FLIGHT OPERATIONS MANUAL



Revised March 2024 (Rev 24-1)

Table of Contents

Revision History				
1. INTRODUCTION4				
1.1.	About This Manual	4		
1.2.	Terms/Abbreviations	4		
1.3.	Exceptions to this Manual	4		
2. RUL	2. RULES OF CONDUCT FOR STUDENTS AND FLIGHT INSTRUCTORS			
2.1.	Personal Conduct	5		
2.2.	Tobacco Products	5		
2.3.	Intoxicants	5		
2.4.	Drugs or Narcotics	5		
2.5.	Blood/Plasma Donations or Transfusions	5		
2.6.	Clothing for Crewmembers	5		
3. GRC	OUND OPERATIONS	6		
3.1.	Line Operations	6		
3.2.	Frost and Snow on Aircraft	6		
3.3.	Fuel Sampling	6		
3.4.	Engine Preheat	6		
3.5.	Hand-Starting Aircraft	6		
3.6.	Preflight and Postflight Action	6		
3.7.	Entering and Exiting Aircraft	7		
3.8.	Engine Start	7		
3.9.	Intersection Takeoffs	7		
3.10.	Taxi Procedures	7		
3.11.	Aircraft Parking Policy	7		
3.12.	Aircraft Status Reporting	7		
3.13.	Securing Aircraft After Flight	7		
3.14.	Aircraft Scheduling and Returning	8		
4. CON	MMUNICATIONS	9		
4.1.	Frequency Listing	9		
4.2.	Aircraft Radio Identification	9		
4.3.	Student Pilot Radio Identification	9		
4.4.	Monitoring of Radio Communications	9		

LE-D02 – Lake Elmo Aero, LLC – March 2024 (Rev 24-1)

5. FLIC	5. FLIGHT OPERATIONS/GENERAL			
5.1.	Airport Operations			
5.2.	Student Training Operational Requirements	10		
5.3.	Non-Student Operational Requirements	10		
5.4.	Icing Conditions	10		
5.5.	Soft/Unpaved Field Operations	11		
5.6.	Unplanned Landings	11		
5.7.	Transfer of Aircraft Control	11		
5.8.	Multiengine Operations			
5.9.	Practical Test (Checkride) Scheduling	11		
6. LOCAL	AREA OPERATIONS	13		
6.1.	Local Weather Minimums – Dual	13		
6.2.	Local Weather Minimums – Solo	13		
6.3.	Fuel Reserves	13		
6.4.	VFR Departure from 21D	13		
6.5.	Practice Area Operations	13		
6.6.	Practice Area Dimensions	14		
6.7.	Practice Area Map	14		
6.8.	Temperature Limitations	15		
6.9.	Collision Avoidance	15		
6.10.	City Overflight	15		
6.11.	Night Traffic Pattern Operations	15		
7. CRC	OSS COUNTRY OPERATIONS	16		
7.1.	Cross-Country Weather Minimums – Dual	16		
7.2.	Cross-Country Weather Minimums – Solo	16		
7.3.	Cross-Country Planning Procedure	16		
7.4.	Cross-Country Procedures	16		
7.5.	Overnight Cross-Countries	16		
7.6.	Route Deviations or Delays	16		
7.7.	Cross-Country Limitations	16		
7.8.	Winter Operations	17		
7.9.	High Density Altitude Operations	17		
8. EM	ERGENCY OPERATIONS	18		
8.1.	Deteriorating Weather	18		

8.2.	Forced Landings		
8.3.	Engine Fire on Start		
8.4.	Loss of Communications		
8.5.	Lost Procedures		
8.6.	Unsafe Landing Gear Indications		
8.7.	Diversion to Auxiliary Fields		
8.8.	Emergency Assumption of Control		
8.9.	Emergency Operations in IMC		
8.10.	Fires on the Ramp 19		
9. ACC	CIDENT/INCIDENT/OCCURRENCE PROCEDURES		
9.1.	Accident/Incident/Occurrence Notification		
9.2.	Personal Injury or Death		
9.3.	Personnel Involved in an Accident/Incident/Occurrence		
APPENDIX A: AIRCRAFT PARKING			
Parking and Ramp Limitations			
APPENDIX B: CROSS-COUNTRY ROUTES			
APPENDIX C: MINIMUM CONDITIONS QUICK REFERENCE			

Revision History

- 10/12/2021 FOM established, SP&P discontinued
- 1/24/2022 Rev 22-1
- 8/22/2023 Rev 23-1 Added Written Test guidance to 5.9 Practical Test Scheduling
- 3/23/2024 Rev 24-1 Modified 6.8 Temperature Limitations

1. INTRODUCTION

Term

1.1. About This Manual

• The purpose of this manual is to clarify and familiarize policies and procedures in effect for **Flight Training Operations at Lake Elmo Aero, LLC** (referred to herein as "Lake Elmo Aero" or "LEA").

1.2. Terms/Abbreviations

Definition

- 21D Lake Elmo Airport
- ATC Air Traffic Control
- Crewmember Any individual occupying a seat in an aircraft
- FAA Federal Aviation Administration
- FAR Federal Aviation Regulations
- IAW In Accordance With
- IMC Instrument Meteorological Conditions
- NTSB National Transportation Safety Board
- PF Pilot Flying
- PIC Pilot in Command
- PNF Pilot Not Flying
- SIC Second in Command
- VMC Visual Meteorological Conditions

1.3. Exceptions to this Manual

• Any operations contrary to the rules in this manual must be individually approved by FBO management (the Owner(s), the Director(s) of Training, and/or their designee) by filling out the Lake Elmo Aero Operational Exemption Form.

2. RULES OF CONDUCT FOR STUDENTS AND FLIGHT INSTRUCTORS

2.1. Personal Conduct

- While either giving or receiving Flight Training, or any time you are on Lake Elmo Aero premises, you are expected to treat every individual with respect, courtesy, and professionalism, regardless of position.
- All LEA employees should act and behave in accordance with the Lake Elmo Aero Employee Handbook.

2.2. Tobacco Products

• Use of tobacco products is prohibited in all Lake Elmo Aero buildings, vehicles, and aircraft, with no exceptions. This includes e-cigarettes and smokeless products.

2.3. Intoxicants

• Consumption of alcohol products or other intoxicants within 12 hours of flight or duty as a crewmember is prohibited. No personnel may be intoxicated or suffer the effects of intoxication when reporting for flight training. No PIC may allow a person who is obviously under the influence of alcohol or other intoxicants to be carried aboard any Lake Elmo Aircraft for any reason.

2.4. Drugs or Narcotics

- Use or possession of drugs or narcotics is prohibited except upon prescription and under the direct supervision of a medical physician. The use or possession of any other drugs which may adversely affect the physical or mental faculties in any manner is prohibited except under prescription and the direction of a medical professional.
- The term "Narcotics" includes cannabis sativa, marijuana, and every compound and substance thereof.
- The term "Drugs" includes, but is not limited to the following: Antihistamines, barbital compounds, sulfa compounds, antibiotics, anticonvulsants, antihypertensives, reducing drugs, rauwolfia, cortisone or ache compounds, mood altering drugs, prescription tranquilizers, hallucinogenic compounds, and amphetamines.
- Upon first usage of a controlled substance under medical direction, the crewmember shall be removed from flight operations, and shall refrain from performing any flight operations until such time that they are physically and mentally fit to resume flying duties.

2.5. Blood/Plasma Donations or Transfusions

• Due to temporary lowering of the oxygen carrying capability of blood following a blood/plasma donation or transfusion, in no case will any crewmember be allowed to fly within 72 hours after a blood/plasma donation or transfusion.

2.6. Clothing for Crewmembers

• When the outside air temperature is below 32 degrees Fahrenheit, all crewmembers on training flights will have the following in their possession: A winter jacket, a winter hat, and a pair of gloves.

3. GROUND OPERATIONS

3.1. Line Operations

- Only persons who have been trained accordingly may open any aircraft storage hangar door.
- Only persons who have been trained accordingly may move an aircraft into or out of any aircraft storage hangar.
- No crewmember will occupy any aircraft that is being towed or fueled.
- All aircraft electrical switches (with the exception of the Navigation Lights switch as specified in aircraft checklists) will be turned off, and proper grounding wires attached to a non-painted aircraft surface, prior to fueling or defueling.
- The aircraft dispatch book, as well as the squawk log in FlightSchedulePro, must be checked before every flight to ensure compliance with all appropriate inspections. Failure to do so may compromise safety of flight and/or violate FAR 91.103 or 91.205.

3.2. Frost and Snow on Aircraft

- No pilot may depart in any aircraft that has frost, ice, or snow adhering to any propeller, wing, windshield, stabilizing or control surface, powerplant installation, or to any airspeed, altimeter, rate-of-climb, or flight attitude instrument system.
- No pilot may take off in an aircraft and fly from VMC to IMC any time conditions are such that frost, ice, or snow may be reasonably expected to adhere to the aircraft unless the aircraft is certified for flight into known icing conditions with appropriate equipment installed and operating normally.
- "May reasonably be expected" means information the pilot actually knows regarding icing conditions such as outside temperature, visible moisture, AWC icing plots, and reports from other pilots, in accordance with FAR 91.103.
- No abrasive tools such as brooms, credit cards, or scrapers will be used at any time to remove ice, snow or frost from any aircraft window surface.

3.3. Fuel Sampling

- When sampling fuel tanks and strainers, use the following procedures:
- If the aircraft fuel sample proves to be satisfactory (no evidence of water or contaminants, and color is correct), return the sample to the fuel tank.
- Should the sample show evidence of contamination, discard the sample by pouring it into a collector tank provided by Lake Elmo Aero. Continue this procedure until an acceptable sample is obtained.
- After refueling, wait five minutes before sampling to allow any debris to sink to the bottom of the tank.

3.4. Engine Preheat

• When temperatures are below 20 degrees Fahrenheit, preheating should be used whenever possible to facilitate prompt engine starts and reduce engine wear.

3.5. Hand-Starting Aircraft

• Due to the inherent adverse effects on safety, no student or instructor will hand-prop aircraft at any time without direct approval from management.

3.6. Preflight and Postflight Action

• Preflight and postflight briefings will be conducted for every training flight.

- Airplane weight and balance will be calculated for every fight.
- Aircraft takeoff and landing performance will be calculated for every flight.

3.7. Entering and Exiting Aircraft

• No person will enter or exit any aircraft with an engine running, except in the case of an initial student solo flight.

3.8. Engine Start

- When starting an engine, do not allow the tail of the airplane to be pointed toward any open hangar, other aircraft, or person on the tarmac. Propeller blast should always be directed toward an unobstructed and/or unoccupied direction.
- Prior to start, crewmembers shall visually clear left and right, followed by announcing "prop clear" out the aircraft window.

3.9. Intersection Takeoffs

• Intersection takeoffs are not authorized unless directed by an ATC facility, or unless the pilot determines that the remaining takeoff distance is more than 3000 feet.

3.10. Taxi Procedures

- Pilots will taxi at a safe and reasonable speed that will not cause undue hazard to persons, property or aircraft. Aileron correction will be maintained when taxiing during winds greater than 6 knots.
- Pilots will carry and use an airport diagram at 21D and all other airports where operations will be performed, for the purpose of avoiding runway incursions and aid in situation awareness.
- The maximum taxi speed of any Lake Elmo Aero aircraft is 20 knots unless on an active runway surface.

3.11. Aircraft Parking Policy

- Aircraft will be parked in such a way as not to cause a collision hazard with other aircraft. All aircraft will be chocked at the nosewheel when practical. Chocks will be stowed in the aircraft when flying to any airport other than 21D with intention to park. Aircraft in hangars are not required to be chocked.
- When returning for parking at 21D, aircraft prioritize Spots 1 and 2 on the ramp, then 3 and 4. See Appendix A for parking spot locations.
- Spots 3 and 4, as well as the southwest border of the ramp, should be reserved for transient GA aircraft whenever possible.

3.12. Aircraft Status Reporting

- Any discrepancies noted by crewmembers shall be immediately related to maintenance via the Squawk feature in FlightSchedulePro, and maintenance staff should be verbally notified of the problem if possible.
- All discrepancies pertaining to the safety of flight will be cleared by a mechanic in the discrepancy log before the aircraft is returned to service.

3.13. Securing Aircraft After Flight

- The PIC is responsible to ensure the aircraft is properly parked and secured.
- Aircraft controls will be secured whenever parked, regardless of wind conditions. If a control lock is not available, interlock the seat belt with the control yoke.

- Winds in excess of 29 knots or forecast thunderstorms will require all aircraft to be tied down or secured in a hangar.
- Postflight walk-arounds shall be completed after every flight by the PIC. Any discrepancies should be reported to Lake Elmo Aero at the front desk, and squawked in FlightSchedulePro if applicable.

3.14. Aircraft Scheduling and Returning

- All aircraft should return to the FBO at least 15 minutes prior to the ending time of the reservation in FlightSchedulePro.
- Instructors should arrive at least 15 minutes prior to any training reservation.

4. COMMUNICATIONS

4.1. Frequency Listing

- Lake Elmo CTAF: 122.8
- Lake Elmo AWOS: 120.075
- Minneapolis Approach/Departure (Airborne): 121.2
- Minneapolis Approach RCO (On ground at 21D): 118.625
- Emergency Frequency: 121.5 (to be used only when all other options have been exhausted)

4.2. Aircraft Radio Identification

- All aircraft will identify themselves using their painted tail number preceded by aircraft type. Lake Elmo Aero does not have fleet or nose numbers for aircraft.
- Example: "Lake Elmo Traffic, Arrow 5083S is 10 miles to the southeast at 2500 feet, inbound for downwind entry, runway 14, Lake Elmo."

4.3. Student Pilot Radio Identification

- ATC facilities may provide additional assistance and consideration to student pilots as necessary. To take advantage of this, Lake Elmo Aero students should include the phrase "Student Pilot" in their identification after their tail number during their initial transmission to any air traffic control facility.
- Example: "St. Paul Tower, Cessna 61879 Student Pilot is 10 miles to the east at 2500 feet, inbound for full stop with information Bravo.

4.4. Monitoring of Radio Communications

- In the interest of situational awareness, it is strongly encouraged that pilots monitor the CTAF or Tower frequency of the nearest airport to their current location.
- These frequencies should be briefed prior to departure.

5. FLIGHT OPERATIONS/GENERAL

5.1. Airport Operations

- Training flights must utilize airports that have facilities available to meet all demands of the individual flight (fuel, maintenance, etc).
- During training for student pilots in pursuit of a Private Pilot certificate with a single-engine class rating, all landings will be to a full stop on runways less than 3000 feet in length.
- During training and/or checkout operations in complex or multiengine aircraft, all landings will be to a full stop on runways less than 3000 feet in length.
- On all airport surfaces and taxiways, taxiing will be performed at a cautious speed such that the aircraft can be stopped promptly and safely if the throttle is closed.
- All takeoffs must meet appropriate takeoff distance performance requirements, including accelerate stop/go distances. In absence of published data, runway length must not be less than twice that required for takeoff ground roll.
- Touchdowns will be planned no less than 100 feet from the threshold of the runway, and within the first one-third or 2000 feet of the available landing distance of the runway, whichever is shorter.
- If a stabilized approach is not assured by 500 feet above the ground, the PIC is required to execute a go-around.

5.2. Student Training Operational Requirements

- Student pilots shall not perform touch-and-go landings on solo flights.
- Student pilot solo flights will be conducted in VMC only, in accordance with Section 6.2 of this manual.
- In order to fly solo, a Student Pilot must log a dual flight with a Lake Elmo Aero Flight Instructor in the last 14 days in the same make and model to be flown.
- Student pilots will carry a logbook, along with medical and student pilot certificates and a government-issued photo ID on all solo flights. Compliance with this policy is the responsibility of the instructor who issued the student's most recent solo endorsement in accordance with FAR 61.87(n), 61.87(p), or 61.31(d)(2).

5.3. Non-Student Operational Requirements

- Any individual requesting a checkout in any Lake Elmo Aero aircraft will be required to do the following:
- Produce an FAA pilot certificate with category and class ratings matching the checkout sought.
- Produce a current and valid FAA medical certificate.
- Produce a logbook for review if required.
- Complete all flight and ground tasks as required by the Lake Elmo Aero checkout course, which can be found in the relevant Flight Schedule Pro syllabus, to the minimum ACS standards of their grade of certificate.

5.4. Icing Conditions

• When an aircraft's flight manual prohibits flight into icing conditions, the PIC will not enter IMC or areas of precipitation when icing conditions are being reported or forecast.

5.5. Soft/Unpaved Field Operations

- The following soft/unpaved runways are approved for use by Lake Elmo Aero Aircraft:
 - New Richmond, WI (KRNH) runway 04-22.
 - Osceola, WI (KOEO) runway 04-22.
 - Stanton, MN (KSYN) runways 18-36 and 09-27.
 - Crystal, MN (KMIC) runway 6R-24L.
 - Cumberland, WI (KUBE) runway 18-36.
- Soft/unpaved runways will only be used when a pilot can provide or obtain a firsthand report of the runway conditions, unless no precipitation has occurred in the last three days.
- Soft/unpaved field landings will not be performed in any aircraft with wheel fairings or retractable landing gear.

5.6. Unplanned Landings

- A student pilot will be authorized to land only at the airports approved for that flight by their Flight Instructor. In the event a student must land at an airport other than the one that is approved, they must contact Lake Elmo Aero and the instructor that endorsed their logbook. Call 651-777-1399 to request instructions.
- In the event that the aircraft must be abandoned, the aircraft will be secured in any way feasible (hangar, tie-down) to protect it from damage from adverse weather. Students MUST contact their instructor for an additional endorsement prior to departure.

5.7. Transfer of Aircraft Control

• The PIC must continuously maintain a defensive position and be prepared to take control of the aircraft at any time. When transferring control of the aircraft, the pilot transferring will state "you have control". This will be acknowledged by the pilot taking control with "I have control". This will be confirmed by the pilot originally transferring control with "you have control".

5.8. Multiengine Operations

- On any flight which involves simulated engine shutdowns below 1000' AGL, no rear seat passengers are permitted.
- In general, rear seat passengers are discouraged during single-engine operation and training due to deteriorated climb performance, unless the passenger is also pursuing training of a similar nature.
- Intentional full shutdown of an engine for training purposes will not commence below 3000' AGL, and only within gliding distance of an airport with major powerplant maintenance available.
- Simulated engine failures on the ground during takeoff run for training purposes must take place below 50% of published VMCA. These engine failures may not be practiced on runways less than 100 feet wide.

5.9. Practical Test (Checkride) Scheduling

- During the scheduling process, the flight instructor providing the practical test endorsement should serve as the primary point of contact with the Designated Examiner.
- Prior to scheduling any practical test, a student must have completed and passed the associated written exam *and* have conducted their first solo flight (if either requirement applies to the rating sought).
 - If a student requires a 61.49 endorsement for an additional written exam attempt, they must demonstrate at least two consecutive passes of electronically-administered practice exams (e.g.

Gleim/Sporty's), and the most recent pass of such a practice exam must be within 7 days of the next actual written test attempt.

- If an additional 61.49 endorsement is required after the second attempt at a written test, a meeting with the Chief Flight Instructor (or their designee) is required to continue training.
- If a checkride/practical flight test is conducted at an airport other than 21D for a student not authorized to act as PIC in the aircraft being used, a flight instructor must accompany the student to and from the remote airport.

6. LOCAL AREA OPERATIONS

6.1. Local Weather Minimums – Dual

- VFR Day: See FAR Part 91.
- VFR Night: See FAR Part 91.
- IFR Day: Published takeoff and landing minima for any airport(s) and approach(es) to be flown.
- IFR Night: 400 feet above published takeoff and landing minima for any airport(s)/approach(es) to be flown.
- Wind Limits: 33 knots total, 20 knots crosswind component. When taking off or landing on runways where the braking action is reported Poor or the RCAM value is less than 3, the crosswind component will not exceed half of the aircraft's demonstrated crosswind component.
- Flight training is not permitted in the event that a runway is contaminated with ½ inch of standing water or ¾ inch of slush or snow, or if braking action is reported Nil or the RCAM value is less than 2.
- Flight training within 20 nautical miles of thunderstorms is prohibited.

6.2. Local Weather Minimums – Solo

- The following weather requirements apply only to solo pilots working towards a Private Pilot certificate with an Airplane Single-Engine Land or Sea class.
- Traffic Pattern: 2000' ceiling, 7sm visibility.
- Local (<50nm from 21D): 3000' ceiling, 10sm visibility.
- Surface Winds: 15kt total, 7kt crosswind component.
- Pilots must have verbal permission from their primary instructor prior to each solo flight, and are expected to have obtained all required planning and weather information IAW FAR 91.103.

6.3. Fuel Reserves

• All flights will land with a minimum of 45 minutes of reserve fuel remaining.

6.4. VFR Departure from 21D

• All aircraft will follow recommended departure procedures for an uncontrolled airport as outlined in the AIM and the Lake Elmo Aero Aircraft Standardization Manuals.

6.5. Practice Area Operations

- When conducting VFR training operations, and when doing so does not impede the objective of the lesson being flown, all aircraft should adhere to one of the four defined local practice areas.
- Departing Lake Elmo, aircraft should climb to at least 2500 MSL while enroute to a practice area.
- Returning to Lake Elmo from a practice area, aircraft should descend to 2200 MSL as soon as practical.
- Aircraft practicing VFR flight maneuvers shall remain more than 500 feet below any overlying class B airspace unless ATC clearance has been granted.
- Use caution to avoid the Baldwin skydive drop zone near the intersection of I-94 and US-63.
- When practical, solo students should utilize Practice Areas B and C (east of St. Croix River) to avoid complex airspace structure in vicinity of Minneapolis/St. Paul.

6.6. Practice Area Dimensions

- Practice Area A: Southern boundary is I-94. Western boundary is I-35E. Eastern boundary is St. Croix River. Northern boundary is MN-97. Contains 25D, STP.
- Practice Area B: Western boundary is St. Croix River. Northern boundary is St. Croix County Rd H. Eastern boundary is WI-46/US-63. Southern boundary is I-94. Contains RNH.
- Practice Area C: Northern boundary is I-94. Eastern boundary is US-63 north of Ellsworth, WI, then a line extending directly south to the Mississippi River. Southern boundary is the Mississippi River. Western boundary is the St. Croix River. Contains RGK.
- Practice Area D: Eastern boundary is St. Croix River. Southern and Western boundaries are Mississippi River.

Forest Lake (313) East MINNEAPOL CLASS B S Deer Park Croix 1.622 For (413) 100 Cylo 40 Eme raid 00 70 129 100 30 BA EO. 1560 1466 402 413-510 15 345) R) TAC 100 100 RIVER. 60-RL 60 (Pvt) OIX RIV 1310 BITLR BOVE 1240 1280 1100 Martell 140 1416 (212) E (330) 100 1.26 Trimbelle 23 75 906 124 100 40 R RGK) Ett 119.25 AWOS-S Bluff HALL (Pvt) D WING RCC 1246 1 67 - Cal Trie ® Mies 122.1 FARMINGTON A 115 Welch VISCONSIN Maider 7 Ch 104 FGT Rock INNESOT PRINCETON

6.7. Practice Area Map

6.8. Temperature Limitations

- The minimum outside air temperature for dispatch is OF.
- The minimum calculated wind chill for dispatch is -10F.
- When outside air temperature is below 32F, engine covers will be installed by the PIC of the aircraft after engine shutdown.

6.9. Collision Avoidance

- Landing lights will be used at all times within 5nm of an airport.
- Pilots should adhere to the lighting guides in the Standardization Manual for their aircraft.
- Pilots will use extreme caution to see and avoid aircraft both in the air and on the ground. External sources such as ADS-B receivers are not to be relied upon as a sole source of traffic awareness.
- When crossing a runway during taxi, regardless of whether it is active, pilots shall verbalize "clear left" and "clear right" prior to crossing. All external lights will be turned on during runway crossing unless they will interfere with other aircraft.
- Prior to departure, pilots should indicate their intended practice area using the provided status board near the front desk.

6.10. City Overflight

- Aircraft operating in populated areas shall attempt to avoid flight below 1500' AGL when possible.
- Aircraft shall avoid practicing maneuvers such as stalls and steep turns over populated areas.

6.11. Night Traffic Pattern Operations

- Only lighted runways may be used at night.
- Taxi and landing lights will be used during ground operations, unless the PIC determines that their use would cause a hazard to other aircraft. When stopped for more than one minute on the ground with the engine running, landing lights may be turned off.
- Pilots should avoid using white strobe lights during taxi operations at night, unless the aircraft is entering or crossing a runway.

7. CROSS COUNTRY OPERATIONS

7.1. Cross-Country Weather Minimums – Dual

- VFR Day: See FAR Part 91.
- VFR Night: 3000' ceiling, 7sm visibility.
- IFR Day: Published takeoff and landing minima for any airport(s) and approach(es) to be flown.
- IFR Night: 400 feet above published takeoff and landing minima for any airport(s)/approach(es) to be flown.

7.2. Cross-Country Weather Minimums – Solo

- VFR Day: 5000' ceiling, 10sm visibility.
- VFR Night: Not authorized.
- Surface Winds: 15kt total, 7kt crosswind component.

7.3. Cross-Country Planning Procedure

- Cross-country flights will land with a minimum of 45 minutes of fuel reserve.
- Cross-country flights will file and activate a VFR or IFR flight plan for each leg of every cross-country flight. At the discretion of the PIC, a VFR flight plan may be substituted with VFR flight following.
- Airports or runways without snow removal operations are prohibited during winter operations.
- Airports with usable runway length less than 2495 feet (solo) or 2000 feet (dual) are prohibited.
- All flights returning after business hours (1900LT) will advise Lake Elmo Aero prior to departure.

7.4. Cross-Country Procedures

- Students must be endorsed for cross-country flight by their own primary instructor.
- Instructors may only endorse or authorize cross-country flights on the same day that they are to take place, and only after personally reviewing completed flight planning information.

7.5. Overnight Cross-Countries

- Pilots who already hold a Private Pilot certificate may conduct overnight cross-country flights with instructor approval.
- Pilots shall advise Lake Elmo Aero of all overnight cross-country flights prior to departure.
- Minimum services are required for all overnight cross-country flights, and proper steps must be taken to ensure the aircraft will remain secure and undamaged (tiedowns, chocks, locked doors, etc).

7.6. Route Deviations or Delays

- Student cross country flights that deviate from their approved route will advise Lake Elmo Aero of their deviation as soon as practical at 651-777-1399. The student's primary instructor will also be notified.
- Should a flight be delated, the pilot will be responsible for all costs not directly associated with the aircraft (lodging, meals, transportation, etc).

7.7. Cross-Country Limitations

- A navigation log will be completed by the student and reviewed by the instructor prior to the flight. This may be substituted for an electronic navigation log provided the student can understand, interpret, and explain the information shown.
- If an aircraft is left unattended at an airport other than 21D, it must be secured such that no undue damage will occur. This includes hangaring in the event of inclement weather.

- All pilots are advised to carry at least one personal credit card in case of emergency.
- Pilots will be reimbursed for expenses directly related to the operational cost of the airplane. Fuel expenses will be reimbursed up to Lake Elmo Aero's current fuel price. No additional fees will be covered (including ramp or facility fees).

7.8. Winter Operations

- All airports used for winter cross-country flights must have open and plowed runways and taxiways.
- All airport FICON readings must be at least 4 for any solo flight.

7.9. High Density Altitude Operations

• Takeoffs are prohibited when the Density Altitude is such that the runway length is less than 1.25 times the published takeoff distance, or when a minimum climb of 300ft/min cannot be maintained on takeoff.

8. EMERGENCY OPERATIONS

8.1. Deteriorating Weather

- Upon encountering deteriorating weather, remain calm. Maintain aircraft control at all times.
- Maneuver as required to escape the weather. This may require a 180-degree turn.
- Determine the nearest suitable airport where a landing can be made, taking the inclement weather into account.
- Upon landing, contact Lake Elmo Aero at 651-777-1399 for further instructions.

8.2. Forced Landings

- Minimum recovery altitude for simulated emergency landing practice will be 500 feet AGL.
- In the event of an actual forced landing, unless you can spot houses or other occupied buildings, remain in the aircraft. Staying with the aircraft will provide shelter and a larger target for search and rescue operations. If possible, contact Lake Elmo Aero or local authorities immediately.
- If possible, ensure that the ELT's control switch is turned on.
- Make use of any available equipment as possible to maximize chance of survival. Remain calm. Search and rescue will find you.

8.3. Engine Fire on Start

- Most fires associated with the engine result from over-priming during start and occur on the ramp area. Following proper priming procedures will lessen the chance of fire.
- Follow appropriate POH/checklist/standardization manual guidelines for extinguishing an engine fire.
- Do not attempt to restart the engine once the fire has been extinguished.

8.4. Loss of Communications

- In the event of a communications loss, land at the nearest suitable airport (preferably an uncontrolled airport, if possible) and contact Lake Elmo Aero immediately at 651-777-1399.
- If a flight plan is active, remember to call Flight Service on the phone and cancel it after landing.

8.5. Lost Procedures

- Always carry current sectional charts to help avoid confusion while navigating.
- In the event of disorientation, don't panic. Try to orient yourself with pilotage and navigational aids, such as VORs.
- If unable to determine position, contact the nearest controlling agency (or 121.5 if that frequency cannot be determined) and advise them of your situation.
- If fuel is critically low, request vectors to the nearest suitable airport immediately. If absolutely necessary, make a precautionary landing in a suitable area if no airport is available *before exhausting your fuel supply*. Do not let the lack of fuel choose the field for you.

8.6. Unsafe Landing Gear Indications

- Most unsafe landing gear indications are traced to minor defects in the indicating system. Follow prescribed procedures in the POH/checklist. Any unsafe indication should be treated as an emergency.
- If possible, overfly a runway while a ground observer visually checks the condition of the landing gear.
- Advise maintenance and line personnel that towing equipment may be required after landing.
- After the aircraft has landed, minimize use of brakes, shut down engine(s), and roll to a stop on the runway. Do not attempt to taxi clear of the runway unless an additional emergency exists.

• After the aircraft has been evacuated, it should be towed to the nearest repair facility. Lock pins should be installed if the landing gear is so equipped.

8.7. Diversion to Auxiliary Fields

- In the event that an aircraft is forced to divert to a field other than Lake Elmo (21D) and must wait to return, a diversion should be made to the first available airport in the following order:
 - South St. Paul, MN (KSGS)
 - New Richmond, WI (KRNH)
 - Red Wing, MN (KRGK)
 - Anoka County, MN (KANE)
 - Any other airport deemed safe by the PIC.
- Upon securing the aircraft after diverting, the PIC should call Lake Elmo Aero at 651-777-1399 for further information or instructions.

8.8. Emergency Assumption of Control

- Assumption of control occurs when the PNF spots opposing traffic or flight hazards, takes the controls, maneuvers the aircraft until safely clear of the hazard, and returns the controls to the PF. This action is temporary, commendable, and part of the responsibility of a PNF or a CFI.
- The PNF or CFI must be ready to assume command and control whenever necessary to preserve life and/or property. Each pilot should be aware of each other's physical and mental state, and ready to confront each other should an aberration be observed.

8.9. Emergency Operations in IMC

- Due to the disorienting conditions that can be associated with IMC, the following maneuvers (or simulated training scenarios thereof) are prohibited while operating in IMC:
 - o Engine Failures
 - Navigation Failures
 - Communication Failures
 - Instrument Failures
 - Unusual Attitudes

8.10. Fires on the Ramp

- Fires on the ramp are most often caused by fuel and can be difficult to extinguish. If a fire occurs, immediately evacuate the ramp area and notify approved line service personnel.
- A fire extinguisher is stored in the ramp entry doorway for use if necessary.
- If the fire is unable to be contained, call 911.
- If the fire is near the 100LL fuel pump, continue to evacuate the entire Lake Elmo Aero premises and wait for emergency services.

9. ACCIDENT/INCIDENT/OCCURRENCE PROCEDURES

9.1. Accident/Incident/Occurrence Notification

- In the event of an accident/incident/occurrence, contact Lake Elmo Aero immediately at 651-777-1399.
- If you are involved in an accident/incident/occurrence, do not discuss the matter with anyone else.
- Do not make any statements or comments to members of the press or media.
- In the event of aircraft damage/mechanical difficulty, contact Lake Elmo Aero for permission to have the aircraft repaired if located at an airport other than 21D.

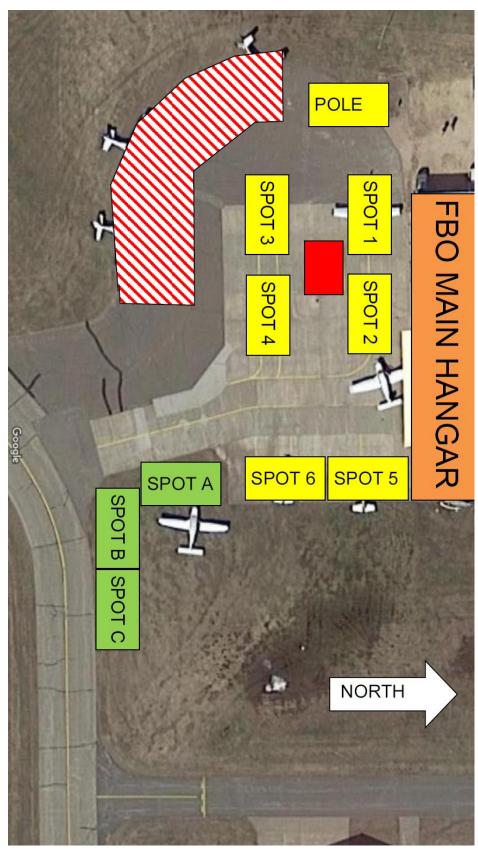
9.2. Personal Injury or Death

- If a personal injury or death occurs, the first concern is the health and well-being of the involved parties. Contact emergency services via 911 as soon as possible, and maintain or move to a safe environment.
- Refer to the Lake Elmo Aero Emergency Response Plan (LE-D04) as required for any external communications.

9.3. Personnel Involved in an Accident/Incident/Occurrence

- Contact Lake Elmo Aero immediately at 651-777-1399.
- Do not make a statement to the press.
- If pressed for a statement, request legal representation before speaking to any law enforcement agency, the FAA, or the NTSB.
- Never relinquish your certificate to anyone. A formal procedure is required before your certificate can be taken.
- You are obligated to assist the NTSB in its investigation of the accident, but not at the expense of your own personal rights. Be alert to the fact that you may be in shock and not know it. Ask an objective individual to ensure your physical and mental state before making any statements or taking any action. In the event that you agree to a formal interview with the FAA, you should secure a written statement from the FAA representative that nothing you say will be used against you in a certificate action or civil penalty proceeding.
- Fill out a NASA ASRS form within 10 days of the accident/incident/occurrence. Keep a copy for your records. Follow legal counsel advice.
- Preserve all flight documents, evidence, and records relating to the situation. Record the names and addresses of all witnesses, hostile or otherwise. Make copies for personal use and do not relinquish them.
- Refer to the Lake Elmo Aero Emergency Response Plan (LE-D04) for guidance on any accident, incident or emergency.

APPENDIX A: AIRCRAFT PARKING



21

Parking and Ramp Limitations

- When utilizing spots 1,2, 3, or 4, airplanes should park into the wind first when possible.
- Use of Spots 3 and 4 should be avoided by training aircraft (unless prohibited from Spots 1 and 2 by this Appendix) to facilitate transient GA fueling.
- The red shaded area on the southwest side of the ramp should be avoided to facilitate transient GA parking.
- Pole position should be used by premium aircraft (i.e. Cirrus) when possible for display purposes.
- No multiengine airplane, or any airplane with a wingspan over 36 feet, may park in Spots 1 and 2.
- Aircraft equipped with wheel fairings may not use Spots A, B, or C (grass parking).

APPENDIX B: CROSS-COUNTRY ROUTES

The following airports are recommended for cross-country flight training. Calculated distances/times are one way and assume a ground speed of 105 knots with a 9-minute factor for takeoff and landing.

Airport	Distance (nm)	ETE
Duluth, MN (KDLH)	114	1.2h
Eau Claire, WI (KEAU)	59	0.7h
Lacrosse, WI (KLSE)	96	1.0h
Litchfield, MN (KLJF)	71	0.9h
Mora, MN (KJMR)	57	0.7h
Owatonna, MN (KOWA)	55	0.7h
Rice Lake, WI (KRPD)	53	0.7h
Rochester, MN (KRST)	67	0.8h
Siren, WI (KRZN)	54	0.7h
St. Cloud, MN (KSTC)	61	0.8h
Winona, MN (KONA)	74	0.9h

APPENDIX C: MINIMUM CONDITIONS QUICK REFERENCE

DUAL LOCAL FLIGHTS

	VFR	IFR			
DAY	Basic VFR	Basic IFR			
	Up to 33kt surface wind, up to 20kt crosswind component				
NIGHT	Basic VFR	Ceilings 400' above any published approach minima			
SOLO LOCAL FLIGHTS					
	VFR				
DAY – Pattern Only	2000' ceilings, 7sm visibility				
Up to 15kt surface wind, up to 7kt crosswind component		7kt crosswind component			
DAY – Local Area 3000' ceilings, 10sm visibility					
	Up to 15kt surface wind, up to 7kt crosswind component				
NIGHT	Not Authorized				
DUAL CROSS-COUNTR	RY FLIGHTS				
	VFR	IFR			
DAY	Basic VFR	Basic IFR			
NIGHT	3000' ceilings, 7sm visibility	Ceilings 400' above any published approach minima			
SOLO CROSS-COUNTRY FLIGHTS (PIC NOT RATED IN CAT/CLASS)					
	VFR				
DAY	5000' ceilings, 10sm visibility				
	Up to 15kt surface wind, up to	o 7kt crosswind component			
NIGHT	Not Authorized				

"Basic VFR" means the weather minima described in FAR 91.155.

"Basic IFR" means all weather minima for the approaches and/or procedures to be flown are met.