# Operations Briefing



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## This Briefing Covers:

- Welcome & Club Introduction
- Airport Overview
- BEFC Aircraft ConOps
- Safety & Passenger Safety
- Hangar Access Doors / Locks / Operations
- Hanger Box Lock/ Logs/Supplies
- Aircraft Movement / Placement
- Workbench/Cabinets & Supt. Equipment / Tools
- Pre Flight / Departing / Post Flight
- Winter Ops
- BEFC Opportunities

| DOOR KEY CODE:   |  |
|------------------|--|
| HANGAR BOX CODE: |  |

## **BEFC Club Introduction**

- Welcome to Creve Coeur Airport (1H0) and the BEFC hangar (#P-6).
- We have 2 aircraft.
  - N8716U 1965 C172F Cessna Skyhawk
    - Student Pilot Training Aircraft & Cross Country
  - N63PL 1978 PA-28-161 Piper Cherokee Warrior II
    - Cross Country & Adv Training IFR, Private Pilot or better.
- We lease 3 spaces in the hangar from the airport
- We have workbenches, parts, supplies, tools, & various equipment



## BEFC – ConOps

- We treat each aircraft as if its our own (because it is).
- BEFC aircraft are owner maintained where possible to help keep our operating costs down.
  - We have A&Ps in the club that assist with this. Many maintenance items require external A&P and FAA Airframe Inspector actions and we fully employ these professionals when needed. (we are cost conscious, but not cheap or undsafe)
  - As a member of a club you help & participate. There is a benefit to this as you will learn much more about the aircraft systems and their operation.
    - Examples:
      - Assist during routine maintenance tasks such as oil changes, landing / nav light changes, tire changes, brake pads
      - The annual inspection needs many hands to help remove cover plates / seats / brakes, clean / wax, ...etc,
      - Periodic Plane washing, Hanger cleanup ... and other

## BEFC – ConOps - SAFETY

- Safety & Safe Operations depend on all members
  - There is no line crew servicing the aircraft pre/post flight.
  - The eyes and ears for aircraft safety & maintenance are our members.
- We do as much as possible to ensure a safe and airworthy fleet.
   But it is essential that we all work as a team and communicate.
  - We are responsible to each other for the airworthiness, cleanliness, and operation of the planes. This includes the Pre/Post flight actions, overnight/away operations, and following the reporting process for any issue(s), squawk, or aircraft grounding item.
  - Safety requires we follow the club By-Laws and Operating Rules.
- FAR 91.3 Responsibility and authority of the pilot in command.
  - (a) The pilot in command of an aircraft is directly responsible for, and is the final authority as to, the operation of that aircraft.
    - Use of club aircraft does not alter this rule. Complying with required maintenance, preflight, or AD/inspection item is still the PIC responsibility.

## Hagar & Flight Safety

#### **Best Practices & Lessons Learned**

- 1. Aircraft ground handling & movement safety.
  - Hangar Rash Damage and/or collisions during ground handling
  - Push/pull hazards; tow bar use, turn limits, stowage
  - Don't move propellers until you verified ignition off. Even then do it the right way. Never arbitrarily move any aircraft's prop. Show how to correctly rotate/move a propeller.
- 2. Hangar Doors
  - Doors can interfere with each other, can hit cars/aircraft, could even get stuck
- 3. Aircraft Fuel & Fueling
  - Follow proper refueling procedures: grounding, checking caps, checking for water & contaminates. We don't offload.
- 4. Startup Area Clear -> towbar, ground wire, obstacles/debris
  - Towbars must not be on aircraft when plane is outside hangar & not actively maneuvering the plane. Never walk away & leave a towbar attached
  - Startup: What / who is in front of or behind you? What will you blast?
- 5. Taxiways Watch for both Taxiing Aircraft & Cars on taxiways
- 6. Chemicals / Tools / Support Equipment

## Passenger Safety

- Give your passengers a mini hangar safety briefing too
- Passengers want to be helpful you MUST NOT let them attempt to do things they are not qualified for.
- Remind/Tell any passenger who is helping you exactly what you want them to do/watch for. Don't assume they know what a statement like "watch the wing" means. You are the one responsible for their actions.
- Passengers should never touch/move a propeller.
- The Fairchild is a fabric aircraft.
   (passengers & kids get curious no poking)
- Where can or can't you push / pull on a plane?
  - Step / NoStep, Cowling, Spinner, Controls / Surfaces, Spars, ...etc <u>Make sure you really know</u> because your passenger certainly doesn't.

## Hanger Doors

- Main Entry Door Demonstrate Lock and give combination
  - Best Practice: Close door behind you after entry & before operating big door.
    - Explain/show that it is possible for the entry door to collide/impact the hanger door while it is cycling
- Leaving / securing hangar checklist on the Door
  - Lights and Ceiling fans off
  - Rear entry door –closed & bolted ....ETC
- Hanger Door Operate / Demonstrate
  - NEVER MOVE AN AIRCRAFT IF THE DOOR IS NOT FULLY UP!
  - Point out the way the door operates and that it swings outward 10 feet when opening. Don't park in front of the door. (notice 1H0 hangar doors w/ dents)
  - Show the UP/ DOWN / STOP control buttons
  - Explain the pulley system and the access panels next to the door.
    - Attend the switch when door is operating
    - If you ever think the door is malfunctioning or jamming STOP DOOR and get the airport manager involved. If it gets jammed or broke it could take a month to fix.
  - Show the manual operation chain for the hanger door

## Hanger Box

- No longer locked
- Cleaning Supplies (sprays, towels, rags, window/lexan sheets)
  - WINDOWS ONLY USE special window cleaner and the special white windscreen wipes
  - Paper towels for checking oil, wiping struts
  - Simple green and Rags are for cleaning the aircraft surfaces (bugs, oil)
  - Other cleaners solvents for their designated purpose only (ex. Instrument cleaner, or degreaser for floor)
- Tire Pump(s) Tire Gauges
- Oil extra quarts & partials
- RED Do Not Fly A/C grounding sign Place visibly in window
- Restocking / something out? Its not someone else's problem.
  - tell someone, refill / mix as needed don't just leave it fix or ask

## Dispatch / Check-In

- Key box on the wall
  - Keys to Aircraft, Storage Cabinets, Tools
- There are no paper logs/documents
  - WHITE BOARDS have inspections and due dates
- Dispatch your aircraft/flight using FlightCircle.Com
- 'SELF DISPATCH' your flight before taking off
- 'CHECK IN' your flight when done
  - Enter times, Fuel used, Oil used, and SQUAWKS
  - AIRWORTHY? Y/N
    - YES YOU CAN (and should) GROUND THE AIRPLANE
    - Put red sign in window, Call the next person, Post on FlightCircle

## Aircraft Movement / Placement

- The club has the planes are arranged in a specific way. Please do not change the arrangement.
- When moving a plane, The best advice is go slow and be very careful.
  - The lines on the floor are guidance... but <u>not an assurance of clearance</u>. You must verify your movements.
  - When you maneuver via the towbar, the tail will swing much farther than the nose. If you turn and move the nose a foot sideways, the tail can swing 5 feet or more.
- We have had cases of damage while moving planes in the hangar! Do Not assume that because others (even a CFI) are around nothing can happen.
- Always assume moving a plane could hit something or another plane.
   DON'T TAKE A CHANCE do it right. Don't Hurry--- hurrying = mistakes.
- Towbars are provided to move & guide the planes.
  - Piper & Cessna use different towbars.
  - The Towbar is NEVER left attached to plane outside the hangar if your hand isn't on it.
  - WARNING Aircraft are TURN RADIUS LIMITED, over steering past the turn limit can damage the steering linkage. Read the POH

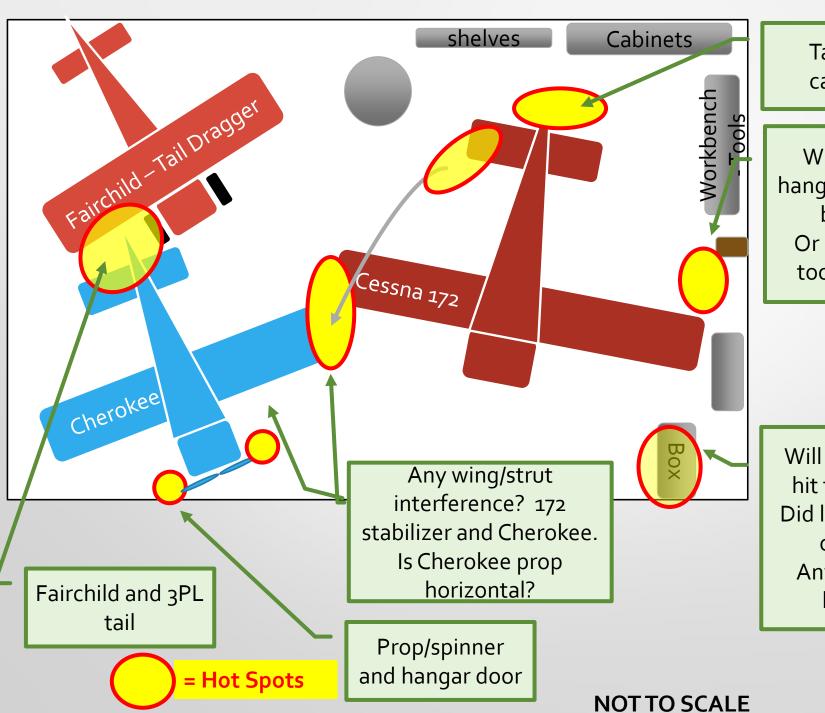
### Tow Bar Procedures

#### **Tow bar practices:**

- ✓ tow bar never leaves hand when not in baggage compartment
- ✓ leave baggage door open while tow bar is out
  - visible reminder to place tow bar back in baggage area
  - tough to get back into piper when baggage door open
- walk-around airplane ever time prior to getting in
- use the checklist with purpose and truly think about where the tow bar is located
- ✓ Be especially cautious if/when moving both aircraft and having to alternate between them. Forgetting to remove on the last one moved has happened.

Proper Procedure to pull out Piper (if when in a confige where its behind Cessna....Now that we have 3 hangar spots this is not the norm)

- 1) remove tow bar from Cessna; leave baggage door open
  - 2) pull Cessna out of hangar
  - 3) remove and replace tow bar in Cessna baggage area
  - 4) remove tow bar from piper; leave baggage door open
  - 5) pull piper out of hangar
  - 6) remove and replace tow bar in piper baggage area
  - 7) remove tow bar from Cessna; leave baggage door open
  - 8) push Cessna back into hangar
  - 9) remove and replace tow bar back In baggage area
  - 10) close the Cessna baggage door
  - 11) walk around piper to look for any abnormalities
  - 12) visually check on tow bar in piper baggage
  - 13) close the baggage door and enter cabin



Tail near cabinets

Wing near hanger support beam?
Or ladder or tool boxes?

Will anything hit the box? Did lid get left open? Any ladder here?



# BEFC Cabinets / Supplies Support Equipment / Tools

- Workbenches & supply cabinets
- Location of keys for supply cabinet and the tool box
- Tools & Specialty Tools
  - maintaining a/c, changing oil, air filter, tires, plugs, engine tuning
- Ladder
- Chemicals / cleaners
- Water
- Oil / filters / other cabinets
- Refrigerator

- Support Equipment
  - Tie down anchor kit
  - Tie down ropes
  - Cowling plugs
  - A/C Covers
  - Tow bars / Tug
  - 63PL Ground Power inverter
- Spare Parts
- Maintenance & Aircraft Logs

## Pre Flight

- Show each aircraft / Walk around + Specific aircraft checks/things to know.
  - Doors, POH & Manuals, W&B, airworthiness certificates
  - Open engine cowling 3PL cooler, key, sump
  - Oil levels, don't overfill, Don't over tighten dipstick demonstrate. 3PL standpipe, 16U cap,
  - Always check tires & air pressure, brakes
  - Fuel testing / Fuel drains
    - Fuel quantity and quality
    - Don't dump fuel in the hangar
- Show tow bars, and move an aircraft

## Preflight

- Reminders:
  - Your preflight should not assume anything.
  - Solo or Dual you have to ensure the airworthiness
  - Have an mindset that you may not go fly today
  - Be suspicious/cautious Where is the problem? What are clues?
- If you find equipment left in the plan call the prior member. (lost&found on back wall desk)
- Cherokee fills to tabs (17 gal tabs, 34 total)
  - You can fill higher if you need. We don't offload fuel though.
- Can Preflight in the hangar or outside
- Not Sure, need something? Call and ask

## Departing

- VERIFY TOW BAR REMOVED BEFORE BOARDING THE PLANE & ENGINE START.
- ALWAYS walk around the plane 1 more time before you board.
- Close the hangar behind you when departing
  - We don't leave the hangar open even for short flights. (assumes someone else is not in the hangar)
- Move/Line up on the taxiway
  - Be aware of what's behind you before you start the engine (this is true no matter where you are)
- Discuss Taxiing at 1Ho
- Remind about the Grass Runway(s) & Traffic Patterns

## Post flight

- Re-fuel the aircraft tanks as specified in the Operating Rules
  - Explain the self-serv process @ 1Ho grounding clip, filling, cost diff
- Secure inside plane
  - Remove all your items/maps/headsets...etc., clean up interior
  - Secure seat belts and shoulder harnesses
  - Remove keys, ignition/switches off
- Clean the aircraft Leave it like you would want to find it.
  - Clean windows ONLY WITH the proper window cleaner & sheets.
  - Wipe down the painted surfaces and clean the bugs off
    - Simple Green and Rags, Refill/Make more if needed
  - Leave dirty rags out to dry, we wash or pitch.
- CHECK IN on Flight Circle.
- Notify others if problems found. (phone, email FlightCircle, Squawk)
- Return keys to log box
- Secure the Hangar checklist on door
  - Turn off fans, lights, lock all cabinets / tool boxes...etc

## Cold Weather Operations

- Both aircraft have electric engine warmers/heaters
- Both aircraft have supplemental oil coolers
- At some point in the fall temperatures dictate rigging for cold weather
  - Aircraft oil warmers get plugged in part of your pre/post flight
  - There is a cover plate that blocks the air flow to the oil cooler
    - (show the plate location on the a/c and how it attaches)
  - There are operating thresholds for the cover plate.
    - 50 Degrees. If it is a warm day, It is very possible you may have to remove the plate due the temperature at the time of your flight (Cherokee only).
  - In very cold periods we also cover w/blanket and insert cowl plugs.
- No flights when surface temp < 10° F</li>
- BEFC Operating Rules exist for hangaring & engine pre-heat when operating away from 1H0. Please become familiar with them as a cold start is not allowed.

## **BEFC Miscellaneous**

- We use Flightcircle.Com for scheduling
  - FC also has Reports for
    - Squawks, Inspection & maintenance due times
  - Get Flightcircle.com working on you smart phone browser too
- Website www.befcstl.org ...
  - A/C manuals and docs on web site
  - Club Contacts
- Creve Coeur Airport numbers:

## **BEFC** Opportunities

- Plane / Hangar Captain
  - Check on oil & other club supplies
  - General Condition / Appearance of A/C, & Equip
- Membership & Publicity
  - Committee(s) / Club growth
  - Trip / airport reports, \$100 hamburger, newsletter
  - Member meeting presentation
  - Report Accomplishments
- Website help/growth, other IT help
- Finance Treasurer assistant
- Fleet Maintenance Participation
  - You are a better pilot if you see/understand the systems you use and depend on