

BLUE SIDE UP!



The BFC, founded in 1956, meets at Naper Aero Estates (LL10), a private residential airpark in Naperville, Illinois. Monthly meetings are held at the airport in the clubhouse near the South end of the runway on the first Tuesday of every month beginning at 7:30 PM. The Club has 45 equity members sharing three planes.

ERV - CIP

LL10 Avgas 100LL

\$4.33/gal

Aircraft Rates as of April 1st

C172S 4BC \$117.80

C172SP 3SP \$112.80

C182S 5RC \$137.58

CY Cumulative Hours Flown

March 2019

884BC 29.9 hrs.

983SP 18.6 hrs.

415RC 22.5 hrs.

TOTAL 71.0 hrs.

2019 Totals

884BC 54.1 hrs.

983SP 39.3 hrs.

415RC 31.2 hrs.

TOTAL 124.6 hrs.

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April Meeting Minutes

Members Section

Article – Engine Failures – Part 3, by Larry Bothe

MEETING MINUTES

The BFC held its monthly meeting on Tuesday, April 2nd, 2019 at Naper Aero. The President called the meeting to order at 7:31 PM. The list of Attendees is provided in the sidebar on page 2.

The minutes from the last meeting were published in the newsletter. Comments were solicited but none made. The minutes were approved as published.

The Treasurers' report was reviewed for the members. Total flying time for March was 71 hours with 1.4 hours club time. We made \$8,171.60 in payments and had \$12,372.47 in receipts. The loan balance is \$98,153 and cash in the bank is \$102,681.19. See the complete financial details later in this newsletter. The treasurer's report was approved unanimously as presented.

The aircraft reports were presented by the plane captains. Old and new business items were presented. Please see details in the following sections.

The meeting adjourned at 8:20 PM.

Join us for our next meeting:

Tuesday, May 7, 2019

Plane Wash at 5:00pm

Business meeting at 7:30pm

See you there!

Attendees**Members**

Jim Krzyzewski
 Gevin Cross
 Jack Lindquist
 Kevin Kanarski
 Ray Kvietkus
 Eric Swanson
 James Cresto
 Chuck Jaudes
 Kris Knigga
 Nick Davis
 Walt Slazyk
 Steve Snapp
 James Robertson Jr.
 John Wrycza
 Al Loek
 Jeff Andrews
 Mel Finzer
 Alex Siegman
 Chuck Blazeovich
 Hubert Elsen
 Don Patterson

Guests

Chris Gill
 Joe Willig
 Zack Willig

Social

Bradley Swanson

TREASURER'S REPORT

CASH

Chase Checking	17,473.34
Chase Savings	85,207.85
Total	\$102,681.19

PAYMENTS

Naper Aero	Fuel and Fees	1,568.18
Volartek	Loan Payment	1,110.21
Aircraft Clubs	Reservation System	36.00
Emery Air	4BC Tire Service	653.00
Van Den Ham	Equity Return	4,250.00
Kastor	4BC Alt belt serv, Chk oil leak	140.00
Kastor	3SP Nose strut service	95.00
JA Air Center	4BC Flash Tube - Case of Oil	319.21

Total **\$8,171.60**

RESERVES

INSURANCE (\$1500/ mo)	-3,000
ANNUALS (\$1000/ mo)	-11,000
LL10 DUES (\$350/ mo)	-2,100
INACTIVE MEMBER	-7,727
ENG OVRHL 5RC (\$750/mo)	-22,675
CREDIT BALANCE MEMBER	-5,900
ADS-B EQUIPMENT (\$7/hr,\$3 dues)	3,532
EQUITY INSTALLMENT MEMBER	-7,500
EQUIPMENT UPGRADE	-46,311

Reserves net 0

Reserve Increase/(Decrease) **\$4,200.00**

LOAN

INTEREST PAID @ 6.0%	\$497
PRINCIPAL PAID	\$1,168
AIRCRAFT LOAN Balance	\$98,153

RECEIPTS

Dues & Flying	7,369.83
Equity	5,000.00
Bank Interest	2.64

Total **\$12,372.47**

CREDITS TO MEMBERS

Fuel Away	492.19
Loan Pymt	555.10
Gift Card	100.00
Cowl blanket / plugs	314.90
Control for winch	23.06

Total **\$1,485.25**

FLYING HOURS

March

884BC	
FLYING	29.9
TACH	2247.7
TBO	2000
TMOH	1913.0
†CLUB	0.6
*GAL/HR.	10.2

983SP	
FLYING	18.6
TACH	4889.7
TBO	2000
TMOH	1661.7
†CLUB	0.0
*GAL/HR.	10.2

415RC	
FLYING	22.5
TACH	5594.9
TBO	2000
TMOH	450.7
†CLUB	0.8
*GAL/HR.	12.3

TBO – engine time between overhauls

TMOH – engine time to major overhaul

† Includes orientation flights

* Gallons per hour for calculating hourly rate. Do not use for flight planning.

AIRCRAFT REPORTS

N884BC

- 1) Lower pilot door hinge pin half missing being replaced
- 2) Bend in pilot door fixed
- 3) Cowling repaired
- 4) Nose wheel shims being repaired to alleviate shimmy
- 5) Loose alternator belt. Adjusted
- 6) Nose wheel tire valve location repaired
- 7) Prop being balanced
- 8) Strobe light replaced
- 9) Pitch trim failure on autopilot reported. Hit the disconnect AP button to silence alarm

N983SP

- 1) Currently in for annual; new brakes and rotors, cowl crack has been repaired, 6 new plugs, Tanis heater needed new thermocouple, heater cord on dipstick, seat recline cable repaired. Seat recliner, intermittent EGT and fuel gauges to be looked at during annual
- 2) AD for the key switch and needs to be replaced. This would require 45 new keys so need to determine how we schedule this.

N415RC

- 1) Currently in annual
- 2) Wheel bearings are corroded and being replaced
- 3) Pitot Static check being performed

OLD BUSINESS

- Selling current 182 – Looking for estimates on what we could get for current plane. Possibly have an interested buyer at Luminair and using the annual inspection as a pre-buy. Will wait to hear if this person is interested before listing publicly.
- Purchasing new 182 – Currently no 182T in the year range we are looking for available for sale. We are interested in a 2006, 2007 or 2008 182T. Prefer non-turbo but will also look at the T182T model if one is available in that year range.

NEW BUSINESS

- Fuel price decreased to \$4.33 as of 4/1/2019. See the new rates in the sidebar on page 1.
- Bradley has agreed to be grill master again this year. The club presented him a gift for his service.
- Jeff Andrews is coordinating work nights and plane washes.

SAFETY

3SP Hanger winch had a runaway condition. 3SP jumped the first set of blocks and lucky stopped at the second set of blocks. Upon testing the winch does exhibit a runaway condition intermittently. The relays in the winch were sparking and are being replaced. Remote is being replaced as well. The winch is INOP currently until it is fixed. Be careful with the other winches when putting the planes away.

MEMBERSHIP – GUESTS

Chris Gill – Obtained his private license last year and is looking to fly more.

Joe and Zack Willig – Looking to join the club for a glass cockpit airplane. Zack is a student at Michigan State and has been a private pilot for 4 years.

Chris – Is currently a private pilot and checking out the club.

Welcome all visitors and new members!

MARKETING

We currently have a wait list to join the club!

ACCOMPLISHMENTS

Eric Swanson obtained his Instrument Rating and is now working on his commercial. Congratulations Eric!



MEMBERS SECTION

This section is for you, the members, to showcase your airplane adventures in the Photo Corner and let others know of your accomplishments. We are also looking for members to submit articles for the newsletter. With the years of flying experience we have in our club we are looking for members to submit articles in the style of 'I learned about flying from that', 'Never Again' or 'Stick and Rudder'. It's in our best interest to make our small community of pilots safer by passing on experience and knowledge. Submit articles to the club secretary.

ENGINE FAILURES - PART 3

Submitted by Larry Bothe (originally written 11/12/2015)

In addition to the very real engine failures discussed in the first two articles in this series, I have been involved in a couple of situations where I thought the engine was going to quit, but it didn't. One of the imaginary failures happened in one of those situations where you're running late, hurrying around, and get yourself into trouble. I had moved up to a 1979 C-182 and was based at Quakertown, PA. I had agreed to meet my old college roommate at Bay Bridge, MD. I was late, and the weather was crummy. I didn't want to take the time to file IFR so I took off in (very) marginal VFR, telling myself it was OK because I was flying toward better weather. But that better weather was maybe 100 nm south, not near my departure point. In just a few minutes the scattered layer underneath me closed up. There was also a higher overcast above, and it was raining. Not good. See what hurrying gets you?

I was headed southwest, with Philadelphia TCA (now class B, dating myself) on the left, between layers at 3000 feet, raining, telling myself it's VFR. Even though it was the middle of the day it was dark enough that I was having trouble reading the instruments. I decided to turn on the panel lights. With the lights up I could now see the instruments a whole lot better. I was adjusting the brightness when I noticed that the oil temperature was rising and oil pressure was falling. I could actually see the needles in motion. Holy lightening! I must be losing oil really fast! When the oil runs out the engine is going to seize. I pushed the nearest airport sequence of buttons on my IFR-approved Foster LORAN. It told me Chester County was only about 5nm away on a 300 degree heading. I turned to go there, changed the transponder to 7700 and the radio to 121.5; transmitted Mayday and engine failure in the blind. Three facilities answered; Philadelphia Approach, Wilmington (Delaware) tower, and one other. I responded to Philadelphia and the others went silent. Philly told me Chester County was at my 2 o'clock and 5 miles. I told them I was already in the turn. I stayed at 3000 feet until the LORAN said I was 1 mile from the field. I chopped the throttle to dive on the field and dropped into the undercast. It was scary because I had no idea what was in the clouds. I knew there weren't any high-rise buildings, but I didn't know about antenna towers or other obstructions. My plan was to descend rapidly until I broke out. No time to make an IFR approach under power.

I came out of the clouds about 600 feet AGL and at the airport perimeter. The runway was right in front of me, perpendicular to my direction of flight. Still raining, but the wind was calm. I crossed the runway, made 3 left turns and landed. The engine was still

running so I taxied off the runway. I shut down on the taxiway and scrambled down an embankment to get to a pay phone (no cell phones back then, late 80's) to call Flight Service. I had to call them to give the airspace back. I was quite sure Philadelphia International had shut down operations due to my emergency.

Once the call to FSS was made I walked over to the airport buildings while trying to decide what to do next. The place was a ghost town on a rainy Sunday, but as luck would have it there was a guy there I vaguely knew named Bob Mertz. He owned an engine overhaul shop on the field and knew a thing or three about engines. I told him what happened. After hearing my sequence of events we went over to have a look at my plane. We pulled the dipstick; there was plenty of oil. It started right up and had decent oil pressure. Bob ran it up and checked temperature and pressure. No problems. The engine instruments were still hard to read in the dim light of bad weather; Bob turned up the panel lights. The oil pressure and temperature gauges moved. What the heck? He turned the rheostat and they moved. There was some goofy electrical interface between the panel lights and the engine instruments. When the rheostat that adjusted panel light brightness was turned back and forth the oil pressure and temperature needles looked like windshield wipers. There wasn't anything wrong with the engine, but there was something very wrong with the electrical wiring. I took the plane to the radio shop where the LORAN had been installed. They found a whole lot of wires going places that made no sense. \$700 later all that accumulated wiring was removed and the dimmer rheostats rewired according to the Cessna wiring schematic. It was an expensive repair for back in the late 80's but I never had any electrical issues with the plane again.

Prior to the event with my C-182 I was involved in a similar incident as a passenger. I was flying out of Perkiomen Valley Airport in Collegeville, PA. My Skyhawk was based there, and I worked for the FBO as a CFI on weekends. I needed to go to Philadelphia International to pick up a package at Atlantic Aviation. The weather was crummy so I filed an IFR flight plan from home; then drove to the airport. When I went inside I met another instructor who had a student and wanted to go somewhere IFR to further his training. I told them I needed to go to Philly and had a flight plan on file. In those days there was a minimum 45-minute wait from when you filed until you could get a clearance. The other instructor and his student agreed that we would use my flight plan, I could ride in the back seat, and we would all go to PHL. We did the preflight, called on the phone to get our IFR clearance, gave ATC the N-number change, and took off. Getting to PHL was no problem. We landed, taxied to Atlantic Aviation, got my package, picked up an IFR clearance for the return flight, and took off. The student was having a great time flying IFR into and out of a large airport, and he was doing a good job. I was saving all kinds of money because I didn't have to fly my plane down there. The instructor was pleased because he saved time by using my flight plan. We were all happy, for a little while.

Departure control told us to climb to and maintain 6000 feet. The student was flying, the instructor monitoring, and I was in the back seat, bored, staring out the window into nothing. We were solid IMC. Pretty soon I felt a tapping on my knee. The instructor didn't say anything; he just pointed at the engine gauges. It was like my C182 problem described above; oil temp was creeping up and pressure going down. The instructor made a both-palms-up gesture to me, "what now?" I pointed down (land), and he nodded. Only then did he speak to the student, telling the student to fly the plane, but

he (the instructor) had the radios. He further instructed the student not to pay any attention to ATC; the student should do only what the instructor told him. I sat up and paid attention.

The instructor then declared an emergency with departure control. Departure immediately told him to descend to 3000 feet, presumably to get us away from airliners. The instructor refused the descent, stating that he would stay at 6000 as long as the engine continued to run and until we were directly over the field. I silently applauded. Departure vectored us back over the field and we spiraled down. We broke out about 1300 AGL (we knew we would) and landed straight in on runway 17. I have never seen so much crash equipment in all my life. There were 7 vehicles on one side of the runway and 6 on the other, all for one little Skyhawk. We landed uneventfully and taxied to Atlantic Aviation, followed by a parade of emergency vehicles. The engine kept running but the oil temp was very high and the pressure at the bottom of the green.

After shutting down we checked the oil. Right on the minimum, 4 quarts. This 172 was a 1976, one of the first to have the O-320-H2AD 160 hp engine. The early ones had the dipstick marked for oil levels of minimum 4 quarts, maximum 6. Later ones are marked with a higher range; 5 and 7 quarts. The problem was that right down at the lower minimum the 4-quart volume was insufficient to dissipate the engine heat generated by a prolonged full-power climb. We had simply overheated the oil, giving us the high temp reading, and the hot oil thinned out, causing the low pressure indication.

We added 2 quarts of oil and were about to be on our way when the when the airport manager drove up in an official city car, followed by a police car, and proceeded to really chew out the instructor. The manager, a city bureaucrat (obviously not a pilot) wanted to know what we thought we were doing, shutting down his airport. He told us the FAA would be informed (they of course already knew), and he would insure that we were prosecuted to the fullest extent of the law. The instructor wisely kept his mouth shut. When the airport manager ran out of steam he and his police escort drove away. We got in the plane and flew home, and never heard a word from the FAA. If you declare an emergency, comply with instructions, land without incident (don't crash) and give the airspace back you never get in trouble with the FAA. You knew how to deal with your emergency, and the FAA is happy with that.

If you would like to know my recommendations on what to do when the engine goes silent you may watch my webinar on that subject at

<http://www.eaavideo.org/detail/video/5543846774001/webinar--when-the-engine-goes-silent&q=Bothe>

OPERATIONAL & SAFETY REMINDERS

Remember, each of us owns 1/45 of these planes. Adherence to the reminders listed below will keep us safer and help to hold down the cost of maintenance. If you have a problem with a club plane notify the plane captain or maintenance officer before you arrange for any repairs. Let those people decide the best way to have the plane fixed. Phone numbers are in the fuel logbook in the plane.

Beware of TFR's: Presidential and stadium (Joliet Speedway & Dekalb Univ.).

Windshield cleaning: Use a clean, soft cloth to clean the windshield. Paper towels scratch the soft plastic. Clean rags should be in each plane; more are in the cabinets by 983SP.

Preflight inspection: Use the checklist. It's easy to get distracted and skip important things. When finished, step back and walk around the plane to take in the big picture.

Tire pressure: Check pressure visually before each flight. If tires look low add air using the red BFC air compressor located in the hangar. Tire gauge is with the compressor. 30 psi all around will do for the C-172's, 40 psi for the C-182.

Engine oil: Check the oil change sticker before each flight. If due it's OK to fly, but notify the plane captain or maintenance officer. If you add oil, log it in the fuel logbook. Oil consumption tells us about the health of the engine. Try to add only full quarts.

Nose strut: NEVER, EVER fly with a collapsed nose strut. Remember the sheared rivets in 388ES? That cost a lot to fix.

Bald tires: Bald (no grooves) is OK; cloth showing through the rubber is not. If in doubt roll the plane to check the portion of the tires that you can't see initially.

Closing airplane doors: Please open the window and close the door by gripping the lower windowsill. Opening the window relieves the air pressure as the door comes shut. Gripping the windowsill instead of the door panel handhold prevents expensive damage to the flimsy door panel (like we had on 388ES).

Ground-lean after engine start: Our fuel-injected engines run very rich at low power, which causes the plugs to foul. That results in bad mag checks and the need to have the plugs cleaned. As soon as the engine is running smoothly after start, pull the mixture out a distance of 2 finger widths. Taxi with the engine leaned. It's OK to do the run-up with the engine leaned provided that it runs smoothly. Remember to go to full rich for takeoff.

Runways and patterns at LL10: The preferred calm wind runway is 36. We prefer that you land on the pavement because tire wear is less costly than damage to the gyro instruments due to vibration. When making a right-hand departure, climb to pattern altitude before turning right. Alternatively, make three climbing 90° left turns and cross over the field.

Parking at the fuel pumps: Please be courteous to others. Don't park at the pumps for an extended period of time.

Tow bars: Never leave a tow bar attached to a plane after you are finished moving it. Don't set the tow bar down on the nose wheel pant; remove it.

Finally, if you damage a plane, man up and report it to the plane captain, maintenance office or a board member right away. You will not be judged (it can happen to anyone), and only those who need to know will hear about it. Our goal is to handle the problem discreetly, efficiently, and get the airplane back in service ASAP. Thank you.

BFC
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ABOUT OUR ORGANIZATION

The BFC, founded in 1956, meets at Naper Aero Estates (LL10), a private residential airpark in Naperville, Illinois. Monthly meetings are held at the airport in the clubhouse near the South end of the runway on the first Tuesday of every month beginning at 7:30PM.

The Club has 45 equity members sharing three airplanes:

1. 1999 Cessna 172SP N983SP
2. 2007 Cessna 172S N884BC
3. 1998 Cessna 182S N415RC

Aircraft Reservations: www.aircraftclubs.com

BFC Website: www.flybfc.org

President: Jim Krzyzewski

Vice President: Gevin Cross

Secretary / Webmaster: Kevin Kanarski

Treasurer: Jack Lindquist

Safety Officer: Ray Kvietkus

Quartermaster: Jeff Andrews

Grillmaster: Bradley Swanson

BFC Instructors:

Nick Davis	630-393-0539
Raymond Kvietkus	630-907-7721 ¹
Mike Pastore	630-606-3692
Michael Beinhauer	847-902-7053
Nick Moore	530-906-9793

¹ Available for club checkouts and Flight Reviews

Chief Maintenance Officer:

John Wrycza	630-697-3559
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Plane Captains:

N884BC	Don Patterson	815-436-5771
N983SP	Kris Knigga	765-357-4735
N415RC	Jim Robertson	630-215-5003