# March 2018

Volume 56 / Issue 03

# 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

\$4.59/gal

#### Aircraft Rates as of April 1st

C172S 4BC \$120.40 C172SP 3SP \$115.40 C182S 5RC \$140.78

#### CY Cumulative Hours Flown

#### February 2018

884BC	13.9 hrs.
983SP	0.0 hrs.
415RC	6.6 hrs.
TOTAL	20.5 hrs.

#### 2018 Totals

884BC	48.6 hrs.
983SP	0.0 hrs.
415RC	19.3 hrs.
TOTAL	67.9 hrs.

Join us for our next meeting:

#### Tuesday, April 3, 2018

Plane Wash at 5:00pm Business meeting at 7:30pm

See you there!

## IN THIS ISSUE...

March Meeting Minutes

Members Section

Article – Enough Fuel by Larry Bothe

## **MEETING MINUTES**

The BFC held its monthly meeting on Tuesday, March 6th, 2018 at Naper Aero. The President called the meeting to order at 7:30 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 December was 20.5 hours with 1.6 hours club time. We made \$18,709.23 in payments and had \$10,767.36 in receipts. The loan balance is \$112,899 and cash in the bank is \$89,668.76. 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 8:35 PM.

\*Note the aircraft rates increase as of April 1st due to a fuel price increase at LL10.

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## **Attendees**

#### Members

Jim Krzyzewski **Gevin Cross** Jack Lindquist Kevin Kanarski Ray Kvietkus **Nick Davis** Kris Knigga **Chuck Jaudes** Gerry Miskowicz Manish Awasthi J.P. Balakrishnan Jim Robertson Jr. Val Vlazny John Wrycza Don Leonard Don Patterson **Jeff Andrews** Mel Finzer

#### Guests

Mike Pastore Larry Brenner Chuck Flood

#### Social

## TREASURER'S REPORT

_		
CASH		
Chase Checking		14,493.96
Chase Savings Total		75,174.80 <b>\$89,668.76</b>
PAYMENTS		ψ03,000.70
	Fuel and Fees	2,000,60
Naper Aero Volartek	Loan Payment	2,008.69 1,110.21
Aircraft Clubs	Reservation System	36.00
Corona	3SP Engine Overhaul Balance	11,107.83
Kastor	3SP horz stab, 5RC aileron srvs	180.00
Avemco	Aircraft Insurance	4,266.50
Total		\$18,709.23
RESERVES		
INSURANCE (\$1500/ mo)		-1,500
ANNUALS (\$1000/ mo)		-11,000
LL10 DUES (\$350/ mo)		-1,750 7,737
INACTIVE MEMBER ENG OVRHL 3SP		-7,727 0
ENG OVRHL 3SP		-28,000
ENG OVRHL 5RC (\$750/mo)		-2,250
CREDIT BALANCE MEMBER		-15,100
ADS-B EQUIPMENT (\$7/hr,\$3 dues)		-3,666
EQUIPMENT UPGRADE		-18,676
Reserves net		0
Reserve Increase/(Decrease)		(\$7,942.00)
LOAN		
INTEREST PAID @ 6.0%		\$570
PRINCIPAL PAID		\$1,095
AIRCRAFT LOAN Balance		\$112,899
RECEIPTS		
Dues & Flying		10,765.07
Equity		0.00
Bank Interest		2.29
Total		\$10,767.36
CREDITS TO MEMBERS		
Fuel Away		126.38
Loan Pymt		555.10
Total		\$681.48
Total		φυσ1.40

## **FLYING HOURS**

#### **February**

884BC		
FLYING	13.9	
TACH	1993.6	
TBO	2000	
TMOH	6.4	
†CLUB	0.4	
*GAL/HR.	10.2	

983SP		
FLYING	0.0	
TACH	4549.0	
TBO	2000	
TMOH	-429.2	
†CLUB	0.0	
*GAL/HR.	10.2	

415RC		
FLYING	6.6	
TACH	5351.7	
TBO	2000	
TMOH	694.0	
†CLUB	1.2	
*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) Right door slide latch is not holding door open. (Replaced by Travel Express)
- 2) Backup AI installed (Travel Express) \*New W&B
- 3) Ignition Switch and Fuel Line inspection AD complete (Travel Express)
- 4) Yoke mounted electric trim switches INOP (Replaced by Travel Express)
- 5) New tube installed in nose tire after old one went flat
- 6) Left turn tendency reported but other members report no issue. Please report if noticed.

#### N983SP

1) Engine overhaul is finished. Southern Sky is reinstalling the engine.

#### N415RC

- 1) Annual is complete
- 2) Autopilot servo is out for repair. AP remains INOP
- 3) Slight left turn tendency reported
- 4) DG precesses badly
- 5) New ELT battery on order

## **OLD BUSINESS**

- ➤ LL10 Airport Updates:
  - New approach pushed off to May for publication. It will be approved for night landings.
  - 2) The current airport manager resigned. Looking for a new airport manager.
  - 3) Rt59 annexation, city of Naperville is pursuing a split annexation. Church will be zoned commercial and the parking lot will be zoned residential. Aero drive will remain residential on both sides for now. The concern is if the annexation process proceeds east but this appears to be unlikely.
  - 4) 9/27 will remain emergency use only, use at your discretion.

#### **NEW BUSINESS**

- Recognized 2 members for outstanding service; Ray K. for promoting the club and bringing in new members, John W. for maintaining the planes and sourcing the best price for parts and service.
- Ightharpoonup John W. fixed the drain valve on the club air compressor. Now there is no excuse to keep those tires properly inflated.

#### SAFFTY

None presented.

#### Membership — Guests

- Larry Brenner Starting lessons for Sport Pilot license
- Chuck Flood Returning guest is currently a 20hr student pilot

Welcome!

## **M**ARKETING

Due to good interest in the club lately, we will be holding off on sending another mail marketing campaign until the early spring of 2018.

## **ACCOMPLISHMENTS**

- Manish Awasthi SOLOED! He flew solo at both Morris and Naper Aero
- ➤ Gerry Miskowicz took an upset training course with Patty Wagstaff's school in St. Augustine, FL. (See What's Up for info)

#### What's Up...

Upset/Aerobatic Training in FL <a href="https://pattywagstaff.com/school/">https://pattywagstaff.com/school/</a>

Collision Course Avoiding Airborne Traffic AOPA Air Safety Institute March 27, 2018 19:00 Hilton Lisle/Naperville

## **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.

## HAVING ENOUGH FUEL

Submitted by Larry Bothe (originally written 10/26/2013)

Our flight school is very small, consisting of just one very nicely refurbished 1981 Cessna 172. I do most of the instruction, with the owner helping out when he has time. The business is actually a maintenance facility that happens to offer flight instruction; not a true FBO. We don't have much staff. Fuel is self-serve and owned by the Airport Authority. With only one plane, scheduling is pretty informal. We rent the airplane

WELCOME TO FREEMAN MUNICIPAL AIRPORT 1025 A. AVENUE SEYMOUR, IN. 47274 1000056539A \*\*\* CHARGE \*\*\* STORE ID#: 09/30/2013 4:30:06 PM AIRPLANE ID N AVGAS 100LI 39. 787 \$5. 7300 \$227.98 CUSTOMER ACKNOWLEDGES RECEIPT OF PRODUCT AN AGREES TO PERFORM THE PRODUCT AND OBLIGATIONS SET FORTH IN THE CARD ISSUER AGREEMENT CARD: American Express INVOICE# 1801 AUTH#: 539910 THANK YOU! HAVE A NICE DAY! 812-522-2031

"wet", and there is a credit card in the plane so renters don't have to use their own money to buy fuel.

So it was one Friday in late September. I was waiting for the plane to return from a cross-country so I could give a lesson to an instrument student. The plane returned a little late, needing fuel after the trip. My student and I filled it up and then did our lesson, which was shorter than originally planned due to our late start. We put 2.3 on the Hobbs. The next scheduled usage was at 6:00 PM that same evening, an advanced Private student flying locally for about an hour. I told the student to lock the clipboard in the plane, tie it down when he was finished, and put the key in its customary secure location. He is on a fairly tight budget; flew for exactly 1 hour.

The next morning one of our regular rental customers, we'll call him "Jimmy" for this article, took the airplane all day to give rides at a reunion. He brought it back Saturday afternoon and he and the owner put it in the locked maintenance hangar. Nobody flew Sunday, and on Monday I was back with my instrument student. On the preflight

my student noted that the fuel gauges were very low so he taxied it to the pumps to fill it up. I walked over to help out. My student was doing the honors up on the ladder, and he got 20.1 gallons in the left tank. Upon seeing that I immediately switched the fuel selector away from *Both* so fuel would not transfer from the full left tank to the low right one. Then we moved the ladder and filled the right tank. When it was all finished we put 39.78 gallons into an airplane with 40-gallon usable tanks. If you figure the 160 HP engine burns about 8 gallons an hour, the remaining .22 gallons would power the plane

for 1.65 minutes. That's not enough to go around the pattern. We're lucky it taxied to the pumps.

I know Jimmy because I gave him his first flying lessons some years ago. He didn't complete his training back then due to money issues, and finally finished up this spring at a different airfield. He came to us when we got our rental plane going in July. The owner checked him out, which went well because Jimmy finished his lessons in a Skyhawk. Both the owner and I view Jimmy as a conscientious and careful, albeit low-time, pilot. We're comfortable renting to him. How he managed to all but run out of fuel became a mystery. When I called and told him the circumstances and how much fuel the plane had taken he was aghast. He couldn't believe it. He said he checked the fuel during his preflight Saturday morning, including using the \*dipstick we provide with the plane. He said he could touch the fuel with his finger in one tank, and the other one was "nearly full" as well. He put 3.3 Hobbs hours on the plane flying it to the reunion at a nearby airport (no fuel there), giving rides to his friends, and returning to our field. After his initial check of the fuel on the preflight he said he didn't pay much attention to fuel, thinking that he had plenty for his intended flying. He said there must be some mistake; he could not possibly have come that close to running out of fuel.

That sent me back to analyze the records in more detail. Had the plane been flown on Sunday and the time not recorded on the clipboard? Was some maintenance performed that caused loss of fuel? Could someone have siphoned fuel out of the tanks? My investigation revealed that none of those things happened. When the plane returned from the reunion rides the owner happened to be there and they put the plane inside. No chance for fuel theft. Nothing was broken on the plane and neither the owner nor the hired mechanic had worked on it. Nobody flew it Monday morning before I got there. No blue/green stains appeared on the hangar floor, which would have indicated a leak. There was no time "missing" on the clipboard; it all added up and agreed with the current Hobbs reading. Jimmy blew it. He and his unwitting friends were very lucky they didn't end up in a farmer's field, or worse. Including his 3.3 hours, the plane was flown 6.6 Hobbs hours between fueling. We have been keeping records since we put the plane in service. It burns, on average, very close to 7 gallons per Hobbs hour. 7 x 6.6 = 46.2, 6 gallons over 40-gallon usable capacity. Scary!!! The only reason it continued to run at all is that my student and I did a lot of reduced-power instrument approaches, and Jimmy taxied a lot while giving his reunion friends rides. The average fuel burn was lower than normal.

That meant I had to have "the talk" with Jimmy. I sat him down and told him essentially what I tell every student I teach to fly. The FAR's regarding VFR fuel reserves are too lenient to ensure adequate fuel to complete a flight. 30 minutes in the daytime and 45 minutes at night just doesn't get it. I advocate at least an hour of reserve, day or night. That last hour of fuel is to cover for something bad that happens just as you arrive at your destination, not to be consumed enroute. If it appears that you will have less than an hour of fuel when you arrive at your destination, stop and buy more. It doesn't make any difference how late that will make you or how angry your spouse or boss will be; do it anyway. You'll live longer. Many things can conspire to eat up your reserves. Perhaps you or the line service person didn't really fill the tanks all the way to the top in order to avoid spilling any fuel. Your ground speed didn't turn out quite as high as expected. Your leaning technique wasn't all that precise, or worse yet, you didn't lean at all. (The cruise

performance chart specifies "with recommended lean mixture". If you don't lean you can throw the Cruise Performance chart away!) The mechanical tachometer is off a 100 RPM or more so you're burning more fuel than you think. Then you get where you're going and can't find the field. After you sort that out and prepare to land you find out that the field is closed because some unfortunate pilot just landed gear-up on the only available runway. Do you have enough fuel to get to an alternate airport? Probably not! After this intense discussion I'm sure Jimmy will check his fuel much more thoroughly in the future.

I can't leave this subject without talking about leaning. Both Lycoming and Continental recommend leaning their engines anytime the plane is in level flight at cruise power, regardless of altitude. In my capacity as a pilot examiner I all too often hear that students are still being told to just leave the mixture full-rich below X-altitude; usually 3000 or 5000 feet. This is wrong! It's not much trouble to teach proper leaning technique. Don't be too lazy to do it right. You teach the use of the Cruise Performance chart and how to do fuel calculations. Leaning the mixture goes with that. Make your instruction meaningful and safe in a practical way. Take the opportunity to teach and practice leaning technique while on a dual cross-country flight.

\*<u>Dipstick</u>: If your flight school doesn't provide a fuel dipstick for each airplane I urge you to correct that oversight right now. You can confirm full fuel visually, but once part of it is used you have no idea where you are without a measuring device. Fuel dipsticks are free at Home Depot, from the paint department. Go get a handful. Mark the *Full* line with a Magic Marker. Then your students/renters can visually confirm what the gauges say.

Larry Bothe is a former FAA Designated Pilot Examiner, FAASTeam Representative and Gold Seal Instructor in the Indianapolis, IN FSDO area. He is also a Master Certified Flight Instructor and has over 7000 hours in more than 80 types of aircraft. Larry is part-owner of a 1961 7EC Champ and may be contacted at LBothe@comcast.net.

## **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 P.O. Box 2631 Naperville, IL 60567

iquiry@flybfc.org

## **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

QuarterMaster/VP: Gevin Cross

Secretary: Kevin Kanarski
Treasurer: Jack Lindquist
Safety Officer: Ray Kvietkus
WebMaster: Kevin Kanarski
GrillMaster: Bradley Swanson

#### **BFC Instructors:**

 Nick Davis
 630-393-0539 \*

 Joshua Jones
 630-605-6044

 Raymond Kvietkus
 630-907-7721 ¹

 Mike Pastore
 630-606-3692

 Jeff Hilsenbeck
 630-660-0821

#### **Chief Maintenance Officer:**

John Wrycza 630-697-3559

#### **Plane Captains:**

 N884BC
 Don Patterson
 815-436-5771

 N983SP
 Kris Knigga
 765-357-4735

 N415RC
 Don Leonard
 630-803-6967

<sup>\*</sup> These instructors offer limited training

<sup>&</sup>lt;sup>1</sup> Available for club checkouts and Flight Reviews