

Operations Briefing



www.befcstl.org

Rev Jan 2023

This Briefing Covers:

- 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 Introduction

- Welcome to Creve Coeur Airport (1H0) and our club hangar. (Hangar P-6).
- BEFC has 2 aircraft.
 - N8716U – 1965 C172F Cessna Skyhawk
 - N63PL - 1978 PA-28-161 Piper Cherokee Warrior II
- We lease 3 spaces in this hangar from the airport
- The hangar contains all BEFC assets
 - Parts, supplies, tools, documents, workbenches, & equipment

Airport Overview

Creve Coeur Airport (1H0)

Grass Runways

07-25 is a official approved grass runway on Sectional.

“16-34 grass” is the area along side the paved runway.
(this is not on sectional or A/FD).
Many conventional & antique/NORDO aircraft use this so you have to be vigilant!

07 - 25 grass

T Hangars

Shadeports

BEFC in Corner hangar P-6

Park in grass next to Boeing Hangar

Use caution and go slow when driving on taxiway

Driving in:
Head in & veer to right past office. Go ahead and drive past the "Parking Permit" Sign. (It's OK).
Stop at the stop sign. Yield to all aircraft! Drive slow!

16-34 grass

Creve Coeur Airport

16 - 34

Ramp

Fuel Pumps
Line Crew Service
or
Self-Service
(after hours)

Airport Office
& Multi-Purpose Room



BEFC – ConOps

- We treat the aircraft as if its our own -- because they are.
- The club 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 certified A&P and FAA Airframe Inspector actions and we employ these professionals frequently. (we are cost conscious, but not cheap or unsafe)
 - As a member of a club you help & participate. There is a benefit to this as you will learn much more about aircraft systems and their operation & maintenance.
 - Assist during routine maintenance tasks such as oil changes, landing / nav light changes, tire changes, brake pad replacement
 - The annual inspection needs many hands to help remove inspection plates, remove & clean seats and interiors, clean / wax, ...etc,
 - Periodic Plane washing, Hanger cleanup
 - Other tasks like parts inventory, ordering supplies, book keeping ..etc

Safety - Lessons Learned

Aircraft ground handling Accidents

- “Hangar Rash” - Damage and/or collisions during ground handling
 - Bumps: Wing tips, Propellers, Rudders --- with other aircraft, hangar structure or door
- Push/pull Damage
 - Grabbing , pushing, or pulling on the wrong aircraft surface
 - tow bar use – tow bar / nose wheel steering has turn radius limits, exceeding will damage

Operational Accidents

Non- Aircraft damage & accidents

1. Hangar Doors
 - The Entry Door can interfere with the big door. Hangar door can hit cars/aircraft
 - The lift pulley system could get stuck
 - 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. Aircraft Fuel & Fueling
 - Follow proper refueling procedures: grounding, checking caps, checking for water & contaminates. We don't offload.
3. 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?
4. Taxiways – Watch for both Taxiing Aircraft & Cars on taxiways
5. Chemicals / Tools / Support Equipment

Distractions Cause Accidents - #1 BEFC Root Cause

Hagar & Flight Safety

Best Practices

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 & contaminants. We don't allow fuel offloading.
4. Startup – Towbar stowed & Area Clear
 - Towbars must not be on aircraft when plane is outside hangar & not actively maneuvering the plane. **Never walk away & leave a towbar attached**
 - **Did you walk around the aircraft before boarding?** Towbar stowed, cowls secure, fuel grounding wire... etc
 - Startup: What / who is in front of or behind you? What will you blast?
5. Taxiing – Watch for both Taxiing Aircraft & Cars on taxiways. Don't get distracted with head in the cockpit.. Eyes outside during taxi

Distractions Cause Accidents

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.**
 - Passengers should never touch/move a propeller.
 - The Fairchild is a fabric aircraft. (people & kids get curious – no poking)
- Remind/Tell any passenger who is helping you exactly what you want them to do or watch for. Don't assume they know what a statement like "watch the wing" means.
You are responsible for their actions.
- Where can or can't you push / pull on a plane?
 - Step vs. NoStep areas, Cowling, Spinner, Controls / Surfaces, Spars, ...etc Make sure you really know because your passenger certainly doesn't.
 - If you are not sure – ask. No one knows everything & we want to help

Hanger Door Operation

- **Main Entry Door – Demonstrate Lock and give combination**
 - Best Practice: Close entry door behind you after entry & before operating big door.
 - It is possible for the entry door to collide/impact the hanger door while it is cycling
- **Leaving / securing hangar when done – checklist on the Door**
 - Lights and Ceiling fans off, Rear entry door –closed & boltedETC
- **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

next to entry door

- 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 or Water with cloth 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.*
 - Notify if out, 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**
- 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 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 not an assurance of clearance.**
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

Even Minor Damage can Cost Thousands to Repair

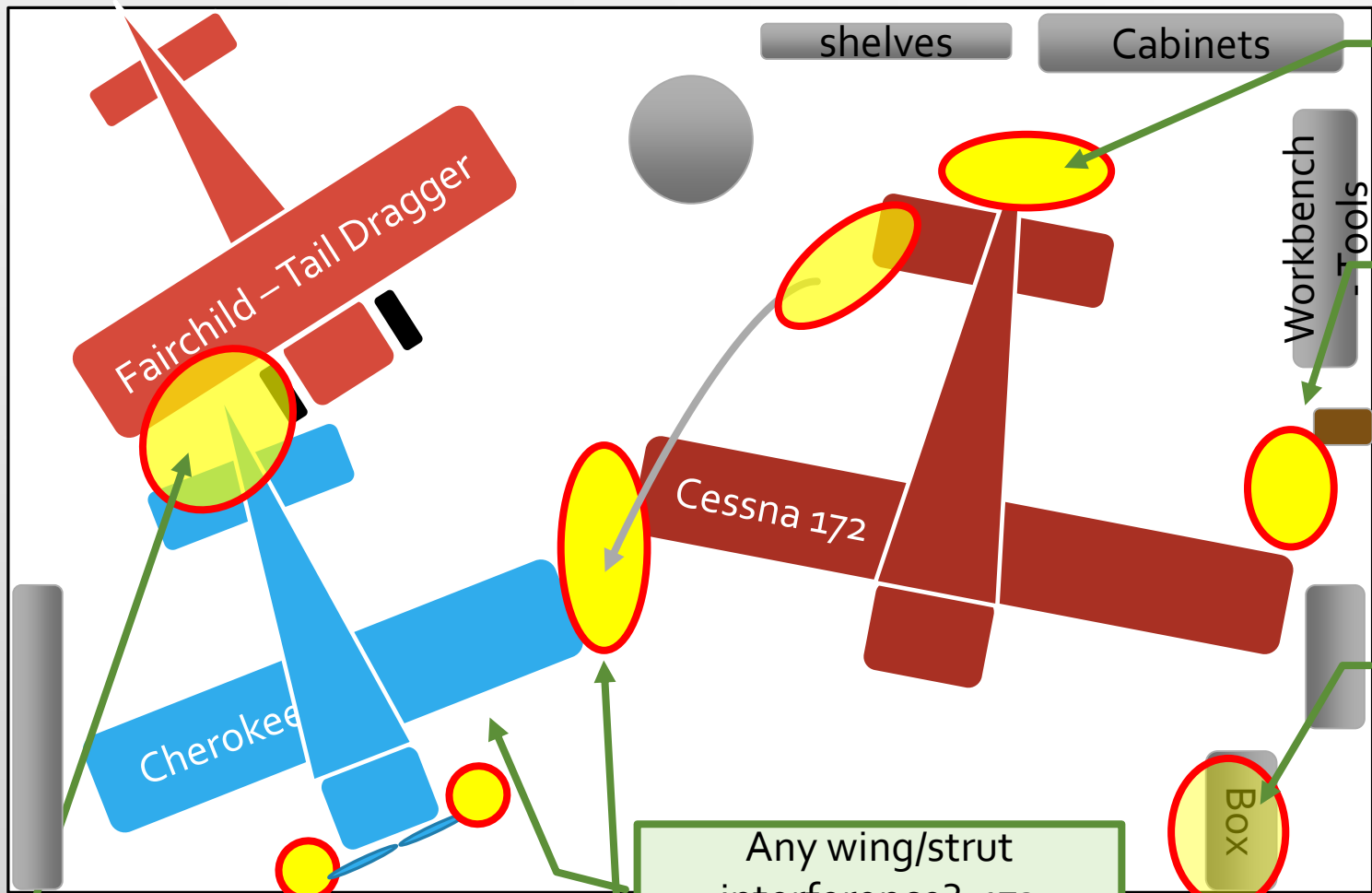
Tow Bar Procedures

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 every 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 config 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



shelves

Cabinets

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?

Any wing/strut interference? 172 stabilizer and Cherokee.
Is Cherokee prop horizontal?

Prop/spinner and hangar door

If Maintenance is being done there could be a temporary rearrangement

Fairchild and 3PL tail

 = Hot Spots

NOT TO SCALE



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 plane 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**
- 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:

314-878-6400

314-878-9575

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