Do not leave trash in the aircraft, or leave the aircraft dirty. GT Aviation can provide cleaning equipment.
- 10. All pilots are expected to perform a post flight inspection of the aircraft after parking. If any flight damage is found by the next pilot during preflight, it is assumed to be the responsibility of the previous pilot.**
11. Checklists should be used for all operations.
12. All pilots are expected to observe noise abatement procedures for any airports they choose to operate at, if they exist.
13. All pilots are encouraged to monitor 121.5 MHz when able.
14. All pilots are encouraged to obtain copies of the aircraft flight manuals, to use when performing weight and balance calculations or performance calculations at home.
15. Student pilots may only use personal electronic devices as Electronic Flight Bags (EFB) and may not use them for photos or text messaging. Phones, if not in use as an EFB, must be off and stored out of immediate reach.

Drug and Alcohol Policy

A pilots physical skills and thinking ability are absolutely essential to the safe operation of an aircraft. The pilot in command has an enormous amount of responsibility, not only to themselves and their passengers, but to people on the ground and the general aviation industry as a whole. GT Aviation treats substance abuse as a very serious issue, therefore there will be zero tolerance for violation of this policy. This applies to all staff, instructors, pilots and students.

- A. Use of, or possession of illegal drugs will result in an immediate suspension of flight privileges and possibly removal from the GT Aviation program, as well as criminal action.
- B. A minimum of 12 hours must elapse from the last consumption of any beverage containing alcohol and a student, instructor or pilot flying any GT Aviation flight. Each person must also be free from the effects of any alcohol, including hangovers. Violation will result in immediate suspension of flight privileges.
- C. All staff must be free from alcohol and drugs at all times while at the airport regardless of their duty status. Alcohol will not be consumed by GT Aviation Staff at the airport, except during pre-approved celebratory or social events during which they will not be flying.

It is every pilot's responsibility to determine his or her own fitness to fly. It is highly recommended each pilot review the following before each flight to ensure they are medically fit to fly, above and beyond simple possession of a valid medical certificate.

I llness	Flying while ill is a bad idea. A simple toothache or sinus infection can become disabling due to the pressure changes of flight.
M edication	Medication, even over the counter, may impair your ability to fly safely. Do not fly unless you know how a given medication effects you.
S tress	Some people fly to relieve stress. However, flying with your mind on something else can leave you distracted. A simple distracted error can lead to an accident.
A lcohol	As mentioned above, you cannot fly if you have consumed alcohol within the previous 12 hours or are still under it's effects.
F atigue	Just like driving, flying while too tired to be alert and attentive may lead to disaster.
E motion	Just like stress, if you are not able to devote your attention to flying, you may not be safe to fly.

**** When in doubt of your ability to safely operate an aircraft, don't! ****

Aircraft Priority Policy

The following list establishes, in order of priority, the aircraft priority policy:

1. Rescue Flights
2. Initial flight tests for certification
3. Sales demonstration flights including Intro flights
4. Standardization flights by the Chief Flight Instructor
5. Maintenance recovery or relocation flights
6. Phase Checks
7. Scheduled dual flights by club members
8. Other scheduled flights by club members
9. Scheduled flight by non club members
10. Unscheduled flights (flights not on the schedule as of the open of business)
11. Overnight flights or extended cross country flights
12. Proficiency flights of the staff
13. Other flights, as approved.

Should a conflict arise, such as a scheduling error, removal of an aircraft from the schedule for maintenance or an overdue flight etc, flights higher on the list will have priority over flights that are lower on the list. If a conflict arises between two flights of the same category, the flight that had been scheduled the longest has priority. GT Aviation will make every reasonable effort to accommodate all those wishing to fly. All students and pilots are encouraged to enter details about their intended flight in the appropriate spaces when making reservations to assist in the proper application of this policy.

Aircraft are considered available, if after 15 minutes into a scheduled flight slot, the scheduled pilot has failed to arrive or notify GT Aviation of his or her intentions.

Solo Flights

This section applies to student pilot solos only. Regulations for certified pilots are specified elsewhere in his manual.

1. All solo flights must be specifically approved in person by the instructor to whom the student is normally assigned, or if that instructor is unavailable, another on duty instructor, **immediately prior to the proposed flight.**
2. Authorization may be given by telephone or other means, only when no instructor is available in person. A GT Aviation employee must still be present to grant access to the aircraft keys and dispatch the solo student. **141 Exception:** If the student is participating in a Part 141 training course, a CFI **must** be present at the airport to authorize the flight per 141.79.
3. Students may not solo unless they have flown with a GT Aviation instructor within the preceding 90 days in the same make and model to be soloed. It is highly recommended they do not fly more than 3 or 4 times solo between each dual flight. This is to prevent the learning of bad habits and to more effectively direct the students solo practice efforts.
4. Except for Potomac airport, the minimum runway length for solo is 3000 feet.
5. Students will use only hard surface runways.
6. Except for emergencies or weather deviations, solo flights will only land at Potomac Airport, or an airport for which the student has received specific training and the appropriate logbook endorsement as required by FARs.
7. All students must carry their student or pilot certificate, current medical certificate, government issued photo ID, proof of SFRA/FRZ training, and logbook on all flights.
8. Students may not carry anyone in the aircraft, other than a FAA designated pilot examiner, FSDO inspector, or GT Aviation instructor.
9. All students will monitor 121.5 MHz in addition to any required ATC frequency.
10. On all flights, students must add the phrase “Student Pilot” on initial contact with ATC.
11. Students may not accept land and hold short clearances.
12. Students must maintain visual reference with the surface at all times, they may not operate “VFR on top,” or under special VFR.
13. No solo flights may be conducted at night.
14. All solo cross country flights must be scheduled to be back on the ground at Potomac at least 2 hours prior to sunset.
15. Student pilots may not participate in formation flying.

General Operational Limitations

This section applies to all flight operations.

All pilots are expected to observe Current Federal Aviation Regulations, as well as state and local laws. Pilots are reminded that as pilot in command, they accept and bear the final responsibility for operation of the aircraft. All aircraft must be operated in accordance with the operating limitations as set by applicable placards, the Pilots Operating Handbook or this manual, except where contrary to established law.

1. Formation flying is prohibited without the approval of the Chief Flight Instructor.
2. No flying may be conducted below 700 ft agl, except where required for takeoff and landing. See Minimum Altitudes section in the Procedures chapter for further information.
3. No IFR flights may be conducted in IMC when, given all available information, it is reasonable to expect icing conditions may exist.
4. Pilots wishing to fly IFR must show evidence that he or she is both legal and proficient to fly IFR.
5. Each pilot is responsible for the preflight inspection of the aircraft including proper loading, fuel and oil requirements and takeoff and landing performance.
6. All flights must land with a minimum of 1 hour of fuel aboard, considering normal cruise fuel consumption.
7. GT Aviation aircraft may not be operated on turf runways without case by case approval of the Chief Flight Instructor, CEO, or Director of Maintenance.
8. Instruction in GT Aviation aircraft may be provided only by GT Aviation employees.
9. Animals may only be carried aboard the aircraft in approved containers. The pilot is responsible for the condition of the aircraft upon its return.
10. Smoking and chewing tobacco are prohibited in GT Aviation aircraft.
11. Each pilot must secure the aircraft in its parking spot, installing gust locks, locking the aircraft and installing the covers and plugs, and attaching the secondary lock, unless the pilot using the aircraft next is physically present and agrees to accept responsibility for parking and securing the aircraft. If this is not accomplished correctly, the pilot responsible will be billed for ½ hr of maintenance time to accomplish the above procedure.
12. Each pilot is required to perform a post flight inspection for damage before they are released from responsibility for the aircraft. **If any flight damage is found by the next pilot during preflight, it is assumed to be the responsibility of the previous pilot.**
13. Aircraft at Potomac Airport are not to be towed or pushed, except to relocate from the fuel pump to another area of the paved ramp in between flights. All other ground movements, including from the fuel pumps to tie downs are to be accomplished by taxi under power.
14. Flights outside the United States require the approval of the GT Aviation CEO.

15. Preheating is **mandatory** if the engine temperature prior to start is 40 degrees Fahrenheit or less, using a common sense estimate. This requirement includes engine starts at airports other than Potomac, when preheating is available.
16. The pilot in command is responsible for paying any landing, parking, or ground handling fees incurred while they are operating the aircraft. The proper ground handling, parking and tie down or storage of the aircraft is their responsibility when at airports other than Potomac.
17. Nothing may be attached to any part of the aircraft using adhesive.
18. GT Aviation aircraft may not be operated above 10,000 feet MSL with out approval from the CEO.

Weather Limitations

Weather Limits for Renters:

Certified Pilots renting GT Aviation aircraft for their own enjoyment (non-flight instruction) are limited to the following weather conditions:

Renters are responsible for making their own decisions regarding ceilings and visibility. All flight operations are limited to no more than maximum peak gusts of 25 knots, regardless of wind direction. At no time will any aircraft be operated beyond its Maximum Demonstrated Crosswind Component as defined by the manufacturer.

Flight into areas where icing may exist, given all available information, is prohibited.

Flight into or in the vicinity of thunderstorms is prohibited.

Wind Limits for All Training:

The table below prescribes the maximum surface wind limit and indicated crosswind peak gust in knots. All flight operations are limited to no more than maximum peak gusts of 25 knots, regardless of wind direction. The reported wind at Potomac and forecast wind at other airports of intended use must be below the indicated crosswind component before departure. At no time will any aircraft be operated beyond its Maximum Demonstrated Crosswind Component as defined by the manufacturer.

Type of Flight	0°	20°	30°	50°	60°	80°	90°
Dual	25	23	20	18	17	16	15
Solo	15	13	12	10	9	8	7

Weather Limits for VFR Training:

The table below prescribes the weather limitations for student pilot solo and VFR training flights in GT Aviation Aircraft.

Type of Flight	Minimum Ceiling	Minimum Visibility
Dual Local	1500	3
Dual Cross Country	2000	5
Dual Night	2500	5
Solo Local	2000	5
Solo Cross Country*	3000	7

*Additionally for solo cross country, no precipitation, fog or thunderstorms may be forecast for the proposed route within two hours before or after the proposed time of operation within the forecast area.

Flight into or in the vicinity of thunderstorms is prohibited.

Temperature Limits:

Day All Aircraft – Dual $>-10^{\circ}$ deg F or $<+110^{\circ}$ F
Solo $>+10^{\circ}$ deg F or $<+100^{\circ}$ F

Night All Aircraft – Dual/Solo $>+10^{\circ}$ deg F

Weather Limits for IFR Training

Instrument training under VFR will be in accordance with the basic VFR weather minimums in 14 CFR, Section 91.155.

For IFR operations, minimum weather for landings will be in accordance with 14 CFR, Section 91.175. For takeoffs, the ceiling and visibility will be equal to or greater than the lowest appropriate aircraft instrument approach minimums at the departure airport based on aircraft equipment or the departure procedure minimums, whichever is higher. If prevailing winds dictate a circling procedure, the lowest circling minimums will apply. Determination of the requirement for an alternate airport will be in accordance with 14 CFR, Section 91.169.

Flight into areas where icing may exist, given all available information, is prohibited.

Flight into or in the vicinity of thunderstorms is prohibited.

Insurance Requirements

Student pilots and renters will be responsible for all damage to the aircraft that results from their negligence that may have occurred during rental. GT Aviation, LLC provides \$100,000 liability coverage for any incident, accident, or damage incurred upon by any GT Aviation aircraft in which GT Aviation is proven at fault. No renter/student is covered by this policy if the incident, accident, or damage to any GT Aviation aircraft is found to be the fault of the renter/student.

GT Aviation requires renters/students carry a “Renter’s Insurance” policy in the amount of \$50,000 (minimum) hull damage as an additional precaution against personal liability and property damage exposure. Evidence of such insurance must be presented to and maintained with GT Aviation prior to rental of any GT Aviation aircraft .

Unscheduled Maintenance

GT Aviation does all it can to ensure that it provides modern, well-equipped, efficient, clean and well-maintained aircraft to its customers. It is unavoidable however, that mechanical devices break. A proper preflight and post flight inspection along with regular maintenance and inspection intervals will help prevent breakdowns from occurring. Any maintenance discrepancy must be documented and reported to GT Aviation so that it may be corrected and tracked.

In the event a maintenance discrepancy occurs at Potomac airport it should immediately be reported to an instructor or other staff member. They can then help the pilot make a decision regarding the urgency of the discrepancy. Minor discrepancies, such as low oil or low tire pressure should be corrected by the pilot or with assistance of a GT Aviation employee. A more complicated discrepancy may require more serious maintenance. Consultation with the pilot and an instructor is required to determine if the planned flight may continue. Consultation with GT Aviation maintenance staff is encouraged.

Note: If the pilot or instructor considers the item essential, regardless of other factors, do not fly. The pilot in command is the ultimate final authority and takes responsibility for conducting a flight with inoperative equipment.

- 1) Check if FAR 91.205 or the aircraft manufacturer AFM (if applicable) require the item to be operative for the intended flight
- 2) If FARs or the aircraft manufacturer does not require the item and the pilot and instructor believe the flight may safely be continued with the discrepancy, it should be documented in the aircraft squawk section of the schedule system and reported by the instructor or pilot to maintenance staff.
- 4) If required by FARs, the instructor will assist the pilot with deactivating the defective equipment and placarding it “INOPERATIVE” in accordance with 14 CFR 91.213. It

should also be documented in the aircraft squawk section of the schedule system and reported by the instructor or pilot to the maintenance staff.

Should a maintenance problem be discovered at an airport other than Potomac, the pilot may be left to decide on their own whether or not to fly. Consultation by telephone with GT Aviation is desired if at all possible. A customer may not perform repairs (other than simple preventative maintenance such as adding oil, filling tires, etc...) or cause repairs to be performed (including estimates) without consultation with GT Aviation.

If maintenance is performed locally by an authorized A&P, the pilot will receive documentation from the mechanic for the aircraft records and return the documentation to GT Aviation maintenance personnel upon return.

If local maintenance assistance is unavailable and minor corrective action is determined necessary and is performed by the pilot under the guidance of GT Aviation maintenance personnel, the corrective action will be documented in the aircraft squawk section of the schedule system. If the item cannot be corrected and must be deferred, the pilot must document the discrepancy and the deferral in the aircraft squawk section of the online schedule system. If access to the online system is unavailable, the pilot will record a written entry on their dispatch sheet documenting the corrective action or deferral along with their certificate number. Upon return to VKX the corrective action or deferral will be entered and documented in the squawk section of the online schedule system. These situations are expected to be rare.

In the event the aircraft cannot be flown safely, the customer must contact GT Aviation so that a plan for recovery of the customer and repair of the aircraft can be devised. GT Aviation will be responsible for all aircraft related costs such as extended parking fees, costs to repair the aircraft, etc. GT Aviation will not be responsible for any loss to the customer resulting from the inability to complete a flight, such as hotel or rental car fees, food or any other loss.

Fees incurred due to the actions of the customer such as landing fees, normal parking fees, preheating or deicing fees (preheating if required is at the customers expense when away from Potomac), tug fees, or environmental fees and associated taxes remain the responsibility of the customer and are not considered maintenance items.

Aircraft Operations

Fuel Management

Over the years, one of the leading causes of general aviation accidents has been failure to properly manage fuel. It is imperative that the pilot in command is constantly aware of how much fuel is remaining aboard the aircraft, and in which tanks it remains.

The Cessna fuel system greatly simplifies fuel management, as fuel is typically drawn from both fuel tanks. In the Arrow, DA-40, or PA-30, as in many other aircraft, there is a left and a right fuel tank. It is not possible to draw fuel from both tanks at the same time, therefore, it is possible to experience an engine failure due to fuel starvation, even though the other tank may contain fuel.

Proper flight instruction will include fuel management procedures. Use of checklists will help accomplish these procedures.

GT Aviation Fuel Management Policy

The minimum fuel permissible upon landing full stop is 1 hour of fuel considering normal cruise flight fuel consumption.

For night flights, instrument flights and cross country flights, it is **highly recommended** that all aircraft depart with full tanks, weight and balance permitting.

To ensure each person only pays for the fuel they use, after flight, the Cessnas must be filled with fuel to the bottom of the filler neck (full fuel). The DA-40 will also be filled full. The Arrow should be filled only to the bottom of the tabs (34 gallons). This allows the next pilot the option to carry extra passengers or cargo without having to defuel to remain within weight and balance limits. The Twin Comanche will only have the main tanks fueled, leaving the aux tanks empty and available for the next renter to decide on fuel load to meet GT Aviation FRAT and/or weight and balance requirements.

Each pilot must check the fuel as part of their preflight procedure. If the aircraft was fueled improperly by the previous pilot, notify an on duty GT Aviation representative immediately. The missing fuel will generally be billed to the previous pilot.

GT Aviation has no control over the quality of fuels offered at Potomac, or other airports. It is mandatory that pilots test all fuels for contamination and proper grade as part of their preflight procedure. Under no circumstances will fuel drawn during a fuel test procedure be put back into the aircraft tanks.

Fuel Conservation and Mixture Leaning Procedures

The price of aviation fuel, as it always has, continues to represent a sizable portion of the flight costs for all pilots. At GT Aviation, you will only pay for the fuel you actually use. It is in your best interest to use procedures to minimize your fuel usage and to maximize your flying enjoyment.

1. Leaning should be accomplished in accordance with the appropriate aircraft's pilot operating handbook.
2. Although research indicates operating lean of peak results in increased engine life and decreased fuel burn, operation lean of peak can only be accomplished safely with specific training, matched fuel injectors and a multi-cylinder engine monitor. GT Aviation aircraft are not presently equipped for this type of operation and as such, all aircraft must be operated rich of peak, as specified in the POH.
3. Pilots are encouraged to select lower power cruise settings. The aircraft can be flown more efficiently at 65% power than 75% power. A slight reduction in cruise speed can result in a large fuel savings for a small time cost.
4. In aircraft equipped with a constant speed propeller, it is recommended that pilots use the lowest RPM setting that will allow them to operate at the desired power setting. This reduces vibration and noise and allows the propeller and engine to operate more efficiently.
5. A dirty aircraft will fly slower than a clean one. GT Aviation strives to provide clean and reliable aircraft, however, we can always use help washing the aircraft.
6. Normally aspirated aircraft fly most efficiently at approximately 8000 feet. Above this altitude engine performance begins to drop off due to reduced air density. Below this altitude, true airspeed begins to drop due to increased drag resulting from increased air density. Pilots are encouraged to select a cruise altitude that allows them to benefit from the aircraft's performance as well as any available tailwinds.

Light Twin Operating Procedures Specific to Potomac Airfield (KVXX)

Due to performance related risks of operating a light twin aircraft out of shorter runways, the following additional procedures have been put in place by the FAA for all instructional flights conducted in light twins out of VKX. The PIC has responsibility for Go / No Go decisions for non-instructional flights.

Flight Risk Analysis Tool

GT Aviation has developed a one page Flight Risk Analysis Tool (FRAT) to assist in a Go / No Go flight determination for all instructional flights in light twins out of VKX.

1. The FRAT must be completed prior to each flight, with the ultimate outcome being a Go / No Go decision based on the FRAT risk assessment outcome.
2. If Accelerate/Stop performance cannot be met, the instructional flight will not depart.
3. New students will be made aware of accelerate-go risks operating out of short fields.
4. The completed FRAT is retained until the flight is completed and is then discarded.

First Flight for New Multi-Engine Students

If the training aircraft does not have both pilot and co-pilot side brakes available, the following additional training steps will occur to ensure pilots with minimal multi-engine experience can safely operate the aircraft:

1. The CFI will occupy the left seat for at least the first training flight in order to relocate to an airport with a runway of at least 3500 feet available runway length.
2. Once relocated, the CFI and student will swap places and the student will then undergo training to demonstrate proper emergency procedures, braking performance, and any additional training at the CFI's discretion to achieve competency in controlling the aircraft should an engine fail during a takeoff roll.
3. The CFI will occupy the left seat on the first landing back into VKX.
4. The CFI will determine how many flights are necessary to conduct in the above manner before allowing the student to depart VKX in the left seat on instructional flights. This will be determined on a case by case basis.

Procedures

Aircraft Scheduling and Dispatch Procedures

All GT Aviation aircraft and instructors will utilize the online schedule available at www.flightschedulepro.com. Pilots and students will be assigned a logon to allow them to view the schedule and to make appointments with instructors or to reserve aircraft. The scheduling system is configured to allow pilots or students to reserve only aircraft they have permission to fly. The system is able send a SMS text alert or email if a reservation is changed for any reason (such as instructor unavailability or an aircraft change). It is highly recommended that all pilots and students configure their account to take advantage of this feature.

All users are required to enter and maintain current emergency contact information in their Flightschedulepro user profile.

Prior to any flight, the flight must be “dispatched.” To be dispatched the following must occur:

1. To ensure a reliable information transfer, the aircraft cannot be dispatched until it has been returned by the previous user.
2. The student or pilot must appear in person before dispatching the flight.
3. If dispatched by an employee, they will ensure the student or pilot is authorized to conduct the proposed flight. If the flight is being dispatched by a “trusted renter” that renter is responsible for the following:
 - a. Proper authorization for the type of aircraft
 - b. If applicable, authorization for solo flight
 - i. Ensure the student has flown with an instructor within the previous 90 days.
 - ii. Ensure the student has consulted with an instructor prior to the proposed flight and received authorization for the flight.
 - iii. If a Part 141 student, ensure there is a CFI present at the airport to authorize the flight in accordance with 141.79.
 - c. Proper security clearance (see section in chapter 4)
 - d. All time based parameters for the pilot have not expired
 - i. Current medical certificate
 - ii. Current BFR
 - iii. Current IPC or GT Aviation Instrument flight authorization
4. Ensure the aircraft is legal for flight (although the determination is ultimately the responsibility of the pilot in command).
 - a. The aircraft has not been grounded.
 - b. The aircraft has not exceeded an inspection interval and enough time remains for the proposed flight and any subsequent flight required to get the aircraft to the maintenance base if required.
 - c. The aircraft has not exceeded any time or date limited AD
5. The student or pilot have checked the “squawks” section of the schedule system for the appropriate aircraft for any uncleared discrepancies.
6. Appropriate computer entries to dispatch the aircraft have been completed.

After the above items are completed, the student or pilot may obtain the aircraft keys.

Starting Procedures

All aircraft will be started within the ramp or tie down area unless otherwise designated by the Chief Flight Instructor or his designee. All starting procedures will comply with the procedures stated in the Pilots Operating Handbook for that aircraft.

Taxiing Procedures

Taxi on yellow depicted taxi routes and at a slow and reasonable speed (use 10 miles per hour as a guide). Spacing between aircraft on taxi routes will be a minimum of two ship lengths. During the day, operate the anti-collision lights while taxiing. Use position lights and the landing light at night. To minimize the chance of runway incursion, read back taxi instructions, particularly hold short, position and hold, runway crossing and takeoff clearances. When obtaining complex taxi clearances at unfamiliar airports write down the clearance, have an airport diagram available and request progressive taxi if needed.

Fire Precautions

During fueling operations the aircraft involved will be unoccupied. Fire Extinguishers will be present when fueling is in progress. In the event of aircraft fire during engine start or taxiing, follow the emergency procedures in the aircraft POH. If there is any doubt about whether emergency procedures are working to extinguish the fire, evacuate the aircraft immediately.

Redispatch Procedures

In the event a student landing is accomplished at an unscheduled destination for any reason (whether on or off airport), the student is to contact GT Aviation via phone prior to determining any further course of action.

Aircraft Avoidance

No person may operate an aircraft so close to another aircraft as to create a collision hazard either on the ground or in the air. At all times, the Pilot-in-Command will be responsible for, and actively use "See and Avoid" procedures as described in the AIM, Chapter 7, Section 5 and comply with the right of way rules specified in 14 CFR Section 91.113.

Minimum Altitudes

Minimum altitude for solo maneuver practice with the exception of landing practice is 700' AGL or higher if the minimum altitude applicable in 14 CFR, Section 91.119 is higher than 700' AGL. All simulated emergency landings will be terminated at 500' AGL

minimum. Minimum altitudes for IFR operations will be in accordance with 14 CFR, Sections 91.175 and 91.177

Tie down and Parking Procedures

Upon completing a flight, the aircraft must be refueled to the level indicated in the “Fuel Management” section of this manual. After the aircraft has been refueled, the pilot or student must park, tie down and secure the aircraft, unless the next person scheduled for the aircraft is physically present and agrees to take responsibility for parking and securing the aircraft. If the aircraft is going to be left on the ramp for the next pilot, it must still be locked, chocked and the secondary lock installed.

Pre-solo student pilots will not taxi or park the aircraft without an instructor on board the aircraft under any circumstances. Student pilots will not park the aircraft at night without an instructor aboard.

1. Aircraft at Potomac Airport are not to be towed or pushed, except to relocate from the fuel pump to another area of the paved ramp in between flights. All other ground movements, including from the fuel pumps to tie-downs are to be accomplished by taxiing under power.
2. All operators will use caution when taxiing on the grass, do not operate faster than a moderate walking speed, avoid stopping and sharp turns and use full back elevator pressure. Never taxi with the flaps down, alternate air open or carb heat on.
3. Once in the parking spot, shut the aircraft down according to the procedures in the checklist and remove the key. Record the current time on the aircraft time sheet and note any squawks observed during the flight.
4. Remove any trash from the aircraft and ensure the windscreen is clean. Remember you are held responsible for the condition of the aircraft after you use it. Do not leave any personal items, headsets, charts, etc in the aircraft.
5. The aircraft must be tied down securely, using all available tie down rings. Do not leave the parking brake on.
6. Secure the prop or throttle lock and install any gust locks, pitot covers, cowl plugs and install the aircraft cover.
7. If it is cold or its going to be cold, plug in the engine heater (if available). When in doubt, plug it in.
8. Lock all doors and ensure all windows and vents are closed.
9. All pilots are expected to perform a post flight inspection of the aircraft after parking. If any flight damage is found by the next pilot during their preflight, it is assumed to be the responsibility of the previous pilot.
10. Return the keys. Ensure any new squawks encountered during flight are entered into the schedule system.
11. Students should ensure their logbook and training folder are completed by their instructor prior to leaving the airport.

Potomac Airport Traffic Procedures

Refer to <http://www.potomac-airfield.com/> for the latest information. Any information relative to traffic procedures posted on the website supersede the information below.

The below graphic indicates the acceptable arrival and departure routes.



1. Note that arrivals enter the area at 1000' msl whereas departures exit at 1400' msl.
2. The calm wind runway is runway 6. Use the Superawos (3 clicks) to check the weather.
3. Use right traffic for runway 24. Left traffic for runway 6. Generally, a straight in approach to runway 6 is used, if a pattern is desired, enter an upwind directly over the runway. Plan to go around if you do not touchdown on centerline, at your desired landing speed within the first 500-700 feet of the runway. Do not plan landings that require significant braking to stop.
4. At night it is highly recommended that you make a low approach before attempting to land, to clear deer and other animals from the runway.
5. Do not change to advisory (122.8 mhz) until you are cleared to do so by Potomac Approach. Keep using your assigned transponder code all the way until after landing and clear of the runway.
6. Remember GT Aviation is not the only user of the airport. Announce your position and keep a sharp lookout for traffic. Do not assume no one is there just because you didn't hear a radio report. Do not use the CTAF for chit-chat.

Security Procedures

GT Aviation is located inside some of the most restrictive airspace where a civilian can still fly at all. For the continued operation of the program, it is imperative that all pilots, students and employees comply with all Transportation Security Administration, Homeland Security Administration, Air Traffic Control, Potomac Airport and GT Aviation security procedures. The information contained below is public information. All people associated with GT Aviation will be briefed on confidential security procedures after they have completed the vetting process.

TSA employees have been known to come to the airport and talk with people at the airport, without identifying themselves, in attempts to get the person to reveal confidential information. **Do not discuss confidential security procedures with anyone but GT Aviation instructors and never tell anyone other than Leesburg FSS your PIN.**

The GT Aviation Security Plan includes:

1. Mandatory Use of aircraft door locks and secondary locking devices anytime the aircraft is unattended.
2. Key control for all aircraft.
 - a. Keys are obtained only after an appearance in person before a GT Aviation employee or by “trusted renters”
3. Compliance with TSA required security training program for all employees during their initial training and then recurrent yearly training.
4. Clear identification of GT Aviation employees.
5. All pilots, students and instructors must complete the FAA’s online training program “Navigating the DC Special Flight Rules Area (SFRA)” and provide evidence of completion to GT Aviation, and carry evidence of completion with them when operating GT Aviation aircraft.
6. All students, pilots and employees must carry a government issued photo ID at all times while operating GT Aviation aircraft.
7. Security surveillance of all GT Aviation offices, aircraft and parking areas

Practice Area

The below graphic indicates the acceptable practice area. It is recommended that Indian Head Airport (2W5) be used for practice take off and landings, due to its location outside the FRZ and its close proximity to Potomac Airport.

Other airports acceptable for take off and landing practice are listed below. Use of these airports will require filing appropriate flight plans to allow re-entry into the SFRA/FRZ. Other airports are generally too far away to be practical to use in a normal 2 hour training flight.

1. Stafford (RMN)
2. St. Mary's County Regional (2W6)

While in the practice area, remember to monitor Air Traffic Control and 121.5 Mhz if possible. Clearance into Class B must be provided by ATC and cannot generally be provided to student pilots. **It is recommended all flights stay within the SFRA while practicing.** If a flight leaves the SFRA, it must receive new clearance to re-enter.



For filing flight plans, the center of the practice area (LaPlata) is the DCA 180° radial at 20nm.

Winter Operations

To operate safely in a cold or winter environment, it is essential to be prepared. As discussed in the general operating limitations of this manual, engine preheating is **mandatory** when there is reason to believe the engine temperature will be 40° F or less. This is because aviation oil is very viscous, especially when it is cold. Preheating is necessary, sometimes to get the engine started but at a minimum, to reduce wear on the engine.

Engine starting, particularly if preheat is not used, may be difficult in cold weather. There is more friction among engine parts, starters and batteries are less efficient and fuel vaporizes poorly. Due to the reduction of the ability of fuel to vaporize, additional primer fuel will be necessary. All pilots and students should receive additional training from a GT Aviation instructor on cold weather engine operations if they have any difficulty starting or operating the engine. It is vitally important for engine longevity and reliability that all people operate the engine correctly.

An important part of operating in a winter environment is removing snow, ice, or more often, frost from the aircraft. Most aircraft cannot tolerate surface contamination. The problem is not from the extra weight, it is the disturbance of airflow. Therefore, all snow, ice, frost or other contamination must be removed before flight. For light frost, simply parking the aircraft in the sun on the ramp may melt it, otherwise, use of deicing fluid may be required. Only a 50% alcohol 50% water mix is approved for use on GT Aviation Aircraft. Use of a commercial aircraft deicing fluid is permissible if approved for use by the aircraft manufacture but only at airports with the appropriate facilities for professional deicing. GT Aviation does not provide deicing fluid.

During all operations, it is good pilot technique to avoid rapid power changes. It is particularly important during cold weather. Also, to avoid shock cooling, it is necessary to reduce power slowly, particularly following cruise flight. When taxiing, be alert to the height of snow banks. It may be possible to hit them with the wing tips. Also, avoid setting the parking brake after taxiing through slush or water that may freeze. Do not retract landing gear right away, allow water or slush to shed. Otherwise, you may freeze the gear in the up position.

Remember, pilots may not operate in IMC in an area where it is reasonable to believe icing conditions exist or may exist.

Consider the possibility, although remote, of an off airport landing. All occupants of GT Aviation aircraft are required to possess suitable clothing for the weather, in case there is a need for an emergency or precautionary landing off airport. This should include a heavy coat, long pants, gloves, a hat and appropriate footwear.

Procedures for Approving Solo Cross Country Flights

The student should come prepared with all necessary weather information, completed flight log, airport information and aircraft performance calculations. The endorsement of cross country flight planning for a GT Aviation student must come from a GT Aviation instructor in person, but need not be the student's primary instructor. Students should be aware an instructor scheduled with another student may not be able to check their planning. It is the student's responsibility to ensure someone will be available to check their planning prior to the proposed flight. Below are the procedures the instructor will use to ensure the student's planning is correct and the procedures he or she intends to use are adequate.

1. The instructor must ensure the student has had their student pilot certificate and logbook properly endorsed for cross country flight.
2. The instructor should ensure the student has enough time to complete the flight and return to Potomac comfortably no later than 2 hours prior to sunset.
3. The instructor should next review the weather and ensure the flight can be completed within GT Aviation and FAA weather minimums.
4. The instructor should review the student's fuel planning, including any necessary fuel stops and ensure an adequate reserve, including time for a lost/recovery procedure will be maintained at all times.
5. The instructor will review the student's flight log. The instructor should check:
 - a. The student has enough time to return comfortably before the aircraft is scheduled for the next person.
 - b. The route stays clear of any special use airspace, or the student has a plan for dealing with any airspace encounters (ie. Remaining below a restricted area, cross through Class C, etc)
 - c. The student has appropriately marked the route on their charts and all charts are current.
 - d. The proposed route meets FAA experience requirements for the rating the student is seeking.
 - e. The airports the student is intending to use comply with GT Aviation solo policy and any restrictions placed upon the student by their primary instructor.
 - f. The instructor should quiz the student on the route, have the student show how he or she calculated a leg. The student should easily be able to confirm their measurements and demonstrate how they developed any information on their flight log.
 - g. The instructor should quiz the student on use of the performance charts used to develop the flight log.
 - h. The instructor should discuss alternatives the student may use if the proposed flight cannot be completed.
 - i. The instructor may quiz the student on anything else the instructor desires, or check or discuss any aspect of the proposed flight the instructor desires.

When the instructor is satisfied, he or she shall endorse the student's logbook for the proposed flight.