Backcountry Aero Club Standard Operating Procedures

Contents:

1. Introductory
2. Preflight Planning and Safety
3. Pilot Currency Requirements & Standards
4. Aircraft Checkout Procedures & Training Operations
5. Standard Flying Procedures
6. Inspections & Maintenance
7. Operating Limitations
8. Incident/Accident Reporting

1. Introductory

Welcome to Backcountry Aero Club! Our mission is to provide opportunities for pilots of all skill levels to experience freedom in scheduling and experiences beyond simple airplane rentals. We are a group of like minded pilots of all skill levels, who enjoy sharing our passion for aviation in many different ways, including backcountry flying!

2. Preflight Planning and Safety

Safety is one of the most important aspects of aviation. It is not something that should be compromised for any reason whatsoever and must be taken very seriously. As a flying club, we must ensure all our members are knowledgeable and up to date on the basics of following safety guidelines, rules, and

procedures. Doing this will help ensure safer practices upon our pilots, passengers, and the rest of the community not only in the air but on the ground too.

Every day, pilots encounter hazards and risks, and it is important that we can identify these hazards and know how to mitigate the risks. Identifying hazards and the associated risk is key to preventing accidents. If a pilot fails to search for hazards, it is likely that he or she will neither see them nor appreciate them for what they represent.

Aeronautical decision making (ADM) is important to ensuring safety. Just like going over checklists in the airplane is a critical aspect of safe flying, it is also our job to utilize ADM tools to appropriately respond to factors in the flight environment. If any one or more of these have an impact on safety, it's critical to make a no-go decision.

The first question we must ask ourselves is: Am I the Pilot safe to fly? An acronym that presents an easy way to remember the factors that might impair a pilot's ability to fly safely is: I'MSAFE

- **I**llness - do I have any symptoms?
- **M**edication - have I been taking prescription or over the counter drugs?
- **S**tress - am I under any physiological pressures? Worried about any family, health, or financial matters?
- **A**lcohol - have I been drinking?
- **F**atigue - am I tired or not adequately rested?
- **E**motion - am I emotionally upset?

Next, we must ensure that our Aircraft is safe and legal to fly. To do this, we can use AROW to ensure the necessary documents are where they need to be.

- **A**irworthiness - does the aircraft have a valid & current airworthiness certificate?
- **R**egistration - is the registration current?
- **O**perating Limitations - is the POH or AFM easily accessible? Are the required placards present?
- **W**eight and balance - is the current weight and balance in the aircraft?

What about the enVironment in which we will be flying in? Here is a brief checklist derived from 14 CFR 91.103 that we can go through to ensure safety of flight within our environment:

- **N**OTAMS
- **W**eather
- **K**nown delays
- **R**unway lengths
- **A**lternates
- **F**uel reserves
- **T**akeoff/landing distance data

The final and most important factor within our personal preflight check should include reviewing any external pressures that may affect flight safety. Examples of this include passengers relying on you to get them somewhere, other crew members trying to push you beyond your personal minimums, or something upon yourself like "get-there-itis".

Safe flying depends on more than just a pilot's experience and ability. Pilots also need to be aware of the attitudes that may influence their judgment and decision-making abilities to avoid dangerous outcomes. The FAA outlines five hazardous attitudes that can compromise a pilot's decision-making: resignation, anti-authority, impulsivity, invulnerability, and macho, also known as RAIIM. Understanding each of these hazardous attitudes can help pilots of all skill levels manage risk and make safer decisions in the skies.

Resignation: "What's the use?" Pilots with an attitude of resignation lack the confidence and conviction to believe they can make a difference in what happens to them. These pilots tend to give up easily when faced with challenges and don't take criticism well. This attitude is particularly dangerous for pilots in an emergency situation because they may believe they are helpless and resign to their fate instead of taking action. **Antidote: I am not helpless, I can make a difference.**

Anti-authority: "Don't tell me!" Pilots with an anti-authority attitude tend to believe that rules, regulations, and safety procedures don't apply to them. For example, an anti-authority pilot may neglect their checklists or refuse to take advice from instructors or ATC. Be advised that having an anti-authority attitude is different from simply questioning authority. Pilots always have the prerogative to speak up to authority if they believe a mistake has been made. **Antidote: Follow the rules, they are usually right.**

Impulsivity: "Do it quickly!" According to the FAA, an attitude of impulsivity is found in pilots who "feel the need to do something, anything, immediately." Instead of taking a moment to think things through or select the best alternative, a pilot with an impulsive attitude does the first thing that comes to mind. Reacting too quickly can lead to irrational decisions, such as skipping a preflight or rushing to get home despite inclement weather. Pilots are encouraged to take time to evaluate their options before choosing a course of action. **Antidote: Not so fast, think first.**

Invulnerability: "It won't happen to me!" Many people, not just pilots, fall into a pattern of thinking that accidents happen to others, but never to them. This attitude of invulnerability can become a safety concern when pilots fail to consider the risks of their actions. **Antidote: It could happen to me.**

Macho: "I can do it!" Pilots with a macho attitude are always trying to impress others and prove themselves by taking unnecessary risks. Both men and women are susceptible to a macho attitude, which leads to foolish and often dangerous behavior. While pilots must have a high level of confidence in their abilities, it's important to avoid becoming overconfident and adopting a macho attitude. **Antidote: Taking chances is foolish.**

Anyone can be guilty of one or more of the hazardous attitudes, which are a normal part of human nature. Understanding these attitudes and recognizing when they occur will help pilots make better decisions and avoid unnecessary danger. Approximately three out of four accidents result from improper human performance. Live to fly another day, DON'T become a statistic.

3. Pilot Currency Requirements & Standards

The pilot in command of each club aircraft must be a member of the club. 14 CFR 61.57 states that to act as pilot in command with passengers you must perform and log at least 3 takeoffs and 3 landings within 90 days in the same category and class (to a full stop in a tailwheel OR 1hr after sunset to 1hr before sunrise) to be considered current, but this does not maintain proficiency.

Club pilots are encouraged to maintain proficiency by maintaining their 3 takeoffs and landings every 30 days, however club pilots are required to fly with an instructor if currency requirements are not met after 45 days for tailwheel aircraft, and 180 days total in tricycle gear aircraft. Currency requirement timelines are counted separately for night flying with the added requirement of being made to a full stop.

As for Instrument flying, club members must also obtain the required "6 HITS" from 14 CFR 61.57 (6 approaches with Holding Intercepting & Tracking) prior to flying under IFR. Instrument competency standards include the execution of all maneuvers to reasonable instrument airman certification standards. If the successful outcome of any maneuver or approach is seriously in doubt and prompt corrective action is not taken (such as a missed approach or appropriate recovery), the club standards are not met.

No club member shall perform any pilot duties in any aircraft within 12 hours after consuming any quantity of alcohol. Club pilots MUST NOT SMOKE OR VAPE while inside any club aircraft or within 50 feet of a club aircraft, passengers or guests must observe the same rule. This is not only intended to promote fire safety, but to preserve gyroscopic instruments from damage (due to smoke particles), to protect aircraft interiors, and as a courtesy to other aircraft users and owners.

It is required that each club member attends 50% of annual safety meetings. If you cannot attend safety programming put on by the club, meeting equivalent credits may also include:

- 1 hour of ground & 1 hour of flight instruction
- FAA WINGS course completion

All renters and instructors must have the following documents uploaded into Flight Schedule Pro:

- Pilot Certificate(s)
- Medical
- Current government issued photo ID
- TSA proof (as required)

All pilots are responsible for ensuring documents and qualifications remain current (flight review, medical, IPC, etc.) and uploading the new documents into Flight Schedule Pro. While operating BAC aircraft, all pilots must carry on their persons, the documents required by the FAA.

4. Aircraft Checkout Procedures & Training Operations

All pilots are expected to have adequate knowledge of the aircraft being flown. All club members must undergo an initial checkout for each aircraft prior to flying club aircraft as PIC. This checkout involves a flight with a club instructor who will determine what needs to be performed based on pilot skill level.

Pilots must demonstrate knowledge of appropriate V speeds, aircraft servicing requirements, emergency procedures, and performance capabilities of the aircraft for all checkouts and for flight training courses. Prior dual flight training given by a club instructor can substitute for a checkout for student pilots as deemed appropriate.

Steep turns, stalls, or any other maneuvers which involve minimum controllable airspeed, or which exceeds 45 degree bank or 20 degree pitch may not be conducted at an altitude below 1500 feet AGL.

For all cross-country student solo flights, a student pilot must have specific written permission from a flight instructor for that particular flight and start with full fuel tanks. Outside instructors are allowed with prior permission by the club chief flight instructor, and must undergo a checkout flight.

5. Standard Flying Procedures

All aircraft rentals are reserved (and billed) through Flight Schedule Pro. Renters will receive online access to view aircraft and instructor availability through Flight Schedule Pro. Renters can also view invoices and upcoming and past reservations. Student pilots must contact their instructor and receive permission prior to scheduling any solo flights. Renters must have a current check out flight to rent any BAC aircraft. Any cancellations more than 24 hours prior can be made without penalty, and cancellations within 24 hours are subject to penalties. Every renter and instructor is responsible for recording the beginning and ending Tach and Hobbs in Flight Schedule Pro. Consistent failure to properly record times or any attempt to fabricate times may result in disciplinary measures or removal from the club.

Checklist use is mandatory. The use of checklists provided should be accomplished orally and in a timely manner. The critical items in emergency lists should be memorized (Fire, Engine restart, Lost Comms etc.).

No member shall start an engine in the tiedown spot or hangar, all pilots must pull/push the aircraft onto the taxiway prior to starting the aircraft. Upon leaving the aircraft's parking spot, the brakes should be checked and taxiing should be done at an appropriate speed. Appropriate speed for conditions should be maintained primarily by varying power including the use of idle. Brakes should be applied only when the throttle has already been retarded to idle and further stopping force is needed to maintain the appropriate speed.

While operating on the ramp, members should always be aware of their surroundings. Run ups are to only be performed in designated runup areas of the airport. To avoid propeller damage, taxiing on any surface other than smooth pavement should be accomplished in the elevator full up position unless strong winds demand that crosswind taxi procedures be used.

Before the initiation of any cross-country flight, members are required to have secured up-to-date weather information covering the proposed route of flight and alternates. For all flights away from the immediate airport traffic area or the practice area, the pilot must have the appropriate navigation charts for the area of flight. Radio use should conform to standards spelled out in the Pilot / Controller Glossary and should be consistent with local practices. Standard phraseology is expected.

Renting club airplanes overnight is allowed, but a minimum of 3 hours will be billed per day that the airplane is gone. Please be courteous to reserve longer trips in advance so that other club members can plan accordingly.

One hour of fuel reserve is required for all flights in Club aircraft during both day and night. No flight in a club aircraft may be initiated where preflight planning would indicate that less than one hour of fuel (at normal cruise settings) would remain in the tanks upon arrival at the destination plus travel from the destination to the alternate (if one is required). On cross country flights, all pilots are required to perform enroute calculations to determine actual ground speed and fuel consumption to ensure that

Club fuel reserve requirements will be met upon landing. Landing with less than one hour of fuel on board may result in disciplinary action.

BAC aircraft require the use of 100LL. BAC will reimburse fuel purchased, but the renter must keep the receipt and send a picture of the receipt to fuel.backcountryaeroclub@gmail.com. When checking in the aircraft on FSP after the flight, a note should be added listing the fuel amount. The price discrepancy will then be subtracted from the cost of the rental.

NEVER REFUEL AN AIRCRAFT IN THE RAIN UNLESS PROTECTION IS USED TO PREVENT WATER FROM GETTING IN THE FUEL TANK.

During airplane checkout the renter will be instructed on appropriate oil type, minimum / maximum levels and where surplus oil is stored. If the renter buys oil, receipts can be sent to fuel.backcountryaeroclub@gmail.com and will be reimbursed in a similar manner to fuel purchases. If engine damage results from failure to maintain appropriate oil levels / type, the renter may be held liable.

Overloading or operating outside of the aircraft's CG is strictly prohibited. It is the responsibility of each member to know and abide by the authorized loading requirements and weight and balance limits of the aircraft to be flown.

Proper mixture leaning is expected for all flights under appropriate conditions both on the ground and in the air.

All renters accept personal financial responsibility for the following:

- Any loss or damage to the aircraft during the rental period resulting from negligence, pilot error, or improper operation
- Expenses for transportation or overnight stays due to unresolved maintenance issues
- Expenses incurred if the aircraft is abandoned away from its home base, including pilot/instructor expenses, travel costs, any aircraft rental costs to return the aircraft to its home base
- Landing fees, hangar/tie down fees, ground transportation, food, lodging, etc.

Every renter/instructor is responsible for ensuring that the aircraft is properly parked and secured before leaving the plane. This includes:

- Hobbs and tach time reporting
- Tie downs
- Control lock
- Pitot tube cover
- Installing any aircraft covers
- Electrical equipment is turned off
- Lockbox is installed (as appropriate)
- Aircraft doors are closed

When renting an airplane that has a club hangar ensure that your car is either parked inside the hangar or in front of the hangar door before leaving. Do not leave your car unattended in front of neighboring hangars. Club members are welcome to drinks in the club fridge. Please be courteous and consider

stocking the fridge with your non-alcoholic beverage of choice. Ensure that the hangar lights are off, the key is in the lockbox and the doors are latched / locked before leaving.

6. Inspections & Maintenance

Members who are to act as PIC of a club aircraft are required to carefully and methodically make a pre and post flight inspection of the aircraft. If a discrepancy is discovered which would in any way compromise the safety of the intended flight or be in violation of FARs if flown, the flight must be cancelled. The PIC/member accepts complete responsibility for assuring that the aircraft for the proposed flight is airworthy, legal, and safe in all regards. The preflight inspection of the aircraft should be carefully completed by checking each of the following items (in addition to other items which are necessary for the particular type of aircraft):

1. Proper documents, manuals, checklists, and weight and balance data on board.
2. Review of any outstanding discrepancies such as a squawk book.
3. All necessary equipment on board (headset, fire extinguisher, flashlight, etc.) and control locks removed.
4. Indicated fuel quantity adequate for the flight including required club reserves
5. Fuel tank and other applicable fuel sumps drained and checked for absence of water, contaminants and for proper fuel type.
6. Landing gear and tires to be checked for any signs of damage or wear which would compromise flight safety. Check for correct function of brakes, as well as steering linkages and shimmy damper if applicable.
7. Check for contamination of pitot tubes and static ports.
8. Check the engine compartment for any signs of oil leakage, fire damage, or loose connections which would compromise flight safety.
9. Check oil dipstick for proper quantity and secure stick.
10. Check the propeller for looseness, bends, cracks, nicks, or oil leakage which would compromise flight safety.
11. Check alternator belts for correct tension and check (to the extent possible) other charging system components including the battery if necessary.
12. Check all control surfaces for proper movement and actuator security and function.
13. Check all antennas for security.
14. Visually check fuel quantity in each tank and assure proper fuel cap security.
15. Check entry/exit doors for proper latching and check all windows.
16. Check that seat latches on seats to be occupied function properly and securely as well as properly functioning seat belts.
17. Check that all cockpit controls and instruments function properly.
18. Check the aircraft to assure that all wheel chocks and tie downs have been removed.
19. Check all exterior surfaces of the aircraft for any signs of damage or mechanical failure and that they are clear of frost, ice and snow under such conditions.

The flight must not be initiated unless an engine runup indicates that the engine is running properly and developing full power at takeoff and all required associated systems are operating normally. All flight instruments which are required for the flight must be checked and operating normally.

If any part of the aircraft is deemed unsatisfactory for safe flight during the pre-flight inspection, the maintenance officer shall be informed and the airplane grounded in Flight Schedule Pro. Other minor discrepancies should be noted in the squawk notes to be later addressed and make other club members aware of the issue.

No repairs are to be permitted on any Club aircraft without specific approval from the owner of the aircraft or the maintenance officer. This policy also applies to any repair which might appear to be needed while the aircraft is away on a cross-country flight. All such repairs must be noted in the aircraft engine or airframe logbook and must be performed by or directly supervised by a certified A&P mechanic. Adding oil, checking tire pressure, servicing the battery, and tightening cowl fasteners are not considered repairs.

7. Operating Limitations

Rental aircraft may not be operated:

- For illegal purposes or in violation of any FAA, federal, state or local regulations
- By anyone other than a BAC approved renter or instructor
- On runways shorter than 1,800 feet unless approved by the Chief Instructor
- At private airports unless prior permission is given
- For any non-emergency off airport landings
- For any aerobatic maneuvers or spins unless approved by the Safety Officer
- Within unsafe proximity of any other aircraft
- Into known icing conditions
- With any frost, ice, or snow adhering to any aircraft surface

Club aircraft are not permitted to land off airport except in an emergency. “Off airport” is defined as anywhere not listed on the aeronautical chart or without an airport identifier. Non paved runways are allowed however should be used with extreme caution. Aircraft performance is decreased when operating on unpaved surfaces. Members with no prior experience must receive instruction from a club instructor before acting as PIC on such surfaces.

Landing on a runway shorter than 1800 feet is prohibited in club aircraft unless specific permission and training has been provided by a club instructor. Should the owner's manual for a particular airplane state a longer minimum runway length requirement, that sets the new precedent (unless a higher minimum allowed runway length for that aircraft is briefed during airplane checkout).

The following weather minimums are in place for club pilots:

Student Pilots:

- Dual = VFR minimums per the FAR
- Solo Local = 10SM visibility, ceiling of 2,500 AGL or better
- Solo Cross Country = 10 SM visibility, ceiling of 3,000 AGL or better

Private Pilots:

- Local = 5 SM visibility, ceiling of 1,000 AGL or better
- Cross Country = 5 SM visibility, ceiling of 1,500 AGL or better

Instrument Rated, Commercial Pilots & CFIs:

- FAR Minimums for both local and Cross Country

Loading and unloading passengers with the aircraft engine running is STRICTLY PROHIBITED, and hand propping must only be conducted by pilots who have received prior training and the conditions allow for it to be safely done. Formation flight is allowed only if all pilots part of the formation flight are fully aware of the situation and is done so legally.

8. Incident/Accident Reporting Policy

For the safety of the club members and our aircraft, it is important that we report any safety issues, accidents, and/or incidents that occur. The reporting system is not intended to punish those who submit or are involved in reports, it is simply intended to keep our pilots and passengers safe. All abnormal, illegal, or unsafe activity, including FAA violations and aircraft accidents/incidents, must be reported to an officer immediately.

President & Financial Officer: Brian Houtz

Vice President & Maintenance Officer: Patrick Cabral

Chief Flight Instructor & Safety Officer: Caleb Olson (253-880-6732)