



Standard Operating Procedures Manual (SOPM)

Chester County Aviation

**Located At:
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RECORD OF REVISIONS

No.	Date of Revision	Affected Pages
01	February 14, 2022	Original Release; 1-41
02	March 21, 2022	As indicated by change bars; 12,13,16,17,18,20,25,26,27,42
03	January 12, 2023	As indicated by change bars; 7,8,11,12,13,15,16,18,20,21,23,25,26,27,28,30,34,41,45,47
04	June 01, 2023	As indicated by change bars; 8,9,10,11,13,14,15,16,17,19,26,27,29,30,48
05	February 10 th , 2024	Index, 4.3, 4.4-4.7, 4.8-4.11, Appendix D & H, Last Page, Footer
06	June 10 th , 2024	1.2, 1.4,1.9, 1.10, 2.2, 5.4, 5.5, 5.6, Appendix D
07	July 31 st , 2024	4.3.4, 5.3, 5.6.1.2, 5.6.2, 5.8.3, 8.6, Appendix H
08	October 30 th , 2024	Appendix D, Appendix G
09		

REVISION OVERVIEW

This is an overview of the changes incorporated with the most recent version of this document. The revised items below are marked in the margins with change bars. Read each change carefully to verify you fully understand the changes.

Revision 08, active as of October 30th, 2024

Appendix D, Cold Weather Operations

Appendix G, Renters Agreement

5.40.1.2 Annual make and model checkout

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SECTION 1: GENERAL

1.1. Compliance. This manual contains the Standard Operating Procedures Manual (SOPM) of Chester County Aviation (CCA). This SOPM is to be used in conjunction with the Federal Aviation Regulations (FAR) from 14 CFR for all flight and ground operations that are conducted by Chester County Aviation. Every pilot will comply with all the procedures in this SOPM.

1.2. Definitions.

- 1.2.1. Flight Operations Team. Wherever used in this SOPM, “Flight Operations Leadership” is defined as the Chief Instructor Pilot, Assistant Chief Instructor Pilot, or the Operations Manager.
- 1.2.2. CCA Management. Wherever used in this SOPM, “CCA Management” is defined as the President, Operations Manager or Controller.
- 1.2.3. Rental Flight. Any flight operation that involves a qualified pilot holding at least a Private Pilot Certificate or higher when no CCA CFI is present.
- 1.2.4. Dual Flight. A training flight when a CCA CFI is present.
- 1.2.5. Solo Flight. A training flight, with a solo student pilot, when no CCA CFI is present.
- 1.2.6. Admin Flight. A flight that is a flight operation for CCA business or instructor recurrency.

1.3. Violations of the SOPM. Any person who violates the SOPM or other written directives will be grounded from all flight operations and must meet with the Chief Instructor Pilot or the designee to continue training or renting.

1.4. Revisions. The Operations Manager, Chief Instructor Pilot and Controller have the authority to revise this SOPM, as necessary. Every pilot will keep or have access to this SOPM in the current revision. New revisions must be verified, read, and understood prior to any flying activity. It is your responsibility to read and understand the Revision Overview on page “3” to see exactly what has changed. Change Bars in the left margin show those lines of text that have changed or been added in the current revision. Change Bars on the Table of Contents pages are also a quick reference to help find items that have changed.

1.5. Waiver Authority. Flight Operations Leadership has waiver authority over the procedures contained in this SOPM up to the limitations imposed by the FARs, provided safety is not compromised.

1.6. Conflicting Statements. Any conflict between CCA manuals or documents and the FARs, or between the various CCA manuals and documents such as SOPM or other guidance must be resolved by the Flight Operations Leadership. If any conflicts exist, the FARs take priority, except where CCA procedures are more restrictive than the FAR. In any case the most conservative and safest course of action will be taken.

1.6.1. If you find a conflicting statement between CCA manuals or documents and the FARs or between the various CCA manuals and documents such as this SOPM or other guidance, please inform Flight Operations Leadership.

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1.7. Deviation from the SOPM. Any pilot may deviate from the CCA SOPM and applicable guidance per FAR 91.3(b).

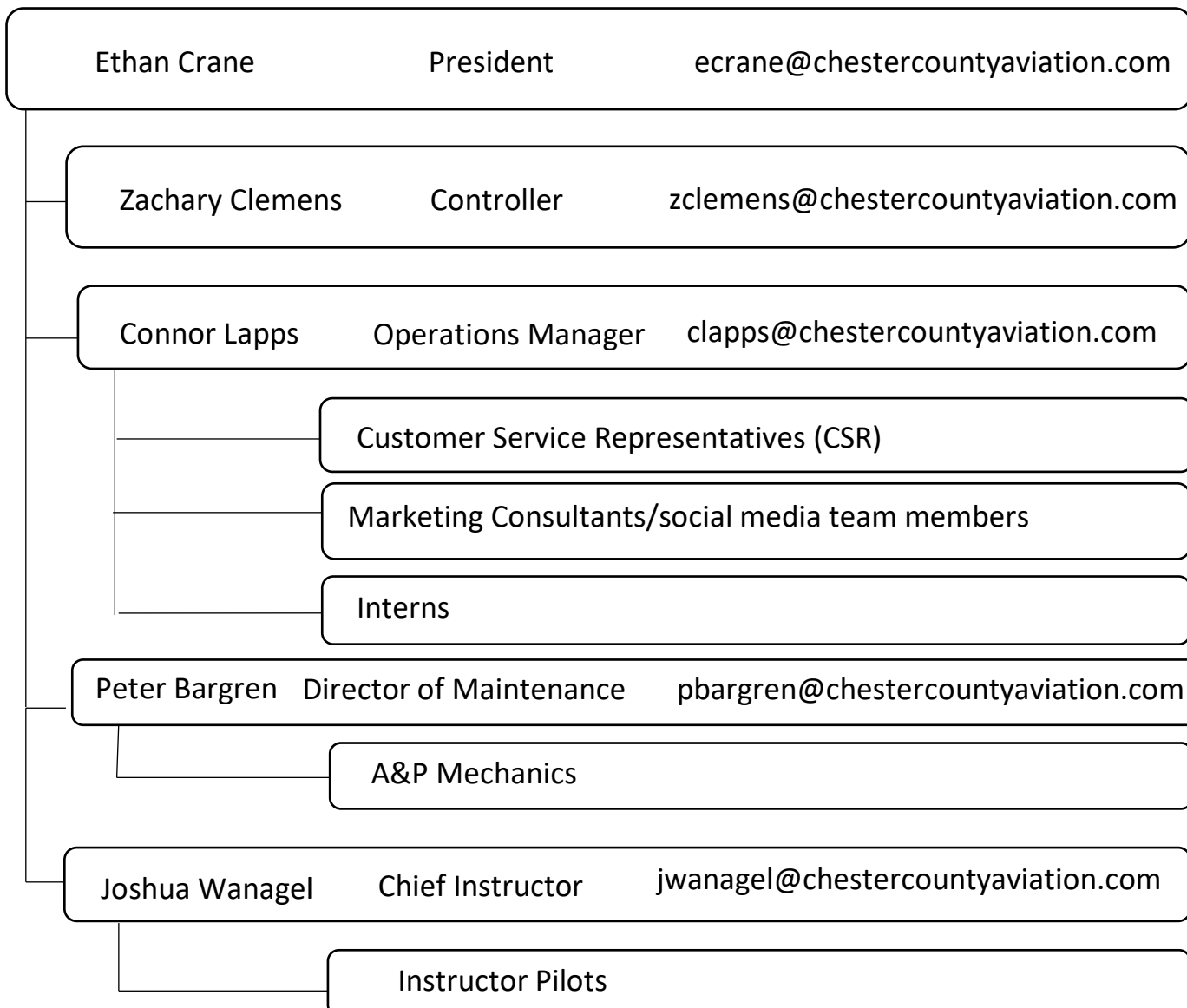
1.8. CCA Mission and Values. A major purpose of this SOPM is to support the mission and values of CCA.

1.8.1. Mission. Provide premier pilot training in the safest, most professional, and efficient manner possible.

1.8.2. Values. Chester County Aviation values safety more than anything else and highly values the development and education of professional aviators.

1.9. Responsibility. It is the responsibility of any CCA employee to ensure all the SOPM and FAR requirements are being met. Any CCA employee shall enforce any of the SOPM requirements to ensure the safety of all involved. The safest outcome should always be chosen.

1.10. Leadership/Management Diagram. This diagram is designed to aid in the understanding of the organizational leadership hierarchy.



SECTION 2: SAFETY

- 2.1. Safety Management Systems (SMS).** Safety is the core of Chester County Aviation’s values and Flight Operations. The responsibility to think and act with safety in mind rests with every individual on the ground and in the air. Aviation safety cannot be legislated or mandated; it is the result of undeviating and persistent commitment to professional conduct by everyone involved, culminating in mishap prevention and successful risk management.
- 2.2. Safety Team.** The safety team is in place to manage the CCA SMS, review data, and make recommendations to prevent accidents/incidents.
- 2.2.1. Safety Team Members.** Safety team members must demonstrate a strong commitment to the CCA SMS and continued safety of our operations. The Safety Team will include:
- 2.2.2.** Safety Officer
 - 2.2.3.** Chief Instructor Pilot
 - 2.2.4.** Assistant Chief Instructor Pilot
 - 2.2.5.** Operations Manager
- 2.2.6. Safety Focus.** The SMS’s singular focus is the safety of Chester County Aviation. CCA personnel investigate safety concerns, make recommendations, and are not subject to pressure involving cost, operational efficiency, or job security.
- 2.3. Reporting Safety Concerns.** Any individual involved in, witnessed, or aware of any incident, situation, or condition placing the safety of CCA in question must report it to a Safety Team member directly or use the VSOAR reporting method.
- 2.4. Reporting System.** Voluntary Safety Occurrence/Accident Report (VSOAR). VSOAR allows for electronic and, if desired, anonymous submissions of reports relating to flight operations safety. VSOAR Reports are to be used to report a safety hazard. VSOAR Report form can be found on the CCA website towards the bottom in the footer. Safety posters are also placed around the CCA facility with QR code links. The VSOAR link is: **ccasafety.com**
- 2.5. VSOAR Action.** No disciplinary actions will be taken against any person for reporting a safety hazard or concern, so long as the act was unintentional. Actions such as oral counseling and retraining are not considered to be disciplinary or punitive in nature. Disciplinary actions may be taken against the offending party if the event was willful, criminal, or due to gross negligence.
- 2.6. Required Report.** CCA strongly encourages reporting of any event related to the operating environment and/or equipment used anywhere at the CCA facility involving an unsafe, or potentially unsafe, occurrence or condition, irrespective of whether it involves injury or property damage. The report is to be submitted via a VSOAR or a designated representative as soon as possible after the occurrence/incident. The person reporting has the option of remaining anonymous.
- 2.6.1.** Please immediately report the following conditions if they occur:
- 2.6.1.1.** Bird Strike
 - 2.6.1.2.** Severe Turbulence Encountered In-Flight
 - 2.6.1.3.** In-Flight Emergencies
 - 2.6.1.4.** Onboard Fires

- 2.6.1.5. Crew Incapacitation
- 2.6.1.6. Personal Injury
- 2.6.1.7. Aircraft Damage
- 2.6.1.8. Aircraft Limitation(s) Exceeded
- 2.6.1.9. Flight Control Malfunction or Fire
- 2.6.1.10. Aircraft Collision
- 2.6.1.11. Deviation from an ATC instruction or FAR
- 2.6.1.12. Near Miss
- 2.6.1.13. Anytime an Abnormal/Emergency Checklist is used (Not for training)

2.7. In-Person Reporting. An “open-door” mindset will be used for any employee for safety reporting. Any customer or employee should feel comfortable bringing up a safety concern that was not reported through the VSOAR report. If the person receiving the report is not on the safety team, contact a safety team member. If the situation presents any danger, refer to Section 4 of this document (Emergency Response Plan)

2.8. Attention to Safety. Safely piloting an aircraft encompasses more than the airborne portion of the flight. It begins with preflight preparation and ends with the post-flight tie down, walk-around and debrief (when applicable). Equal, detailed attention to all phases of flight is imperative and the hallmark of a safe aviator. Attention to safety must extend to flight support activities, including driving to and from the airport, being physically ready to fly and all hangar and ramp operations.

2.9. Safety Meeting. A quarterly safety meeting will occur for the safety team to meet and discuss all the current issues, identify trends, make recommendations to change, and improve the safety program. Public safety meetings will not occur but if you need to, please contact a safety team member to discuss.

SECTION 3: RULES OF CONDUCT

- 3.1. Alcohol and Drugs.** All pilots will follow this policy for of the use of Alcohol and Drugs.
- 3.1.1.** All pilots and will follow FAR 61.15 and 91.17.
 - 3.1.2.** The use of alcohol within 12 hours of flying is prohibited.
 - 3.1.3.** No CCA employee or pilot may be under the influence of alcohol, narcotics or drugs when reporting for duty or when on duty except as provided in 3.1.6.
 - 3.1.4.** No pilot may allow a person who appears to be intoxicated to be aboard an CCA aircraft.
 - 3.1.5.** Any incident involving alcohol or drugs will be shared with Flight Operations Leadership and may result in a removal of privileges to rent or train at CCA.
 - 3.1.6.** The use or possession of drugs or narcotics is prohibited except for a prescription under the supervision of a medical doctor. However, such a prescription may prevent a person from taking part in flight activities, and pilots will consult a designated Aviation Medical Examiner. All students and renters must consult with their instructor pilot before flight any time they are taking any medication, to include over the counter medication. The instructor pilot will consult with Flight Operations Leadership as necessary to ensure it is proper for the student or renter to fly
- 3.2. Professional Conduct.** The National Business Aviation Association (NBAA) defines *“Professionalism in aviation is the pursuit of excellence through discipline, ethical behavior and continuous improvement”*.
- 3.2.1.** Refrain from the use of abusive or profane language on CCA property or in any area where training is conducted.
- 3.3. Unapproved Flight Maneuvers.** Unapproved Aircraft Maneuvers (including, but not limited to, aerobatic flight, fly overs, low level flying and formation flight), and incidents proving a lack of flight discipline or violation of the FARs, SOPM, POH, or any other guidance by pilots or instructors are prohibited and will result in disciplinary action. This action may include removal of renting privileges and/or termination of employment. Ignorance about these directives is not an excuse for violating them. Exceptions are granted when completing aerobics or Upset Prevention/Recovery Training with and approved instructor.
- 3.4. Portable Electronic Devices.** (ref. AC 91.21-1C) The use of portable electronic devices that are not related to the operation of the aircraft are prohibited during any phase of flight, except in an emergency or pertain to the flight. Passenger may use devices during flight. The intent is to minimize distractions during critical phases of flight.
- 3.5. Photography/Videography.** Active Photography/Videography of any kind is not allowed on any student solo flight. During dual or rental flights, Active Photography/Videography is allowed only during cruise flight and only above 1000 feet AGL. Passive Videography (does not require active pilot involvement) is allowed only when all crewmembers are aware and agree that passive videography is acceptable and will not affect safety of the flight.
- 3.6. Pilot Duty Time.** CCA pilots may not fly more than 8 hours in a 24-hour period. All pilots will be properly rested prior to duty. Pilots will be away from CCA a minimum of 8 hours after their last flight of the day and have an opportunity for rest during that time.

3.7. Clothing Requirements. As professional aviators, all pilots will be neatly groomed and wear modest and non-offensive clothing. The following clothing requirements must be met for any lesson or rental flight.

3.7.1. For safety reasons, shoes must completely cover the feet.

3.7.2. When the outside air temperature at the surface is below 0°C (32°F) for any portion of the planned flight, the pilot, passengers, and instructor pilot should each have a winter jacket, hat, and gloves in their possession. Each pilot is also responsible for being personally prepared for the unlikely event of an unplanned or off-field landing. Such added items include, but are not limited to boots, warm socks, and additional warm/waterproof pants.

3.7.3. Instructor pilots are to wear their assigned CCA Polo with khakis, black or blue dress pants, or professional looking pants while conducting any training event, unless otherwise authorized by Flight Operations Leadership. Blue jeans would not be considered professional dress. Remember, Instructor pilots are representatives of CCA here and when at an outstation.

3.7.4. Flight Operations Leadership finds it acceptable to wear short sleeves and shorts when the temperature is above 65° F.

3.8. Instructor Pilot Meetings. All Instructor pilots are required to attend monthly Instructor Pilot meetings to receive updates on flight operations, business, and safety.

3.8.1. The meeting will occur on the first Wednesday of each month at 18:00.

3.8.2. If an instructor pilot is unable to attend the meeting, that Instructor pilot will contact Flight Operations leadership to inform them.

3.9. Instructional Activities. All Chester County Aviation (CCA) Instructor Pilots are prohibited from providing any instructional services (flight or ground) to students at the Chester County Airport (KMQS) when not conducted through CCA scheduling, billings, and operational oversight. This rule applies to local airports as well, including KOQN, N57 and KLNS but please speak with our Chief Instructor Pilot with any specific questions regarding this type of situation.

SECTION 4: SCHEDULING

- 4.1. General.** The use of online scheduling is the basis for efficient flight operations, and it is imperative everyone does their part to keep the schedule accurate to the best of their knowledge. Resources are finite and have great value to other customers, please let's all be good stewards of our resources.
- 4.2. Chronos.** Scheduling will be exclusively completed through CCA's Chronos account. All CCA employees, renter pilots, and student pilots will have logins.
- 4.2.1.** Any activity conducted with CCA resources (Instructors, Airplanes, Facility, or Simulator) must be scheduled and dispatched at the time of activity through Chronos.
- 4.2.2.** Link: <https://cca.flychronos.com/>
- 4.3. Flight Cancelled**
- 4.3.1.** CCA should be notified of cancellations as far in advance as possible.
- 4.3.2.** Flights within 24 hours may be canceled for legitimate reasons such as weather, aircraft maintenance, or health of the pilots.
- 4.3.3.** Flights are not considered cancelled until they have been removed from Chronos.
- 4.3.4.** Excessive cancellations will result in charges for aircraft and instructor time. Charges will be determined by management on an individual basis.
- 4.4. Scheduling Priority.** If a schedule conflict exists, aircraft priority will be assigned in the following order:
- 4.4.1.** Practical Test for FAA Pilot Certification
- 4.4.2.** EOC Stage Check
- 4.4.3.** Dual Flight
- 4.4.4.** Solo Flight
- 4.4.5.** Rental Flight
- 4.4.6.** Discovery Flight
- 4.4.7.** Instructor Pilot Proficiency Check and Training
- 4.5. Return Time.** All Pilots must be aware of the return time and manage the flight such that the aircraft is back 10 minutes prior to the end of the scheduled slot. If flight past the normal return time is desired, coordinate this prior to departure, or call CCA Operations via radio/phone. If approval is not given for a late return, the aircraft must be back on time.
- 4.6. Rental Flights Outside Normal Operating Hours.** To assist CCA in preparing your airplane for rental flights, notice is to be given to CCA Management or Flight Operations Leadership (See contact in Appendix H) for flights that begin prior to 0800 LCL or after 1759 LCL. Weekdays require at least 24 hours of notice, and 48 hours on weekends, as well as a credit card on file.
- 4.7. Short Notice Instructional Events.** Scheduling an Instructor Pilot for a training event within 24 hours requires notification of that Instructor Pilot. Failure to do so may result in an Instructor Pilot not being present at the scheduled times.

SECTION 5: FLIGHT OPERATIONS (AIRPLANE)

5.1. Aircraft Dispatch. The airplane must be properly dispatched for every flight to ensure the planned flight will be conducted in accordance with all applicable regulatory requirements.

- 5.1.1.** An instructor pilot or Customer Service Representative will dispatch and assign the airplane in Chronos and will resolve any administrative discrepancies. The Pilot(s), accepting the dispatch is confirming that they have reviewed the maintenance inspections, verified airworthiness, plan to accomplish the flight inside all SOPM and FAR requirement, and are confident to fly.
- 5.1.2.** The Pilot in Command will review the dispatch to confirm that the airplane has complied with all required inspections and will not be overflown during the planned flight. The following must be verified at the time of dispatch:
 - 5.1.2.1.** Annual Inspection,
 - 5.1.2.2.** 100-Hour Inspection,
 - 5.1.2.3.** ELT Inspection,
 - 5.1.2.4.** Pitot Static/Altimeter Inspection (IFR Flight),
 - 5.1.2.5.** Transponder inspection, and
 - 5.1.2.6.** VOR Check (IFR Flights)
- 5.1.3.** Special Information including INOP equipment should be verified for compliance with FAR 91.213. The Pilot in Command has ultimate responsibility for flying an airplane with INOP equipment.
 - 5.1.3.1.** No “open” maintenance squawks may exist at the time of dispatch without CCA maintenance approval.
- 5.1.4.** If the flight is a solo student pilot, the student’s authorized instructor or his/her designee will be present at the time of dispatch to ensure proper documentation and that the flight can be completed as planned. The instructor and student should discuss alternative plans in the event of an issue (This may occur over the phone, but designee must be present).
- 5.1.5.** Determine a suitable parking spot at the completion of the flight. This is extremely important when dispatching a solo or rental flight.
- 5.1.6.** Select a suitable practice area if applicable.

5.2. Local Flight. A “Local Flight” is defined as a flight that operates at or within 50NM of KMQS.

5.3. Aircraft Re-Dispatch Procedures. For any landings ON or OFF an airport that was not planned, Call CCA Operations (610-596-1821) and report the following to an instructor pilot or Flight Operations Leadership (If a student pilot):

- 5.3.1.** Conditions of persons aboard the airplane,
- 5.3.2.** Condition of the airplane,
- 5.3.3.** Nature of the issue,
- 5.3.4.** How you can be reached,
- 5.3.5.** If possible, secure the airplane with control locks, tie-downs, chocks, and lock the airplane.
- 5.3.6.** Once resolved. (If Applicable) A instructor pilot will re-dispatch the airplane from your current departure point to return to base.

5.4. Airport to be used for Cross-Country Flight Training. The following airports are approved for cross country flights. Other airports must be pre-approved by Flight Operations Leadership unless a diversion is required. Distances are from KMQS.

5.4.1. 50-75 NM

39N	MJX	N87
DMW	MPO	N94
ESN	N51	SEG
HZL	N81	TTN
MIV	ACY	WWD

5.4.2. 75-150NM

AOO	FRG	N38
AVP	IPT	OKV
BDR	ISP	OXB
BGM	JST	SBY
BLM	MFV	SWF
CDW	MMU	GED
CGE	MRB	
ELM	N27	
UNV		

5.4.3. 150-250NM

SYR	GON	LWB
ATR	PVD	AGC
ITH	GFL	BUF
ROC	BAF	ERI
ALB	RIC	
BDL	LYH	

5.4.4. 250NM+

ACK	BKW	BED
PYM	PHD	RDU
DAN	4B6	

5.5. Rental Insurance. Chester County Aviation requires all pilots conducting flights where a CCA CFI is not on board to have a current renter insurance policy. This non-owned aircraft “Renter” insurance policy covers flight or ground activities should a mishap occur. A liability limit of \$1,000,000 each occurrence with a Per Passenger liability sub-limit of \$100,000. Please note: A sub-limit of “per-person” does not fulfill this requirement. Additionally, the policy must include \$5,000 in non-owned physical damage hull coverage but except in reference to the SR22T and the R44; in which the renter must have \$35,000 in non-owned physical damage hull coverage.

5.6. Overnight Rental. Overnight rentals are permitted with prior approval from Flight Operations or CCA Management. CCA will not allow primary training aircraft to be used for overnight rentals at anytime. Please treat the aircraft as your own.

5.6.1. Overnight rentals are normally only permitted for the following aircraft:

- 5.6.1.1.** Cirrus SR22 (N632CD)
- 5.6.1.2.** Cirrus SR20 (N187PH)
- 5.6.1.3.** PA-28-235 (N9373W)
- 5.6.1.4.** Cirrus SR22T (N1199Z)

5.6.2. Daily Minimum hours (Hobbs) for each 24-hour period are:

5.6.2.1. Weekdays (Monday through Friday) – 1 Hours

5.6.2.2. Weekends (Saturday and Sunday) – 2 Hours

5.6.3. The renter pilot will be charged the minimum daily rate or the total flight time, whichever is greater.

5.6.4. The renter is solely responsible for any tiedown, ramp, hangar, or other associated service fees.

5.6.5. This policy does not apply to leaseback owners.

5.6.6. The daily minimum rate may be waved or altered by CCA leadership with prior approval.

5.7. Aircraft Towing/Pushing. Aircraft towing/pushing must be done with an instructor pilot, maintenance personnel, or trained employee present. Signature Flight Support may move CCA aircraft. Small movements to align the aircraft with the tie down points and “T’s” or if the aircraft must be moved on a cross country flight are allowed by other personnel. If so, all the procedures listed below must be followed.

5.7.1. One person may safely tow or push an aircraft; however two people are recommended in order to prevent damage, especially when moving aircraft into the hangar. Do not construe this policy as blanket approval to always tow with only one person. Make every attempt to locate a second person prior to beginning the tow. If a second person is not available proceed only with extreme caution.

5.7.2. Walk around the aircraft to identify any hazards or potential hazards. If possible, rectify the hazardous situation prior to beginning the tow. If this means moving another aircraft, you must consider that to be a separate tow Operation and all of the precautions in this paragraph must be taken. Advise the second person of any areas of concern so that they can give them special attention during the tow.

5.7.3. Establish Verbal and Non-Verbal STOP commands.

5.7.4. Consider tow operations to be like sterile cockpit. Do not engage in any extraneous activities or conversation during a tow.

5.7.5. When placing aircraft into the hangar:

5.7.5.1 Do not park an aircraft such that it overlaps another aircraft, equipment or structure. A deflated strut or tire or change in loading from climbing into the aircraft may cause enough motion to result in contact and possible damage. Exception: High-wing airplanes may overlap low-wing airplanes.

5.7.5.2. Do not leave an aircraft in the Prop Arc of another aircraft. Merely moving the Prop can result in a compression kickback that could result in the prop striking another aircraft.

5.7.5.3. Leave sufficient space between the aircraft and other aircraft, equipment or structures for personnel to move easily between them

5.7.6. Tow Tractor. Only authorized personnel may use the Tow Tractor and only after having been trained to do so.

5.7.7. If any doubt about safety, or about clearance between the aircraft and other objects exists, immediately stop the tow and resolve the problem prior to continuing. If you think you are going too slowly the best policy is to slow down and reassess the situation.

5.7.8. Do not turn the aircraft so as to exceed the Tow Limit Markings on the Nose Gear. These limits are marked by a placard.

5.7.9. Secure the aircraft after the tow. Walk around the aircraft to ensure no damage occurred and install the chocks. If the aircraft is parked on the ramp reinstall Control Locks, and aircraft Tie Downs as appropriate.

- 5.8. Aircraft Parking.** All instructor pilots and CCA staff will follow these procedures regarding parking aircraft and hangar stack. Use Appendix E for reference to parking spots.
- 5.8.1. General:** All aircraft, whether CCA operated, or customer stored/maintained aircraft must be secured properly. At all times, either the parking brake must be on, or proper wheel chocks should be installed on the nose gear, and a control lock must be installed. When leaving an aircraft unattended, wheel chocks must be installed on the nose gear, and the parking brake must be left off.
- 5.8.2. Maximum wind for outdoor storage:** The maximum surface winds for outdoor parking is **25 Knots** unless the aircraft is tied-down and properly secured.
- 5.8.3. Overnight storage:** All CCA employees will make a reasonable effort to secure aircraft in the hangar when that aircraft is done for the day. The hangar stack is subject to change but should stay uniform. It is important to consider what is flying first the next day when deciding an order for storage. If you are the last employee to be at the airport, and an aircraft is not secured in a tie down spot, or the hangar, you must immediately notify the Operations Manager. Contact information can be found in appendix H.
- 5.8.4. Cirrus and Cessna specific concerns:** Due to tail-strike and wheel pant concerns, Cirrus aircraft may not be moved into the alley between hangars two and three. Cessna aircraft may not be parked in spot #6. Ensure the nose gear of a Cirrus aircraft is straight when parking, failure to do so can cause nose gear damage.
- 5.8.5. Prop Wash:** When parking and accepting an aircraft, ensure the tail is pointed away from other aircraft, open hangars, and any object that could become displaced by propwash. Ensure all covers are removed, the fuel caps and oil dipstick are secure, and the aircraft is free of chocks, tiedowns, and tow bars.
- 5.8.6. Parking at Other Airports:** Park the aircraft in a reasonable location that does not pose a risk of damage to the aircraft. Ensure the aircraft is properly secured before leaving the aircraft.
- 5.8.7. Approved Parking Spots:** All CCA and customer owned aircraft must be left in a CCA approved parking spot. The spaces are listed in Appendix E. Some aircraft may be parked on a Signature Flight Support (SFS) parking spot with approval from Flight Operations Leadership.
- 5.9. Hangar Door Operation.** Only employees are authorized to operate the large hangar doors and only after having been trained to do so. Other pilots are permitted to assist in moving the door if they are under the supervisor of a trained employee. During cold weather, plan and minimize the amount of time the door is left open.
- 5.10. Pre-Flight Action.** All training flights will have a completed CCA Takeoff and Landing Card (TOLD).
- 5.10.1.** The instructor will verify the TOLD card prior to engine start.
- 5.11. Preflight briefings and Walk-Around.** The Pilot(s), including instructors will perform a preflight inspection as follows:
- 5.11.1.** Preflight briefings will occur between the pilot and the instructor pilot for each flight.
- 5.11.2.** A complete walk around inspection of the airplane will be completed for each flight, checking all items listed in the preflight section of the Pilot's Operating Handbook.

5.11.3. The instructor pilot must perform a walk around inspection even if one was completed by the student. Ensure that the propeller is over a clean surface with no rocks, loose ice, or debris.

5.12. Fuel Sampling. All airplane fuel sumps will be sampled before every flight.

5.12.1. After refueling, wait 3 minutes before sumping the fuel. This allows time for the dirt to settle to the bottom of the tanks.

5.12.2. No fuel samples will be taken from the airplanes while they are parked inside a hangar, unless approved, on a case-by-case basis, by Flight Operations Leadership, or CCA Maintenance Personnel. If approved, ensure a bucket is readily available to use to catch fuel in case a sump sticks open.

5.12.3. All pilots will pour the sample back into the aircraft fuel tank IF the sample is not contaminated.

5.12.4. If the fuel sample does not test properly:

5.12.4.1. Notify your instructor pilot or the office manager that the sample is contaminated.

5.12.4.2. Continue the sumping process until you have a clean sample. **DO NOT** return contaminated fuel to any fuel tank. Place contaminated fuel in a suitable container (oil drip bucket) and give it to Maintenance for disposal.

5.13. Hobbs and Tachometer Times.

5.13.1. During the airplane preflight inspection:

5.13.1.1. Both the student pilot and the instructor pilot will compare the airplane Hobbs time and the tachometer time with the aircraft dispatch.

5.13.1.2. Any discrepancies in times will be recorded on the dispatch sheet.

5.13.2. At the completion of the flight, the pilot will record the Hobbs time and the tachometer time in the aircraft dispatch.

5.13.3. For aircraft that do not have an installed pilot flight time Hobbs Meter, record the engine start and engine stop times and convert to hours and tenths for purposes of recording times for the aircraft records and for entry into Chronos.

5.14. Care of Aircraft and Simulators.

5.14.1. Treat the aircraft/simulator with respect.

5.14.2. Do not place any items, except the checklists and ignition keys, on the glare shields to prevent damage to the wind shield and magnetic compass.

5.14.3. Pick up any trash. Do not leave anything behind.

5.14.4. If you find other pilot's gear, turn it in at the front desk with a note with tail number and date.

5.14.5. Do not remove Airworthiness Certificates, Registration Certificates, Checklists, Pilot Operating Handbooks, Sectional Charts, or other equipment/paperwork from an aircraft.

5.14.6. Notify a CCA employee if you find an airplane or simulator in poor condition.

5.15. Frost, Ice, and Snow on Aircraft. No Pilot may takeoff with frost, ice, or snow adhering to a component of the airplane per FAR 91.527(a). AIM 7-6-14

5.16. In-Flight Icing. No CCA aircraft may be flown into known icing. Icing conditions are defined as temperature below freezing and visible moisture. Pilots should also be cautious to avoid operations during freezing rain conditions. AIM 7-1-20

- 5.17. Refueling/Defueling.** All pilots will be taught how to properly fuel the airplane.
- 5.17.1.** Fueling of airplanes at KMQS will be completed by Signature Flight Support (SFS). SFS can be reached by radio on 122.700 MHz by calling “Signature at Chester County.” SFS can also be called on the phone at 610-384-9000.
 - 5.17.2.** When at an outstation, the Instructor pilot, Renter Pilot, or Student Pilot will refuel the airplane. To greatest extent possible Renter and Student pilots should use a full service FBO to refuel.
 - 5.17.2.1.** Renter and Student Pilots may not refuel an airplane if they have not been properly trained by a CCA employee.
 - 5.17.2.2.** If refueling at any airport other than Chester County (KMQS), the renter pilot will keep a copy of the receipt and present that to CCA upon checkout and will be reimbursed for those fuel expenses.
 - 5.17.3.** When personally fueling at an outstation, follow these steps:
 - 5.17.3.1.** Ensure the aircraft is chocked and grounded to an exposed metal surface.
 - 5.17.3.2.** Ground the filler spout to the aircraft prior to beginning to pump fuel and keep it grounded during the time fuel is being pumped
 - 5.17.3.3.** Do not overfill the tanks. If the aircraft is not to be flown again prior to hangaring, or if you do not know, leave at least 2” of space below the filler neck. NOTE: There is no auto-shutoff like a car.
 - 5.17.3.4.** Use only the fuel flow rate needed. Excessive rates may cause splash back, damage to internal components, and may cause fuel to vent overboard.
 - 5.17.3.5.** When available, use the fueling pad to protect the aircraft. Place the pad on the wing prior to beginning and be careful to not cause damage to the aircraft, aircraft paint, vortex generators, stall vanes, etc., with the nozzle or with the nozzle cap as it dangles on the chain.
 - 5.17.3.6.** In the event of a fuel spill, the pilot will use the fuel spill kit to clean up the spill and will contact the necessary airport operations authority.
 - 5.17.3.7.** Use care when retracting the fuel hose to protect the nozzle from receiving any damage. DO NOT allow it to drag on the ground.
 - 5.17.4.** Defueling should be always discouraged as it is costly and poses environmental risk to discard waste fuel. Defueling should be used to keep an aircraft within proper weight and balance limitation while still respecting adequate fuel reserves. Proper planning of aircraft fuel loading can reduce this from occurring.
 - 5.17.5.** If defueling is required, 4-hour notice must be given to CCA.
 - 5.17.6.** Defueling may only be accomplished by maintenance personnel
 - 5.17.7.** If defueling should be necessary, contact maintenance and they will follow the AMM. If no AMM procedure exists, they will accomplish the following:
 - 5.17.7.1.** Locate and acquire adequate fuel storage
 - 5.17.7.2.** Locate and acquire fuel siphon hose
 - 5.17.7.3.** Attach grounding wire between fuel storage container and the aircraft
 - 5.17.7.4.** Perform siphon action through fuel filter cap into fuel storage containers
 - 5.17.7.5.** Return all acquired equipment to original locations.
 - 5.17.7.6.** ** IF A FUEL SPILL OCCURS: OBTAIN FUEL SPILL KIT**

5.18. Oil Servicing. Students will not service aircraft oil unless they have been trained by an instructor pilot or by maintenance personnel.

5.18.1. Oil for Cross Country flights should already be in the cargo compartment. Check this prior to a trip and do not take extra bottles unless it is necessary.

5.18.2. If taking extra oil at PIC choice, notify the Operations Manager.

5.18.3. Process:

5.18.3.1. Oil will be serviced in 1-quart quantities only. Do not use a partial quart.

5.18.3.2. To avoid over servicing, only add oil when it is below the normal operating level for the type of aircraft. Over servicing can cause engine damage.

5.18.3.3. Use the Funnel. Never try to pour oil without a funnel. Use care with the funnel to ensure it is not contaminated with dirt, small bits of gravel, etc., that might be introduced into the aircraft oil system.

5.18.3.4. If you spill oil in the engine compartment, contact maintenance. Do not start the engine until you talk to them.

5.18.3.5. Ensure that the dipsticks are securely replaced, oil service caps are properly closed, and oil access door(s) are closed and secure. Please do not over-tighten oil service caps.

5.19. Engine Starting.

5.19.1. “Hand-Propping” an engine is not allowed.

5.19.2. A verbal yell of “CLEAR PROP” along with a visual check of the propeller area will be completed prior to starting the engine(s) to ensure that there are no persons or objects in the propeller area.

5.19.3. Always follow the Starter Limitations for the aircraft type.

5.20. Entering/Exiting Aircraft. No person will enter or exit the airplane while the engine is running. Do not exit the airplane over the leading edge of the wing.

5.20.1. Flight Operations or Maintenance may approve CCA personnel to exit a running airplane for maintenance purposes.

5.20.2. An exception is made for Instructor pilots during solo pilot operations.

5.21. Taxi Operations. All CCA operations will adhere to the following:

5.21.1. Prop Blast: To minimize prop blast, use minimum power required to break away from parking. Also, during turns maintain momentum such that idle power can be selected, and the aircraft will continue moving. If the aircraft comes to a stop during a turn, first straighten the nose wheel and then use minimum power to continue taxiing.

5.21.2. When parking the aircraft and/or stopping the aircraft (for run-up, clearing the runway, etc.) ensure the nose wheel is straight before the aircraft comes to a complete stop.

5.21.3. Always apply the proper flight control positions for the surface wind.

5.21.4. Unless following taxi lines, or while being marshaled, or parking, no pilot will taxi closer than 10 feet from any object, structure or other aircraft.

5.21.5. On the ramp, taxi no faster than a slow walk (5 knots ground speed or less) and slower when close to any obstruction. Exercise extreme caution when taxiing near any obstructions. Whenever the clearance is in question, STOP the aircraft, shutdown the engine and have the aircraft towed or the obstruction removed.

5.21.6. On the taxiways, taxi at a brisk walk speed that will allow an immediate safe stop, therefore do not taxi greater than 10 knots ground speed. Do not ride the brakes and use power to control the taxi speed.

5.22. Post-Flight.

5.22.1. Walk Around. A post-flight inspection will be performed, and any discrepancies reported and recorded. Walk completely around the aircraft, looking for leaks, any damage, condition of tires and brake pads, evidence of any bird strikes, etc. Ensure the aircraft is placed in a secured manner in a reasonable location.

5.22.2. Aircraft Cleanliness. Ensure the interior of the aircraft is clean.

5.22.3. Postflight briefings will occur between the pilot and the instructor pilot after each flight.

5.23. Noise-Abatement. Be a good neighbor and avoid, when possible, flying over houses.

5.23.1. See Appendix B for Local Airport Noise abatement procedures.

5.24. VFR Departure Procedures. See Appendix B for Local Airport Noise abatement procedures and VFR Departure procedures.

5.24.1. Runway 29. Fly runway heading (293°) until abeam the Heli plex, then fly a heading of 260°. Upon reaching 1,600' MSL:

5.24.1.1. Turn left to join left crosswind and remain in the pattern.

5.24.1.2. Fly a heading of 240 to the high school/south practice areas.

5.24.1.3. Turn right on course for north/west departures.

5.24.2. Runway 11. Standard FAA Traffic Pattern. Upon reaching 1,300' MSL:

5.24.2.1. Turn left to join to join left crosswind

5.24.2.2. Fly a heading of 060 to golf course/north practice areas

5.24.3. South Practice Areas. Reporting point is the High School located 5NM southwest of KMQS.

5.24.3.1. All aircraft outbound should cross the high school at 2,100' MSL or greater.

5.24.3.2. Once over the high school turn to enter the assigned practice area.

5.24.4. North Practice Areas. Reporting point is the Golf Course located 5NM northeast of KMQS.

5.24.4.1. All aircraft outbound should cross the golf course at 2,100' MSL or greater.

5.24.4.2. Once over the golf course turn to enter the assigned practice area.

5.25. Transfer of Flight Controls. When transferring the controls of the aircraft from one pilot to another pilot, the positive exchange of flight control will be used.

5.26. Minimum Flight Altitudes. The minimum altitude for all CCA flights is as stated in FAR 91.119 but not lower than 1000 feet AGL except for takeoff and landings, ground reference maneuvers, and simulated emergency power off approaches to land. Flight maneuvers will not be practiced over heavily congested areas.

5.27. Food and Drink in CCA Aircraft.

5.27.1. Dual Local Flights. No food or drinks, except for water, are allowed in the airplanes during local training flights.

5.27.2. Dual Cross-Country Flights. Food may be consumed during cross country flights during non-critical portions of flight.

5.27.3. Solo Flights. No food or drinks, except for water, are allowed in the airplanes during solo flights.

5.27.4. Rental Flights. Food may be consumed during cross country flights during non-critical portions of flight.

5.28. Solo Flight Training Operations.

5.28.1. No person other than the pilot will be carried on any solo training flights.

5.28.2. For the first solo of a student pilot, the instructor pilot will give the proper endorsements for solo flight per FAR 61.87 in the pilot's logbook. These endorsements will be given prior to the pilot beginning the first solo flight.

5.28.3. The student pilot cross-country endorsements will be given in accordance with FAR 61.93(c).

5.28.4. A student's first solo flight will be performed on Runway 29/11 at KMQS. Solo students in the Private Pilot Course may perform touch-and go's only on Runway 29/11 at KMQS and only when briefed to do so by their instructor pilot. Use of any other runway requires a full-stop landing. Deviations from this may be approved by the Chief or Assistant Chief Instructor Pilot.

5.28.5. Solo students may not operate on a soft-field runway.

5.28.6. Student pilots may not fly solo in complex or high-performance airplanes.

5.28.7. No student pilots may fly solo between sunset and sunrise.

5.28.8. Students actively engaged in the commercial pilot syllabus may not enter IMC conditions without a CCA CFI on board or approval from their authorized instructor.

5.29. Night Procedures.

5.29.1. A working flashlight that is capable of suitably illuminating the instrument panel must be carried on all night flights.

5.29.2. VFR maneuvers will not be performed later than 30 minutes after sunset or before 30 minutes prior to sunrise except as specified in the syllabus for a night training flight.

5.29.3. Dual Cross-country flights will not plan to land later than 30 minutes after sunset unless specifically fulfilling the syllabus requirements for a night training flight. The only exception is an instrument syllabus flight.

5.29.4. Delays that will cause a dual cross-country flight to land later than 30 minutes after sunset must be approved by Flight Operations Leadership prior to departure on the applicable flight leg.

5.29.5. No airplane may enter IMC conditions at night without approval from Flight Operations Leadership.

5.30. Special VFR. No CCA airplane will operate under a special VFR clearance unless they have received approval from Flight Operations Leadership.

5.31. Simulated Engine-Out Procedures. Simulated engine out procedures (including power off 180s) will not continue below 500 feet AGL unless the landing can be made on a runway.

5.32. Fuel Reserves.

5.32.1. All VFR flights (Day or Night) will depart with a minimum fuel reserve of at least 60 minutes at normal cruise beyond the intended destination.

5.32.2. All IFR flights will depart with enough fuel to fly to the first airport of intended landing, then to the alternate airport (if applicable), and then for at least 60 minutes at normal cruise.

- 5.33. Traffic Avoidance.** All pilots must be actively scanning for aircraft at all times. To aid detection by other pilots, strobe lights will be used in accordance with 91.205 unless their use causes a distraction or impacts safety. The landing light will be used from takeoff until landing except for cruise flight outside of the local practice areas. Clearing turns will be made prior to performing maneuvers.
- 5.34. Local Practice Areas.** Pictorial descriptions of the local practice areas can be found in Appendix A. This does not apply when the POTUS TFR is in effect.
- 5.34.1.** When proceeding to or from a practice area, do not cut through another practice area unless it is necessary.
- 5.34.2.** When using the “Pottstown” Practice area, fly over marsh creek to transit the “Marsh Creek” practice area. Communicate on the 123.500MHz frequency with traffic in the “Marsh Creek” practice area.
- 5.34.3.** When using the “Honey Brook” Practice area and runway 11 is in use, depart the pattern on a 060-degree heading to 1,600’ MSL then turn on course. Use caution when flying to the north reporting point for returning to KMQS.
- 5.34.4.** Use of radios **once** in the practice areas:
- 5.34.4.1. COM 1 Radio.** Monitor and communicate on 123.500 MHz. If you are near New Garden, Smoketown, Pottstown Heritage or Brandywine airports, monitor the appropriate CTAF rather than CCA operations. If you hear traffic in the vicinity of the airport, report your altitude and position relative to the airport on the CTAF. Return to 123.500 MHz after departing the airport area.
- 5.34.4.2. COM 2 Radio.** Monitor 121.500 MHz.
- 5.34.4.3.** 122.7000 MHz should be used when departing or returning to the airport and within 5 NM of KMQS. If remaining in the pattern, monitor 123.500MHz on the COM2 radio
- 5.34.4.4.** Make this radio call once in a practice area, “Chester County Practice Areas, N12345 is in the ‘Marsh Creek’ practice area maneuvering at 2,500, Chester County Practice Areas.”
- 5.34.5.** While airborne, if operations outside of a local practice area are needed in order to complete a lesson, complete the following:
- 5.34.5.1.** Refer to the Sectional Chart to ensure the location is suitable to the maneuvers to be performed (clear of terrain, obstructions, airports, airspace, airways, etc.)
- 5.34.5.2.** Notify CCA operations (123.500 MHz) to advise them of your location if someone is present.
- 5.34.6.** Once outside CCA Practice areas, monitor 121.500Mhz.
- 5.35. Use of Circuit Breakers.**
- 5.35.1.** On the ground, do not reset any circuit breaker. Taxi back to parking and contact CCA Maintenance.
- 5.35.2.** Inflight a circuit breaker may be reset only after a thorough evaluation of the situation. If the flight can be completed safely without associated equipment, do not reset the circuit breaker. Plan the remainder of the flight accordingly.
- 5.35.3. If you decide to reset, the following restrictions apply:**
- 5.35.3.1.** Reset only one time

- 5.36. GPS Database.** A GPS NAV Data Base may be out of date if the following procedures are followed:
- 5.36.1.** RNAV Departures, RNAV Routes and RNAV Arrivals, and Instrument Approach Procedures based on GPS guidance are not conducted.
 - 5.36.2.** Current Aeronautical Charts are used to verify Navigation fixes prior to departure.
 - 5.36.3.** Procedures are established and used to verify status and suitability of Navigation Facilities used to define route of flight (PIC will check NOTAMS and verify Service Volumes can be maintained for the planned route), and
 - 5.36.4.** Approach Navigation Radios are manually tuned and identified.
- 5.37. VFR Arrival Procedures.** See Appendix B for Local Airport Noise abatement procedures and VFR Arrival procedures.
- 5.37.1. South Practice Areas.** Reporting point is the High School located 5NM southwest of KMQS.
 - 5.37.2.** All inbound aircraft should cross the high school at 1,600' MSL.
 - 5.37.3. North Practice Areas.** Reporting point is the Golf Course located 5NM northeast of KMQS.
 - 5.37.4.** All inbound aircraft should cross the golf course at 1,600' MSL.
- 5.38. Stabilized Approach Concept.** The FAA and NTSB has found that Loss-of-Control (LOC) is one of the leading causes of general aviation accidents. Focusing on establishing and maintaining a stabilized approach and landing is a great way to avoid experiencing a loss of control. All CCA Pilots will follow these practices to maintain a safe and stabilized approach and landing.
- 5.38.1. FAA Definition:** *“A stabilized approach is one in which the pilot establishes and maintains a constant angle glidepath towards a predetermined point on the landing runway. It is based on the pilot’s judgment of certain visual clues and depends on the maintenance of a constant final descent airspeed and configuration.”*
 - 5.38.2. Decision Making:** The first pilot to recognize the unstable condition will state “Go-Around” and the Pilot-In-Command must initiate the go-around procedure without any hesitation or questioning.
 - 5.38.3. Touchdown Location:** CCA requires that all aircraft land within the first 3,000' feet or first 1/3 of the available landing distance. If the pilot-in-command determines that the airplanes will not land in this defined range, a go-around must be performed.
 - 5.38.4. Flight Training:** When properly briefed and required for flight training purposes SOPM 5.38.5 and 5.38.6 may be exceeded when a CCA IP is present.
 - 5.38.5. CCA Stabilized Approach Criteria below 1,000' AGL:** If the following criteria cannot be met, the Pilot-In-Command must initiate the go-around procedure.
 - 5.38.5.1.** Completed all appropriate briefings and checklists.
 - 5.38.6. CCA Stabilized Approach Criteria at 500' AGL:** If the following criteria cannot be met, the Pilot-In-Command must initiate the go-around procedure.
 - 5.38.6.1.** Aircraft power setting is consistent and large changes are unnecessary.
 - 5.38.6.2.** Aircraft is in the manufacturers recommended configuration.
 - 5.38.6.3.** Airspeed at manufacturers recommended airspeed +10/-5 Knots.
 - 5.38.6.4.** A descent rate not to exceed 1,000' FPM and is established on an appropriate glide path to the aiming point (~3°).

5.39. Maintenance Procedures. The following procedures are for the documentation of mechanical squawks associated with CCA aircraft while an aircraft is located on the ground. If a pilot notes a mechanical discrepancy during flight, the POH, training, and good pilot judgment will be used.

5.39.1. All Maintenance Squawks: All mechanical squawks will be reported by the Pilot to the maintenance advisor and entered into Chronos. The exact wording will be entered into Chronos when “downing” the aircraft.

5.39.1.1. Any pilot who finds a maintenance squawk will call CCA Operations at (610)-596-1821 to report the squawk.

5.39.1.2. All active or “fixed” discrepancies will be in Chronos.

5.39.1.3. When a pilot discovers a discrepancy during preflight or on the ground, the pilot will not fly the aircraft and report the squawk.

5.39.2. Maintenance Squawks >50NM from KMQS: Call the CCA operations phone number at **610-596-1821**. This is a 24-hour on-call number for any flight operations related questions.

5.40. Rental Pilot Flight Currency.

5.40.1. All Rental Flights:

5.40.1.1. All renter pilots must an initial proficiency check in each make and model.

5.40.1.2. Within the preceding 12 calendar months, the pilot has accomplished a recurrent proficiency check in each make and model by a CCA Instructor Pilot.

5.40.2. VFR Day:

5.40.2.1. SOPM 5.40.1 and;

5.40.2.2. The pilot must meet the PIC experience requirements of 14 CFR § 61.57(a).

5.40.3. VFR Night: (Sunset to Sunrise)

5.40.3.1. SOPM 5.40.1 and;

5.40.3.2. Pilot has an “Instrument Airplane” rating on their pilot certificate or holds an Airline Transport Pilot certificate and;

5.40.3.3. The pilot must meet the PIC experience requirements of 14 CFR § 61.57(b).

5.40.4. IFR:

5.40.4.1. SOPM 5.40.1 and;

5.40.4.2. Pilot meets 14 CFR § 61.57(a) or 14 CFR § 61.57(b) as applicable and;

5.40.4.3. Pilot has an “Instrument Airplane” rating on their pilot certificate or holds an Airline Transport Pilot certificate and;

5.40.4.4. Within the preceding 12 calendar months, the pilot has accomplished an instrument check by a CCA Instructor Pilot and;

5.40.4.5. The pilot must meet the PIC experience requirements of 14 CFR § 61.57(c).

5.41. Rental Flight Operations on Grass Runways. No Rental Pilot may operate on grass runways.

5.41.1. A CCA IP must be on-board for any flight that will use a grass runway.

5.41.2. Approval may be granted by the Chief Instructor Pilot to use a grass runway on a rental flight on limited basis.

- 5.42. Retractable Gear Airplanes.** No Renter Pilot may act as Pilot-In-Command, without a CCA Instructor Pilot, unless they have at least 25 hours retract time/10 hours Make/Model or 15 hours Make/Model with CCA IP.
- 5.43. TFR Flight Operations.** All CCA Flights operating in a TFR will follow Appendix F on specific TFR operating rules and procedures. Following these procedures is paramount to safe operations while transiting TFR airspace.
- 5.44. Extended Overwater Flights.** No pilot-in-command shall fly outside of the airplane's gliding range from land unless each occupant has a suitable flotation device in the airplane.
- 5.45. Aircraft Approved for Flight Training.** This is a list of approved airplanes (N-Numbers) for each course of training. Customer aircraft may be used in any training course with the approval of Flight Operations Leadership.
 - 5.45.1. Private Pilot.**
 - 5.45.1.1.** N16237
 - 5.45.1.2.** N21056
 - 5.45.1.3.** N83076
 - 5.45.1.4.** N8171Y
 - 5.45.1.5.** N717VT
 - 5.45.1.6.** N187PH
 - 5.45.2. Instrument Rating.**
 - 5.45.2.1.** N16237
 - 5.45.2.2.** N21056
 - 5.45.2.3.** N83076
 - 5.45.2.4.** N8171Y
 - 5.45.2.5.** N717VT
 - 5.45.2.6.** N187PH
 - 5.45.2.7.** N632CD
 - 5.45.2.8.** N9373W
 - 5.45.3. Commercial Pilot.**
 - 5.45.3.1.** N16237
 - 5.45.3.2.** N21056
 - 5.45.3.3.** N83076
 - 5.45.3.4.** N8171Y
 - 5.45.3.5.** N717VT
 - 5.45.3.6.** N1199Z
 - 5.45.3.7.** N187PH
 - 5.45.3.8.** N632CD
 - 5.45.3.9.** N9373W
 - 5.45.4. Flight Instructor.**
 - 5.45.4.1.** N16237
 - 5.45.4.2.** N21056
 - 5.45.4.3.** N83076
 - 5.45.4.4.** N8171Y
 - 5.45.4.5.** N717VT
 - 5.45.4.6.** N1199Z
 - 5.45.4.7.** N187PH
 - 5.45.4.8.** N632CD
 - 5.45.4.9.** N9373W

- 5.45.5. Use Of Customer Aircraft.** Before flight instruction can be provided, students must provide documentation proving aircraft airworthiness to Flight Operations Leadership. The following are the required to be provided:
- 5.45.5.1.** Annual Inspection (AD Compliance History),
 - 5.45.5.2.** 100-Hour Inspection (If Applicable),
 - 5.45.5.3.** ELT Inspection,
 - 5.45.5.4.** Pitot Static/Altimeter Inspection (IFR Flight), and
 - 5.45.5.5.** Transponder inspection,

5.46. Instructor Pilot Qualifications. Instructor pilot currency/proficiency of skill and knowledge is critical to be an effective educator.

- 5.46.1.** All IP's will complete an "Initial Proficiency Check" before they are permitted to teach in a specific make and model.
- 5.46.2.** All IP's will complete a "Recurrent Proficiency Check" each twelve calendar months for each make of airplane they are qualified to teach in.
 - 5.46.2.1.** Differences training may be necessary for some makes. Example. PA-28-161 and PA-28-235 are in the same make.
- 5.46.3.** Each IP qualified to teach in the instrument rating course will complete an Instrument Proficiency check each twelve calendar months.
- 5.46.4.** The Chief Instructor Pilot shall send the schedule for each IP before the beginning of the calendar year. The schedule will include each IP and the Check IP doing the recurrent proficiency check.
- 5.46.5. Aircraft Makes:**
 - 5.46.5.1.** PA-28 Series
 - 5.46.5.2.** Cessna 172
 - 5.46.5.3.** Cirrus SR20/22/22T

5.47. Admin Flights. Admin flights are for the purposes of CCA business and must be approved by CCA Management.

- 5.47.1.** The pilots will be compliant with SOPM 5.40.
- 5.47.2.** All Admin flights will follow "Rental Flight Weather Minimums" found in SOPM 7.5.
- 5.47.3.** The pilots should conduct a risk assessment before conducting any "Admin Flight" because they are non-standard and often carry an increased level of risk.
- 5.47.4. Repositioning Flight.**
 - 5.47.4.1.** A repositioning flight will be authorized by CCA management for CCA business or repositioning an airplane for CCA schedule needs.
- 5.47.5. Instructor Pilot Proficiency/Employee Pilot Proficiency Training.**
 - 5.47.5.1.** Authorized by Chief Instructor Pilot and will be scheduled in advance.
- 5.47.6. Ferry Flight.**
 - 5.47.6.1.** Planning will be conducted and monitored by CCA Management in conjunction with the Ferry Pilot(s).
- 5.47.7. Operational Check Flights required per 14 CFR § 91.407.**
 - 5.47.7.1.** May only be requested by an A&P Mechanic.
 - 5.47.7.2.** Only one (1) CCA Pilot may fly the airplane with no passengers and be current with SOPM 5.40.
 - 5.47.7.3.** The flight will be performed in accordance with the ASEL Operational Check Flight Checklist.

CCA ASEL OPERATIONAL CHECK FLIGHT ITEMS

Utilize all normal procedures and checklists

Pre-Flight

****Complete a Risk Assessment Prior to Flight****

- Verify all required certificates, documents, markings, signs, and placards are present and legible.
- Check all systems for proper operation - this includes Pitot Heat.
- Verify all flight controls operate normally.
- Note GPS databases if expired.

Taxi/Run-Up

- After start, verify Oil Pressure and Oil Temperature are within normal operating ranges.
- Verify the electrical system is operating normally.
- Complete a radio check on all installed radios.
- Before taxi-out, check the braking system.
- Deflect rudder fully in each direction and verify nose wheel steering operates normally.
- Deflect ailerons and elevator/stabilator fully and check for proper operation.
- Exercise the propeller controller to full limits (If installed).
- Ensure the Magneto Drop/Difference is within acceptable tolerance.
- Make use of the Alternate Air and/or Carburetor Heat and verify within acceptable tolerances.
- Verify the autopilot operates normally (If installed). Test all the normal and abnormal ways to disconnect the autopilot. Re-Trim for takeoff.
- Verify pitch trim system work normally (If installed).
- Verify Standby Flight Instruments are functioning normally.
- Exercise all installed avionics switches, and knobs for proper operation.

Takeoff

- Perform a normal takeoff (Reject the takeoff at the first sign of an abnormal condition).
- Depart to the Octorara practice area, Marsh Creek practice area, or stay in the local pattern.

Airwork

- Climb to safe block altitude (Recommended 3,000' AGL to 5,000' AGL).
- During climb, use a combination of hand flying, autopilot flying (If installed), and Control Wheel Steering (CWS If installed).
- During Climb, fly through the normal range of speed (V_X - V_Y to cruise climb)
- During cruise, set 55% power and lean the mixture to "Best Power" and verify Fuel Flow (If installed), EGT (If installed), CHT (If installed), Oil Pressure, and Oil Temperature are all within normal operating ranges.
- Perform two medium bank turns (left and right) at normal cruise airspeed.
- During cruise, set 75% power and lean the mixture to "Best Power" and verify Fuel Flow (If installed), EGT (If installed), CHT (If installed), Oil Pressure, and Oil Temperature are all within normal operating ranges.
- Slow to approach airspeed and configure the airplane for landing. Perform turns and verify the airplane's stability and flight controls are responding normally.
- Perform an imminent power-off stall. Check the stall indication system for proper operation.
- Check VOR navigation radios.

Approach and Landing

- Normal approach and landing with full flaps. No "Touch and Go's" unless directed to by an A&P Mechanic.
- Monitor ILS receiver (If installed)

Taxi In and Post-Flight

- Complete an exterior inspection (Check for obvious signs damage or fluid leaks)
- Advise maintenance of the discrepancies found during the operation check flight.
- Complete the require logbook entry with the A&P Mechanic.

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5.48. Rental Agreement. All pilots must have annually agreed to and signed the renter agreement from, found in appendix G, to rent any CCA airplane.

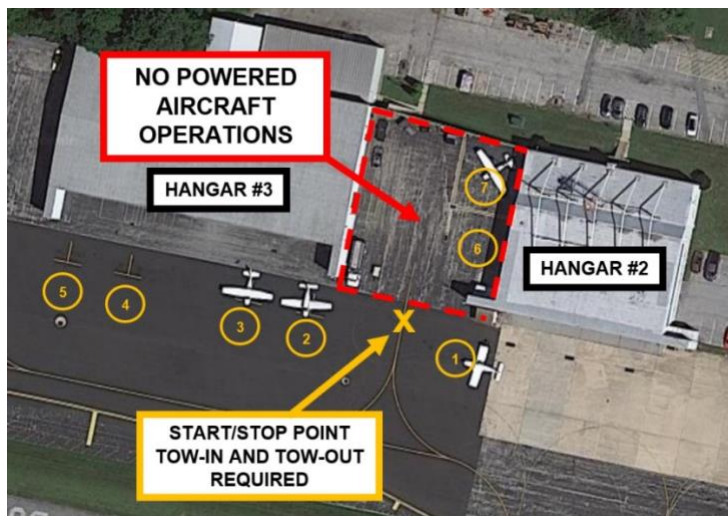
5.49. Limitations on Powered Aircraft Movement on CCA Ramp. Due to the uneven and sloping pavement, limited building clearance, and increased activity between hangars #2 and #3. CCA requires that no powered aircraft operations occur between hangars #2 and #3 (No powered aircraft operations means that the propeller can NOT be spinning).

5.49.1. If parked in spots #6 or #7: Contact CCA personnel to tow the aircraft to the designated Start/Stop Point before engine starts.

5.49.2. If instructed to park in spots #6 or #7: Park before the alleyway at the Start/Stop Point, and CCA personnel will tow the airplane to the parking spot.

5.49.3. If returning from a late-night rental: CCA Management or Flight Operations Leadership will provide additional instructions.

5.49.4. Diagram 1:



5.49.5. Diagram 2:



SECTION 6: FLIGHT OPERATIONS (Rotorcraft)

- 6.1. General.** This section outlines additional or modified requirements for rotorcraft operations at CCA. Unless otherwise specified in this section, all other portions of the SOPM apply to rotorcraft as they do for fixed wing aircraft.
- 6.2. Weather Minimums.** All weather minimums as specified in Section 7 of this document apply to rotorcraft. However, alternate minimums may be approved by CCA Flight Operations Leadership on a case-by-case basis. IFR operations of rotorcraft is not permitted under any circumstances.
- 6.3. Night Operations.** SOPM 5.40.3 is amended for rotorcraft. A rotorcraft pilot is required to complete a night checkout with a CCA Instructor Pilot. All rotorcraft night flights require direct approval by CCA Flight Operations Leadership. The pilot must meet the PIC experience requirements of 14 CFR § 61.57(b). No off-airport operations will be approved at night.
- 6.4. Minimum Altitudes.** The minimum altitudes specified in SOPM 5.26 are waived for rotorcraft operations. The pilot must comply with 14 CFR § 91.119(d)(1).
- 6.5. Insurance Waiver.** All pilots are advised that the rental insurance requirements specified in SOPM 5.5 apply equally to helicopters. However, the insurance deductibles for helicopters are significantly higher than for equivalent fixed wing aircraft. By accepting dispatch of a helicopter, the Renter Pilot agrees that he or she is responsible for any damage that may occur to the helicopter and agrees to assume full financial responsibility for the full amount of the insurance deductible.
- 6.6. Overnight Rental.** Overnight rental of helicopters is not permitted.
- 6.7. Rotorcraft Parking.** Parking will be specified by CCA Staff for each rotorcraft flight. Pilots are advised to use extreme caution to avoid damaging parked aircraft with rotor downwash.
- 6.8. Taxi Operations.** Hover-taxi is prohibited on taxiway A at MQS. Rotorcrafts are advised to taxi across taxiway “A” at a 90-degree angle to enter the runway prior to departure.
- 6.9. Traffic Pattern.** All rotorcrafts are to utilize a left pattern at 500’ AGL (1,160’ MSL) for Runway 29 at MQS, and a right pattern at 500’ AGL (1,160’ MSL) for Runway 11 at MQS. All other airports, follow published information as applicable. Noise Abatement procedures apply.
- 6.10. Simulated Engine-Out Procedures.** The requirements of SOPM 5.31 are waived. No autorotation’s will be conducted unless a CCA Instructor Pilot is onboard the rotorcraft. No “full down” autorotation’s will be conducted without the direct approval of the Chief Rotorcraft IP.
- 6.11. Fuel Reserves.** The fuel reserve required by SOPM 5.32 is amended to 30 minutes for VFR rotorcraft flights.

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6.12. Off Airport Operations. Off Airport operations are permitted only after direct approval by flight operations leadership. Leadership may require a flight to the off-airport location with an instructor pilot prior to approval.

6.13. Currency. Any renter pilot who has not flown within 60 days is required to complete a check flight with a CCA Staff member or Instructor Pilot prior to solo rental.

6.14. Flight Operations Leadership Staff Listing (Rotorcraft). The below diagram is the current list of staff for Rotorcraft operations.

Flight Operations Leadership (Rotorcraft):

Role	Name	Phone	Email
Chief Instructor Pilot	Jessie Robinson	610-764-7127	jrobinson@chestercountyaviation.com
Director of Flight Operations	Darren Lucas	717-368-4720	dlucas@chestercountyaviation.com
CCA Operations Phone Number: 610-596-1821			
CCA Operations Email: operations@chestercountyaviation.com			

SECTION 7: WEATHER MINIMUMS

- 7.1. Weather Briefings.** Prior to any cross-country flight, the pilot must obtain a weather briefing from 1-800-WXBRIEF (Flight Services), Fore-Flight, Garmin Pilot, or 1800wxbrief.com. For flights in the “Local Area” pilots should check at least the METAR, TAF, Winds Aloft, AIRMETS, SIGMETS, Weather Radar, and NOTAMs.
- 7.2. Temperature Limitations.** All flight training will cease when the surface outside air temperature (AWOS/METAR) is less than -10° C (14° F) or greater than +35° C (95° F).
- 7.3. Dual Flight Weather Minimums.** The following weather minimums apply to all dual training flights.

DUAL FLIGHT WEATHER MINIMUMS	
ALL Flight Operations	
Maximum Wind Velocity:	25 Knots Including Gusts
Maximum Crosswind:	Not to exceed Maximum Demonstrated for the aircraft
	50% of Maximum Demonstrated if Braking Action less than GOOD
VFR Traffic Pattern	
Ceiling:	1,700 AGL
Visibility:	3 SM
VFR Local Flight	
Ceiling:	2,000 AGL
Visibility:	5 SM
VFR Cross-Country	
Ceiling:	3,000 AGL
Visibility:	7 SM
IFR Operations	
Ceiling:	1,000 AGL (Lowest applicable straight-in approach minimums + 300' <i>when approved by Flight Operations Leadership</i>)
Visibility:	3 SM (Lowest applicable straight-in approach minimums + 1 SM <i>when approved by Flight Operations Leadership</i>)

7.4.Solo Flight Weather Minimums. The following weather minimums apply to all solo training flights.

SOLO FLIGHT WEATHER MINIMUMS				
TYPE OF FLIGHT	TIME OF DAY	CEILING	VISIBILITY	SURFACE WINDS
STUDENTS SOLO IN THE PRIVATE PILOT COURSE:				
Traffic Pattern	DAY	1,700 AGL	5 SM	<ul style="list-style-type: none"> • 15 Knots unless logbook endorsement to higher velocity • Crosswind in logbook endorsement • 5 Knots Tailwind
Local Flight	DAY	2,500 AGL	7 SM	
Cross-County Flight	DAY	3,500 AGL	10 SM	
STUDENTS SOLO IN THE COMMERCIAL PILOT COURSE:				
Traffic Pattern	DAY OR NIGHT	1,700 AGL	5 SM	<ul style="list-style-type: none"> • 20 Knots unless otherwise authorized • Not to exceed demonstrated crosswind limitation. • 5 Knots Tailwind
Local Flight	NIGHT	3,000 AGL	10 SM	
	DAY	2,000 AGL	5 SM	
Cross-County Flight	DAY	3,000 AGL	7 SM	
	NIGHT	5,000 AGL	10 SM	

7.5.Rental Flight Weather Minimums. The following weather minimums apply to all rental flight.

RENTAL FLIGHT WEATHER MINIMUMS	
ALL Flight Operations	
Maximum Wind Velocity:	25 Knots Including Gusts
Maximum Crosswind:	Not to exceed Maximum Demonstrated for the aircraft
	50% of Maximum Demonstrated if Braking Action less than GOOD
VFR Traffic Pattern	
Ceiling:	1,700 AGL
Visibility:	5 SM
VFR Local Flight	
Ceiling:	2,000 AGL
Visibility:	5 SM
VFR Cross-Country	
Ceiling:	3,000 AGL
Visibility:	7 SM
IFR Operations	
Ceiling:	1,500 AGL (Lowest applicable straight-in approach minimums + 500' <i>when approved by Flight Operations Leadership</i>)
Visibility:	3 SM (2 SM <i>when approved by Flight Operations Leadership</i>)

7.5.Thunderstorms.

7.5.1. Avoid ALL thunderstorms by at least 20 NM.

7.5.2. Do not takeoff or land in the face of an approaching thunderstorm.

7.5.3. Do not attempt to fly under a thunderstorm even if you can see through to the other side.

7.5.4. Remember that computer generated “radar” depictions are not real time and may be as much as 15 to 20 minutes older than the time indicated in the display. The weather may have moved significantly from that shown on the display.

7.6. General Operating Practices. FAA AC91-92 says, " As part of the preflight familiarization with all available information concerning a flight, each pilot should review all appropriate sources (including but not limited to Chart Supplements, the AIM, and NOTAMs), for pertinent information on current traffic patterns at the departure and arrival airports, airport environment, routing, departure and approach procedures, NOTAMs, weather, GNSS availability (if required), crew duties, standard cockpit procedures (e.g., transferring aircraft control), protected phrases, potential emergencies and their remedies, alternates and alternative mission options, fuel and timing, and Take Off and Landing Data (TOLD) speeds. Preflight actions are a rehearsal of the whole flight with contingencies added. Pilots should use a checklist to ensure they do not miss any area of the operation (see Appendix B for a sample preflight checklist). For many GA pilots, the Flight Service Station (FSS) remains an important source of comprehensive weather and aeronautical information. However, most pilots have become more accustomed to performing a self-briefing than calling an FSS. The FAA considers that a self-briefing may be compliant with current Federal aviation regulations. By self-briefing, pilots can often improve their knowledge of weather and aeronautical information. Flight Service personnel are available should a pilot need assistance."

SECTION 8: EMERGENCY OPERATIONS/PROCEDURES

8.1. Emergency Procedures Testing.

- 8.1.1.** All student and instructor pilots must regularly review procedures to ensure quick and accurate reactions during an actual emergency. To evaluate this, CCA uses both Oral and practical emergency tests.
 - 8.1.1.1.** Instructor pilots will test emergency procedures every 60 day to verify the student competency with the aircraft emergency procedure.
 - 8.1.1.2.** Pilots who do not complete a test within the required period will be non-current and will not fly until the test is completed in a satisfactory manner.
 - 8.1.1.3.** Scenario Based Emergency Training. The oral recall procedures and practical tests are only the first step in knowing what to do in an emergency. Instructor pilots will regularly give students realistic emergency situations in the air and on the ground that require application of knowledge and not just rote memorization.
 - 8.1.1.4.** Test Failures. If a pilot fails a test, he/she will retrain with a instructor pilot and may retake the test. However, if taking, grading and retaking a test impacts the flight schedule (will cause a delayed departure) the student will not fly and will be assessed a No Show.

8.2. Forced Landings. DO NOT PANIC. In the event of a forced landing stay with the airplane unless you can see a building or are assured of reaching help by leaving the airplane. It is easier to locate an airplane rather than a person, and the airplane will provide you with shelter. Ensure that the ELT is activated by placing the switch in the ON position. Remove the Survival Kit (If installed) from the aircraft. Know that rescue personnel are searching for you and will locate you. If you are able, call CCA Operations (610-465-1225). CCA Operations will begin to enact the CCA SMS Emergency Response Plan (ERP).

8.3. Precautionary Landing at an Airport. DO NOT PANIC. Land at the nearest suitable airport, complete the appropriate emergency checklist. Once safely landed, ensure the safety of anyone on board the aircraft and after completing any required checklists. Do not admit fault or blame to anyone. Call CCA Operations (610-596-1821). CCA Operations will begin to enact the CCA SMS Emergency Response Plan (ERP).

8.4. Unsafe Landing Gear Indications. DO NOT PANIC. If there are any indications of the landing gear not being down and locked, advise the controlling agency, if applicable, of the situation and exit the traffic pattern. Proceed to a safe altitude and airspace prior to attempting any troubleshooting. Set realistic limits for minimum fuel, minimum altitude, and maximum distance from the airport. When any of the limits is reached, troubleshooting will cease.

- 8.4.1.** Attempt to obtain a gear down and locked indication using the appropriate checklists in the CCA Checklist and Aircraft POH. Prior to an attempted landing, contact CCA Flight Operations on frequency 123.500 MHz, if in the local area to obtain assistance in resolving the discrepancy. The pilot will declare an emergency if the gear is questionable.
- 8.4.2.** If a gear down and locked indication is not obtained, declare an emergency and proceed to an airport with emergency equipment available and within the range of the current fuel load. If possible, return to Chester County (KMQS). Do not add fuel exhaustion to the emergency. The pilot will over-fly the runway to receive a visual gear check. After landing, the pilot will use minimal braking, taxi clear of the runway and shut down or shut down on the runway, if necessary. The airplane will be towed to a maintenance facility for

inspection. Call CCA Operations (610-596-1821) and do not take off until Maintenance clears the discrepancy.

8.5. Accident or Incidents. DO NOT PANIC. If you are involved in an accident or incident, contact Flight Operations Leadership immediately after ensuring the safety of anyone on board the aircraft and after completing any required checklists. Do not admit fault or blame to anyone. Give all related facts to CCA officials, but NOT to news reporters or anyone else. All news releases will be made by CCA officials. An aircraft involved in an accident, incident, or occurrence will be grounded until released by the CCA Flight Operations or CCA Maintenance Personnel. An aircraft involved in an accident will not be moved from the accident site until released by the NTSB or FAA. Keep your flight crew and passengers together. If an authorized investigator requests to see your certificates, you must present them for inspection but do not surrender the certificates to them. Complete a NASA report within 10 day of the accident, incident, or occurrence and send it by registered mail return receipt requested or by the internet. Keep a copy of the report and all documents relating to your flight for your files. Prepare a written report describing the entire accident, incident, or occurrence. Keep this for your records only.

8.6. Chester County Airport Authority (CCAA) Reporting.

8.6.1 If Emergency Services are required, immediately call 911. Afterwards, notify Airport Manager, Gary Hudson (484-880-2959) of situation. The airport manager will close the airport if required; the airport manager must be made aware of the situation prior to emergency vehicles or non-CCAA vehicles being present on taxiways, runways or airport movement areas.

8.6.2 Issuing a NOTAM. The airport manager will issue the NOTAM if necessary, but if any CCA personnel need to, call 877-487-6867.

8.7. Fire Precautions. Engine fires on starting are mostly caused by improper starting procedures. Always follow the starting procedure in the Pilot's Operating Handbook (POH). Do not over prime the engine as it can easily lead to an engine fire. For all airplane fires, know and follow the emergency procedures in the POH.

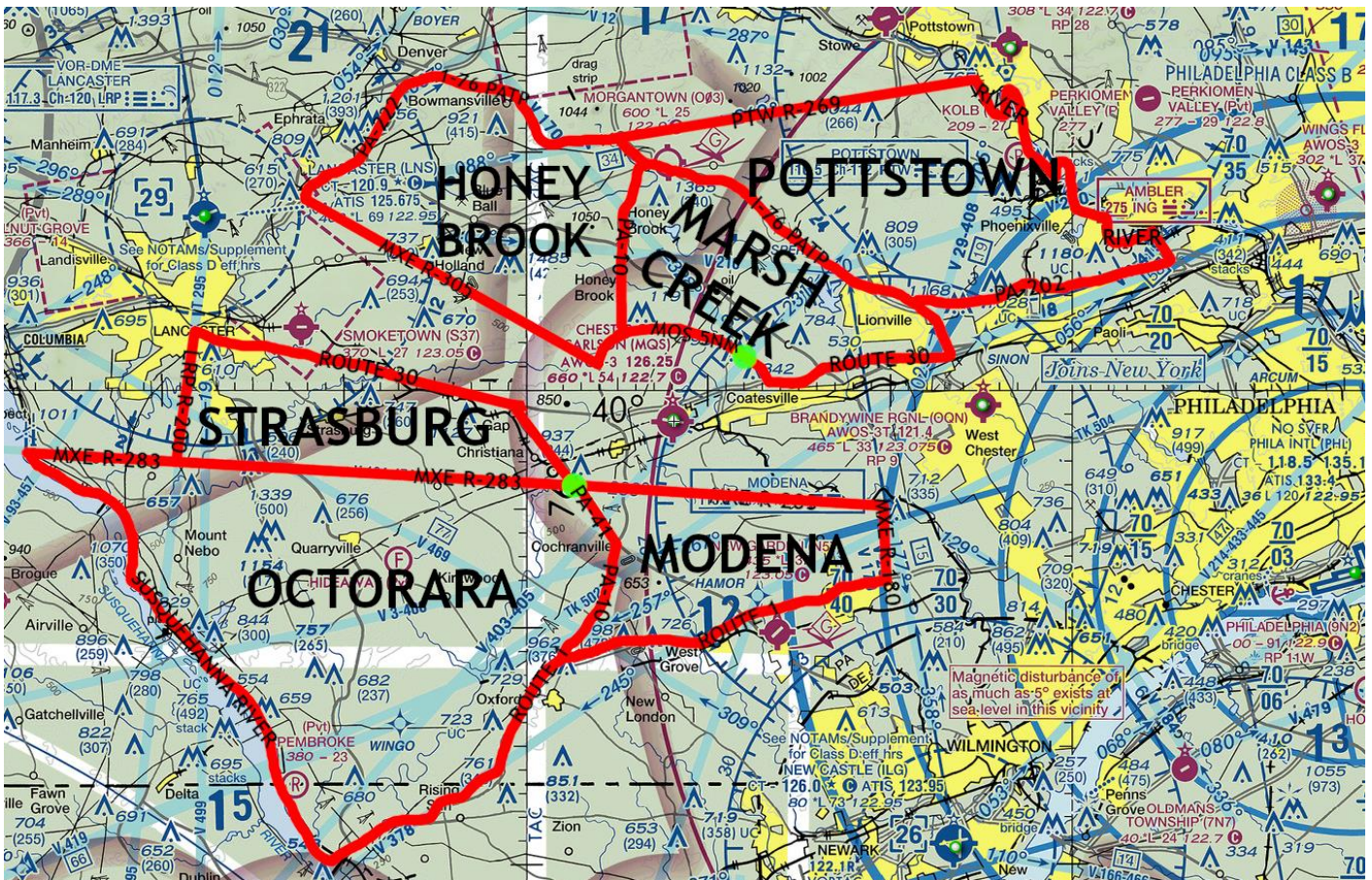
8.7.1. After a fire, do not attempt to restart the engine until a mechanic has inspected it.

8.7.2. Know the location of fire extinguishers and how to use them. Avoid breathing the discharged fumes of any fire extinguisher since the extinguishing agent may be as hazardous as the fire.

8.7.3. For engine fires on the ground, when you egress the aircraft after completing the "Engine Fire After Start" Recall Procedure, bring the Fire Extinguisher with you so that it is available for use. Do not re-board the aircraft until maintenance has determined it is safe to do so.

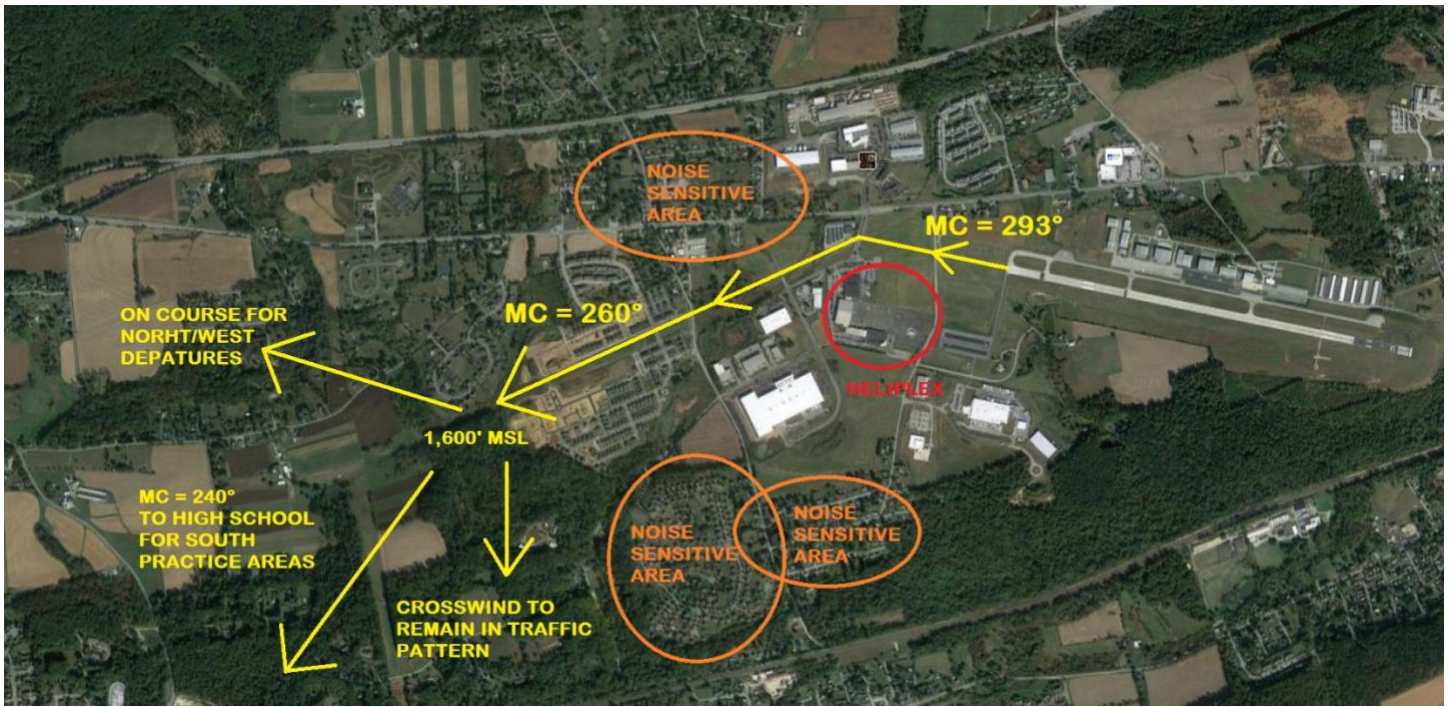
APPENDIX A: LOCAL PRACTICE AREAS

Local VFR Practice areas. Monitor 123.500 MHz in the practice areas.

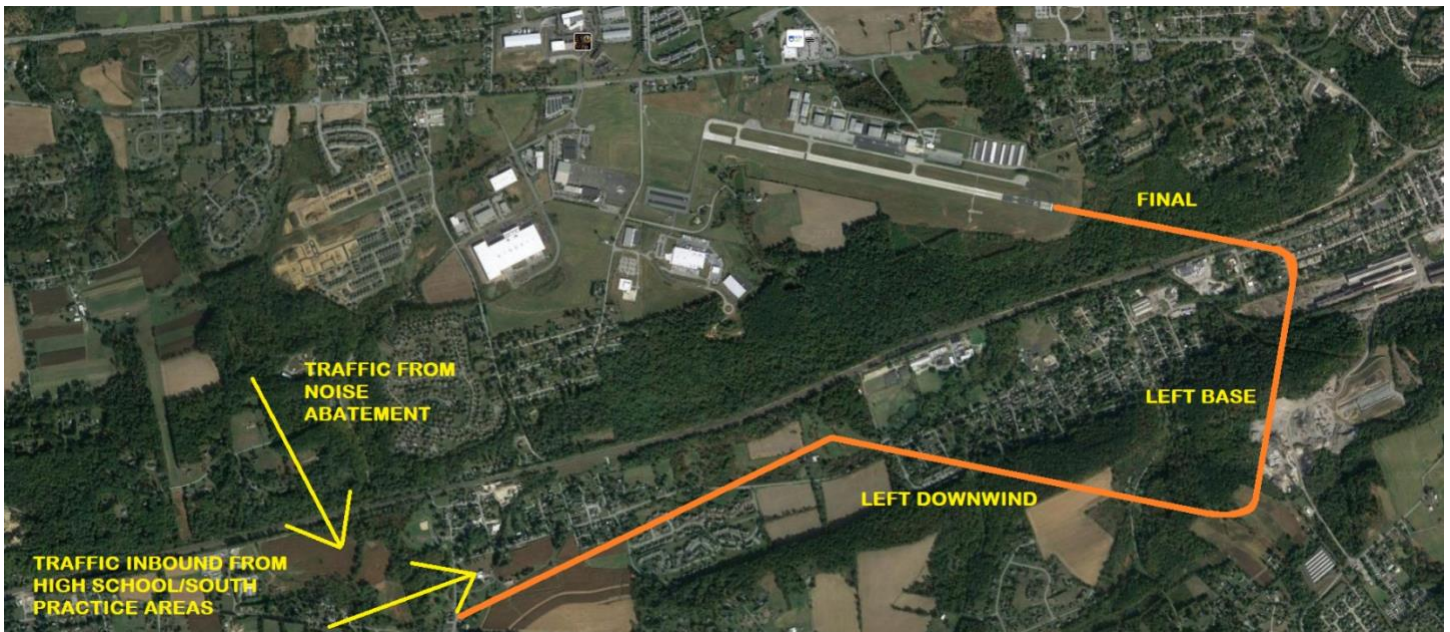


APPENDIX B: NOISE ABATEMENT / VFR DEPARTURE PROCEDURES

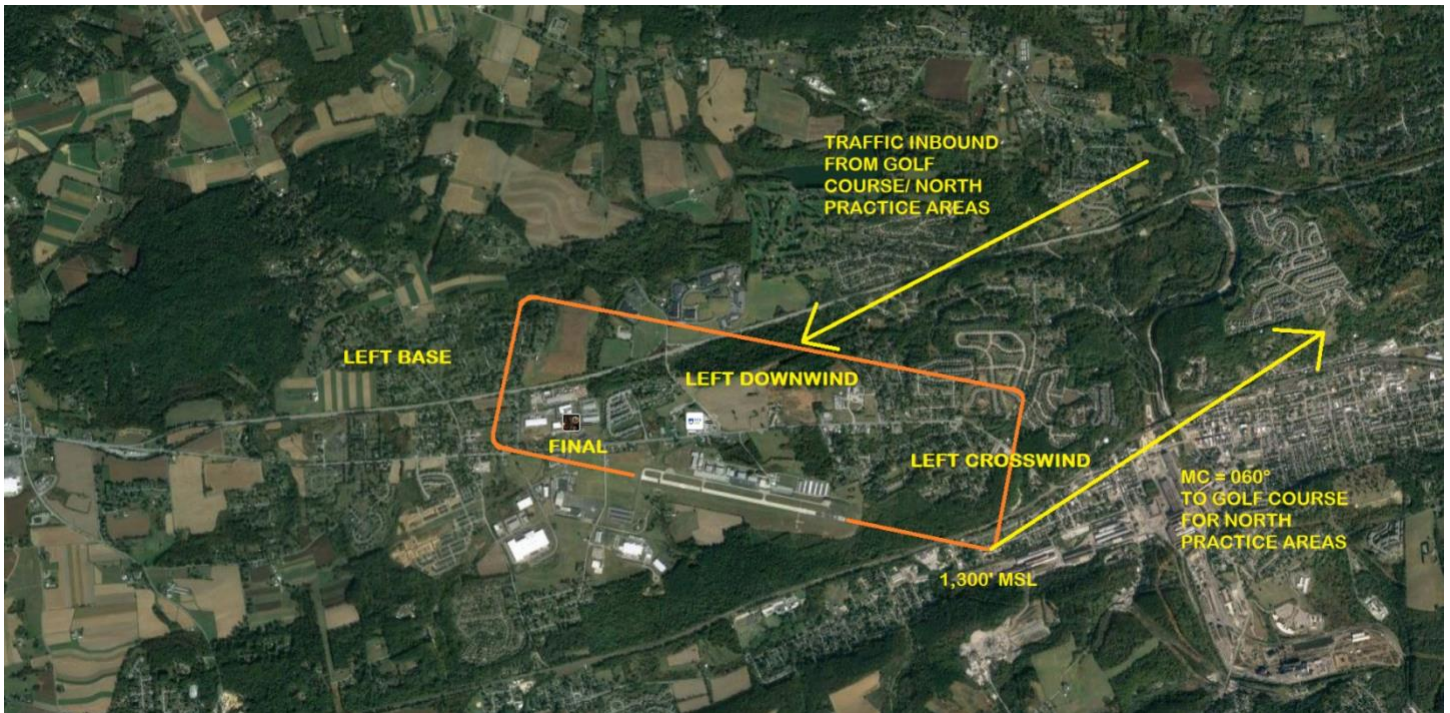
Runway 29 Departures/Noise Abatement:



Runway 29 Traffic Pattern:



Runway 11 Traffic Pattern:



APPENDIX C: PROPELLER SAFETY

Safety awareness around aircraft propellers is a basic aviation practice that should be ingrained in every pilot from the very beginning of their flight training.

- A. **Assume Hot Mags.** First and foremost, you should approach every propeller with the mindset that the Magnetos are HOT, and the Ignition is ON. Never assume that this is not the case. Be aware that any movement of the propeller could cause the engine to start or to kick back with considerable force.
 - a. Magneto Checks are to be done during Run-Up at the correct RPM. Checking them at lower RPMs can result in arcing and internal damage to the Magnetos
- B. **Propeller Arc.** The Propeller Arc is an imaginary box at least as wide as the entire propeller when it is sitting in a horizontal alignment. To be safe the box is about one foot wider on each side and projects at least a foot in front of and behind all portions of the propeller. It also extends vertically from the ground to at least several feet above the propeller when it is in a vertical alignment. Think of it as a rectangle painted on the ground beneath the propeller that rises to surround the propeller when it is turning. The idea is that you mentally visualize this “box” and pay close attention to it. Any activity inside this “box” is at higher risk.
 - a. Never enter the Propeller Arc except when you have a legitimate reason such as preflight or post flight inspections. When your inspection requires you to be behind the propeller, such as checking oil or under the propeller when inspecting the gear, do so with caution. The best plan is to move in to position outside the arc. Don’t duck under the propeller as a short cut to get to the other side
 - b. Never enter the Propeller Arc until you have ensured that the ignition/magnetos are OFF. If someone (including other pilots or instructor pilots) is in the cockpit advise them that you will be in the vicinity of the prop arc during your pre and post flight inspections.
 - c. Never touch the propeller except when you have a legitimate reason and even then keep the bulk of your body forward of the propeller arc and be prepared to move rapidly away from the arc should the engine start or kickback
 - d. Since we are always assuming that the Ignition is ON (Mags are HOT), moving the propeller is a risky operation.
 - i. Having the chocks installed and/or the parking brake set before moving a propeller is always a good idea. During preflight, do not remove the chocks until after you have completed your propeller inspections.
 - ii. Move the propeller by hand only when it is necessary and with extreme caution.
 - iii. Move the propeller slowly and ONLY in the direction of normal rotation. Moving it backwards can damage other engine components (vacuum pumps, piston rings, etc.)
 - iv. Even when the Mags are NOT hot, Propeller Kickback can occur with a piston engine due to compression. Kickback can occur with surprising force and can result in serious injury such as cuts, broken bones, etc
 - v. If you are NOT holding on to the tow bar it must be removed from the aircraft. Do not place the tow bar on the ground in front of the aircraft. Unhook the tow bar and stow it in the baggage compartment when removed from the aircraft.
 - vi. Brief your passengers about propeller safety and advise them to stay completely away from the propeller(s).
 - vii. “Clear Prop” callouts prior to start include a thorough inspection of the entire area, not just the Prop Arc. Look all around the aircraft for hazards such as

persons or vehicles approaching, ground equipment positioned nearby, foreign objects or loose asphalt, cones, and what is going on behind the aircraft where prop blast might create a problem.

C. Aircraft Lights and Propellers.

- a. Lighted Rotating Beacons, or Anti-Collision Lights on aircraft without a beacon system, are the internationally accepted indication that a propeller is rotating or soon will be rotating. The lights go ON prior to start and stay ON until the propeller(s) come to a complete stop.

D. Follow the Shutdown and Post Flight Checklists. CCA checklists are designed to ensure that the following conditions have been met. This is the reason the Shutdown Checklist is a Read & Do procedure.

- a. Master switch is OFF
- b. Magnetos are off and the key is removed and placed on the glareshield (If applicable)
- c. Mixture is in the IDLE CUTOFF position
- d. Throttle is at IDLE
- e. The chocks are installed.
- f. Control locks INSTALLED

E. Hand Propping. CCA does not allow anyone to hand prop an airplane. The dangers are extreme to those who are not highly familiar and trained.

APPENDIX D: COLD WEATHER OPERATIONS

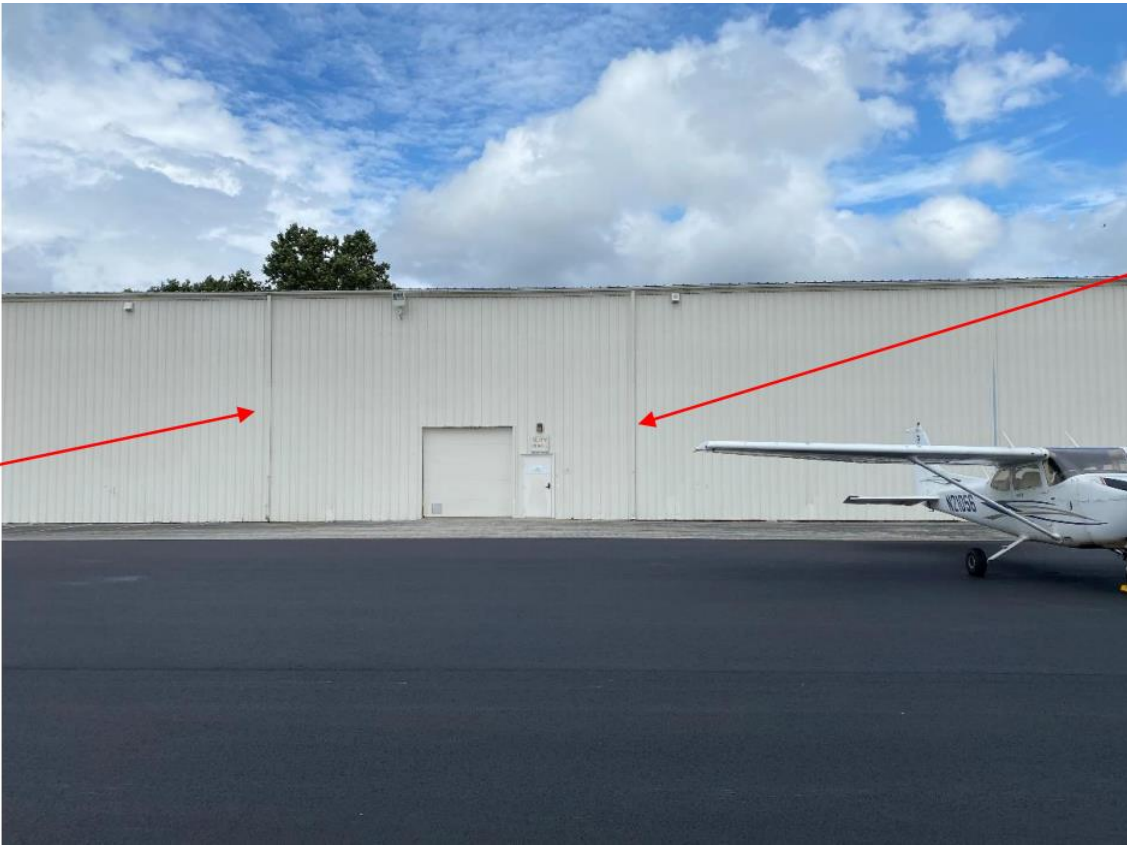
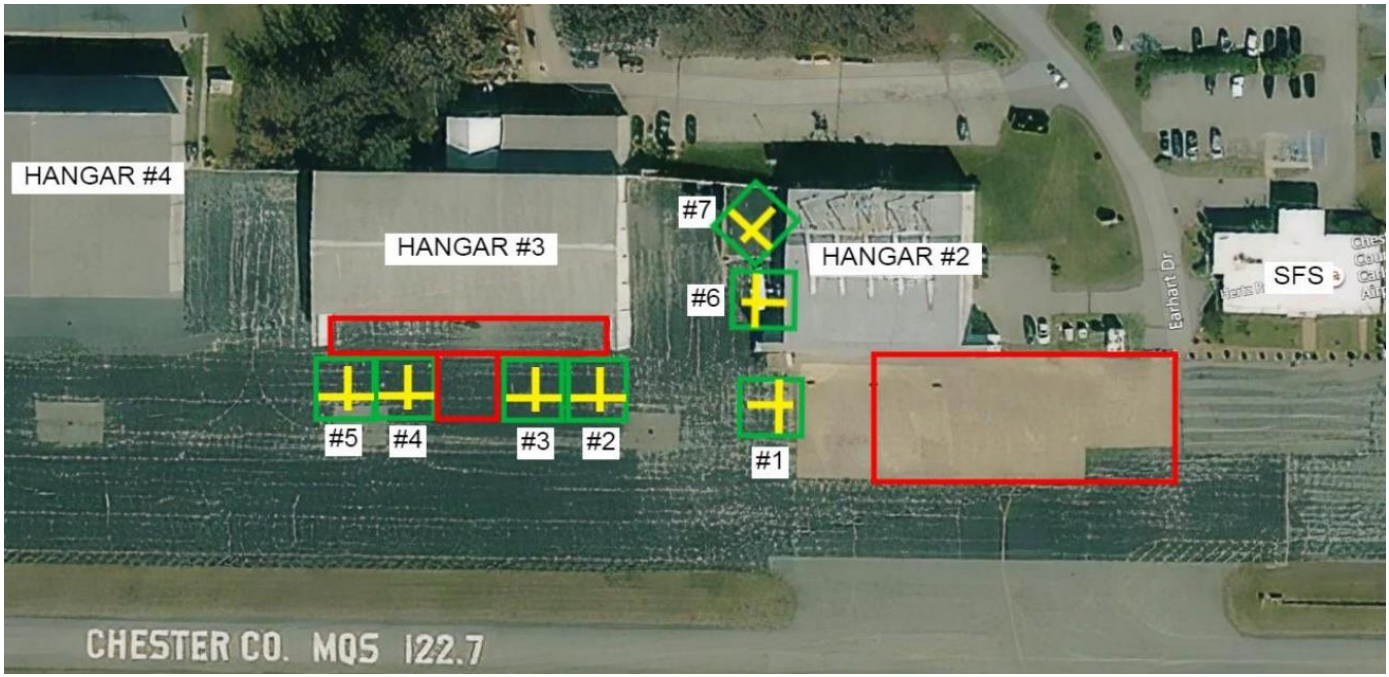
- **Clothing:** Please consider proper clothing during your flights. Not only do these clothing requirements help ensure surviving an off field landing they also promote the required thorough pre-flight inspections. If you're cold, you are more likely to rush through the pre-flight to limit your exposure to the unpleasant conditions. Remember, if you ever think you are going too slow, you need to remember to slow down (due to the tendency to rush if you think you are going too slow)
- **Frost:** Aircraft will have the potential to accumulate frost prior to engine start, and even after engine start and prior to takeoff, if the temperature and dew point spreads are close together. Frost, the thickness of coarse sandpaper has the potential to increase drag by 40% and reduce lift by 30% and MUST be removed prior to flight.
- **Brakes in the Snow:** Remember to taxi more slowly on ramps contaminated by snow or ice. Braking action will be greatly reduced from dry pavement. Contaminated surfaces warrant much slower speeds. Remember to NOT lock up the brakes on snow and ice, but rather "pulse" the brakes to prevent wheel lockup. This is what the anti-lock brakes on your car accomplish, and greatly increases braking ability with the addition of preventing flat-spotting tires if a tire becomes locked up on snow/ice and then contacts dry pavement.
- **CO Awareness:** All of us will be utilizing aircraft heaters more frequently during the winter months, and therefore the risk of CO being admitted to the cabin increases. Remember to keep the CO detector in your scan. If you see the indicator turning black, shut off the heater/defroster, open the fresh air vents, and proceed to the nearest airport for landing.
- **Carburetor Icing:** Colder temperatures, if accompanied by high humidity (temp/dew point spreads within 5 degrees) also increase the likelihood that carburetor ice may form. Remember to use carburetor heat during low power settings, and to verify proper operation during the runup prior to takeoff.
- **Cold Starts:** We must limit cold starts for our aircraft as the engine oil is very viscous (resistant to flow) and doesn't properly lubricate the engine until the engine warms up. The engine is also made of aluminum and steel, two dissimilar metals that expand and contract at different rates with changes in temperature. This creates tighter tolerances within the engine, and increased wear and tear during cold starts. Leaving your aircraft in the hangar for the pre-flight inspection will keep the engine warm, as will taking an aircraft that has recently flown (within the last hour to 30 minutes). Please respect aircraft starter limitations. If it is necessary, a engine pre-heater must be used before attempting a start to reduced damage on engine components.
- **Internal Components:** Keeping the interior of the aircraft warm also helps the gyroscopes within certain instruments stay warm and reduces wear on their components
- **Temperature:** No aircraft shall be started with an engine temperature below 25 degrees (F) or -4 (C). Starting with an engine temperature below 32 degrees (F) or 0 (C) requires a usage of an engine preheater for at least 45 minutes or 90 minutes in the heated hangar.

CCA RCAM Conditions			
Ramp, Taxiway or Runway Conditions Limitations			
RwyCC	Dual Flight	Rental Flight	Solo Flight
6	Yes	Yes	Yes
5	Yes	Yes	Yes
4	Yes	Yes	No
3	Yes	No	No
2	No	No	No
1	No	No	No
Contaminated Surfaces	Yes*	No	No

*Must not exceed on ½ inch or greater of snow, slush, or standing water. Taxi speed must not exceed 5 knots when on contaminated surfaces.

- ALL Dual flight training operations must cease in RwyCC 2 or less. Braking action must be at a minimum of “Medium.” No dual flight training operations can occur on greater than ½ inch of snow, slush, or standing water. Taxi speed must be reduced when operating on contaminated surfaces. When taxiing on contaminated surface DO NOT EXCEED 5 knots ground speed.
- ALL rental flight operations must cease in RwyCC 3 or less. No renter pilot is allowed on any contaminated surfaces including snow, slush, or standing water.
- ALL student pilot solo flight operations must cease in RwyCC 4 or less. No student pilot operations are allowed on any contaminated surfaces including snow, slush, or standing water.
- RwyCC’s are report via Notice to Airmen (NOTAM) and can be found at: <https://www.notams.faa.gov/dinsQueryWeb/> OR call 1-800-WXBRIEF and speak with a weather briefer to get the most current information.
- Please report changing conditions to CCA Staff as soon as possible to allow for other pilot to become more informed.
- Since runway conditions are constantly changing, contact Connor Lapps (Operations Manager) (clapps@chestercountyaviation.com or call 610-596-1821) for updates on current conditions.

APPENDIX E: AIRCRAFT PARKING SPOTS



APPENDIX F: TFR PROCEDURES

When a VIP TFR is effect, the following procedures must be strictly followed. All IFR departures should follow normal procedures and receive a clearance and a release off KMQS prior to departure. VFR aircraft should do the following:

When Departing KMQS VFR:

1. File a VFR Flight Plan from KMQS to the desired destination with a Flight Service Station (FSS). Then, file a return flight plan from the desired airport back to KMQS. 1-800-WXBRIEF or 1800WXBRIEF.com or any other flight plan filing service is acceptable. Ensure the time of your flight plan matches your estimated departure from KMQS.
2. Prior to departure call Philadelphia Clearance Delivery (800-354-9884) or attempt to reach them over the radio on 125.600 MHz. When calling Philadelphia Clearance Delivery over the radio reception is limited. Best chance of reaching Philadelphia Clearance Delivery is in the runway 29 run-up area.
 - a. Say the following to Philadelphia Clearance Delivery: “Hello Philadelphia Clearance Delivery, this is the pilot of N12345 (*Applicable N-Number*), on the ground at MQS. I would like to get a squawk code to depart VFR to XYZ (*Destination Airport*).”
 - b. The controller will ask type of aircraft and requested enroute VFR altitude.
 - c. Once the controller gives you the discrete squawk code and departure frequency read that back to them to verify.
3. Prior to departure, verify the transponder is set with the discrete ATC assigned code. Additionally, ensure the assigned departure frequency is tuned in your radio ready for after your departure. Ensure that the COM2 radio is monitoring 121.500 MHz anytime inside the TFR. 121.500 MHz is the frequency used by ATC to reach aircraft if they cannot be reached on approach frequencies.
4. If departing runway 29, follow the noise abatement procedure to 1,600’ MSL then turn on course. If departing runway 11, depart the traffic pattern to the northeast on a 45-degree angle to 1,600’ MSL then turn on course. Upon reaching 1,600’ MSL call the assigned departure frequency.
 - a. “Philadelphia Approach, N12345 is at 1,600’ (*As the Altimeter reads*) climbing 3,500 (*Request VFR Altitude*).”
 - b. Follow all of ATC’s instructions.

When Arriving at KMQS VFR (Before Entering TFR):

1. If not already completed, establish two-way radio communications with ATC by obtaining VFR Flight Following from a controller.
2. Ensure you are squawking a discrete code assigned by ATC prior to entry.
3. Once you report that you have the airport in sight, ATC will release you back to the CTAF frequency. You **MUST** remain on the assigned transponder code until you are on the ground.

Always ensure while operating in the TFR that you:

1. Have a VFR flight plan on file with a FSS.
2. Establish two-way radio communications with ATC.
3. Squawk the assigned ATC transponder code.
4. Monitoring 121.500 MHz on COM2

APPENDIX G: RENTER AGREEMENT

CCA Aircraft Training & Rental Agreement

Safety

- I will always choose the safest course of action with considerations to the FAR's and CCA SOPM's.
- I will report any safety-related occurrence/accident through the Voluntary Safety Occurrence/Accident Report System (VSOAR). Link: ccasafety.com

Flight Operations/General Requirements

- Clients on training and rental flights shall comply with all requirements of the current version of the Chester County Aviation (CCA), Standard Operating Procedures Manual (SOPM) and Federal Aviation Regulations (FAR). The most conservative/restrictive requirement shall apply when there is a conflict between the CCA SOPM and FAR.
- Safety related incidents, accidents, and concerns shall be reported using the Voluntary Safety Occurrence & Accident Reporting (VSOAR) form at ccasafety.com.
- Training and rental flights shall stay within the SOPM weather limits.
- CCA requires a minimum fuel reserve of 60 minutes for aircraft and 30 minutes for rotorcraft.
- Training and rental flights shall be scheduled through the CCA Chronos website.
- Cancellations shall be made as far in advance as possible by cancelling in Chronos, calling the CCA front desk, or contacting a CCA employee. Excessive cancellations, especially within 24 hours, will result in charges for instructor and aircraft time when not due to aircraft maintenance, weather, or illness.
- Instructors shall be scheduled with 24+ hours of notice unless confirmed directly with the instructor.

Rental Requirements (Without CCA Instructor)

- Rental insurance is required with liability limits of \$1,000,000 each occurrence, \$100,000 per passenger, \$5,000 in airplane hull damage, and \$35,000 for rotorcraft hull damage.
- An aircraft checkout is required every 12 calendar months in each make & model of aircraft flown.
- Renter pilots must have done 3 takeoffs and landings within the last 90 days in category and class.
- Flight between sunset and sunrise requires an instrument rating and a CCA night checkout within 12 calendar months.
- Flight in instrument conditions requires an instrument rating and a CCA instrument checkout within 12 calendar months.
- Only CCA instructors are allowed to provide instruction in CCA aircraft.
- Overnight rentals shall be charged the greater of flight time or the minimum daily rate of 2 hours Monday to Thursday and 3 hours Friday to Sunday.
- Aircraft renters shall be responsible for all landing, parking, & other fees but will be reimbursed for fuel purchased at other airports.
- Landing is only approved at chartered airports with paved runways (no soft fields).
- Hand propping of CCA aircraft is prohibited.
- Renter pilots and passengers shall not enter or exit airplanes with the engine running.
- Rental aircraft shall be pre-heated before starting if engine temperature is below 32°F (0°C).
- Renter pilots shall be responsible for causing damage or excessive cleaning not covered by insurance.
- Aircraft rental is not guaranteed and CCA may cancel on short notice due to repairs or maintenance.
- All overnight rentals are subject to approval by CCA management.
- Standard operating hours are from 8:00 AM to 6:00 PM daily and rental flights outside of these hours may not be possible unless confirmed with a CCA employee.
- CCA SHALL BE NOTIFIED IMMEDIATELY OF EMERGENCIES OR AIRCRAFT DAMAGE AT 610-596-1821

APPENDIX H: STAFF LISTING

Below is a list of current staff members and their contact information should you need to reach them.

Ownership and Finance:

Role	Name	Phone	Email
President	Ethan Crane	610-596-1811	ecrane@chestercountyaviation.com
Controller	Zach Clemens	610-596-1817	zclemens@chestercountyaviation.com

Management:

Role	Name	Phone	Email
Operations Manager	Connor Lapps	610-596-1821	clapps@chestercountyaviation.com

Maintenance:

Role	Name	Phone	Email
Director of Maintenance (DOM)	Peter Bargren	N/A	pbargren@chestercountyaviation.com
Operations Manager	Connor Lapps	610-592-5788	clapps@chestercountyaviation.com

Flight Instruction Team:

Role	Name	Phone	Email
Chief Instructor Pilot	Josh Wanagel	610-596-1814	jwanagel@chestercountyaviation.com
Assistant Chief Instructor Pilot	Thomas Birsch	610-405-0715	tbirsch@chestercountyaviation.com
Safety Officer	Nicholas McBride	610-930-6068	nmcbride@chestercountyaviation.com

CCA Operations Phone Number: 610-596-1821

CCA Operations Email: operations@chestercountyaviation.com

