Flying Club 1

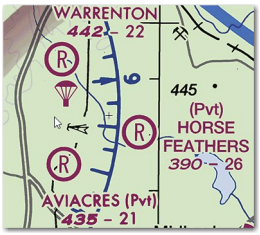
Flying for Fun in Northern Virginia! www.flyingclub1.org

Volume 18 – 06 www.FlyingClub1.org June 2018

The Privileged View

Steve Beste, President

Horse Feathers (53VA). Night was rushing in the first time I landed at Horse Feathers and met Frank Thompson. Sunset had caught me while I was still setting out boxes for the next day's poker run. I hit Horse Feathers at 9:01 pm with 11 minutes to go to make it to the Airpark before my trike turned into a pumpkin as civil twilight arrived. But really, more than that legality, I was alarmed by how dark it was getting. The western sky still glowed, but the land was dark. Neither my trike nor the Airpark have landing lights. This was going to be close. So quick, drop the box off, put my helmet back on, and get the hell out of here. That's when Frank showed up.



He was driving a golf cart with its headlights on, and had come out to meet me. We had talked on the phone, so he was expecting me, but Geez, NOT NOW! But yes, now. I couldn't just take off. Courtesy demanded a hello and a thank you. That's how I was raised. So I yanked off my helmet, bolted from the trike, and gave Frank a hearty handshake. I couldn't see him too well behind the headlights, so I actually don't know what he looks like. I'm afraid I didn't give him a chance to say much, in case he turned out to be a talker. I thanked him profusely for letting us use his field, made my apologies an TOOK OFF. Thank goodness my GPS glows in the dark. The Airpark is nearby, but I was pretty disoriented in the dark. I arrived in the last legal minute of the longest day of the year, the trees just shadows around me.

That was in 2008. Soon after that, Frank's health declined. I was unable to reach him on the phone, X's appeared on the field, and we stopped using Horse Feathers in the poker run. Recently, I drove out there to see what was going on and found this interesting story.

RC Gliders

The key to flight operations at Horse Feathers these days is Neal Huffman. He's and old friend of Frank's and an avid flyer of radio-controlled gliders. *Avid* doesn't begin to describe it. He's head of the USA national team for the sport, with plans to go to the world championships in Romania this summer. Horse Feathers is where he and others practice and hold regional competitions. It's a major center for the sport.

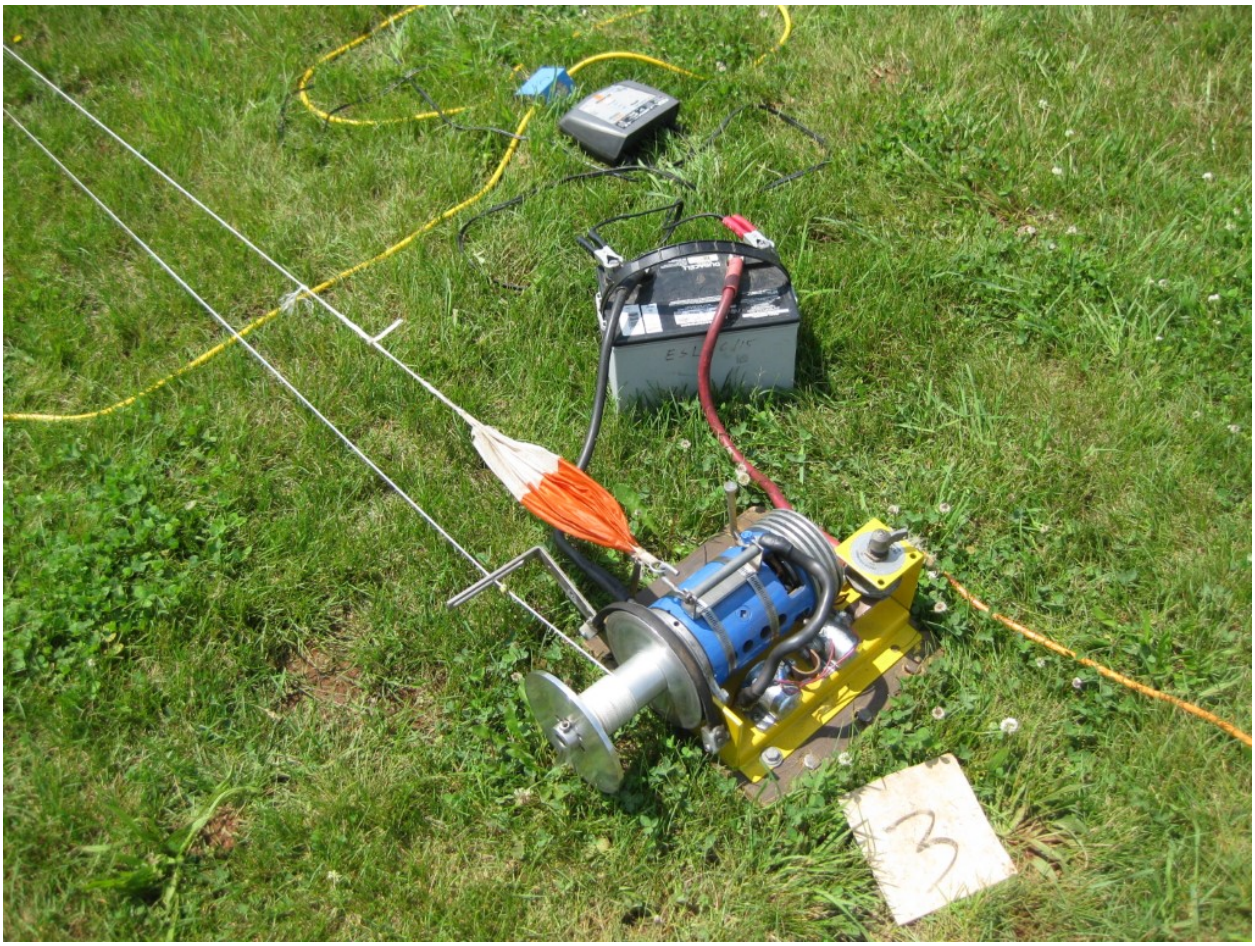
This is the kind of sailplanes they use. It has 3-axis control plus flaps. (BTW, notice what a beautiful field Horse Feathers is, with trees far back and the grass in great shape.)

Sailplane

To introduce competition to the sport, they've created several games. The one I saw them flying was this:

- Start the timer on launch.
- Keep the glider aloft.
- In exactly ten minutes, land the glider at a point on the ground.
- Deduct points for distance from the landing point and distance from the ten-minute mark.

Launching is done by an electric winch that pulls a stretchy monofilament line through a pulley down-field. The orange-and-white cloth marks the end of the line that hooks to the glider. Launches are almost instantaneous and quite steep. Gliders can reach 150 feet easily. Then the pilot has to find lift.



Winch

Launch

Each pilot has a timer standing next to him calling out the seconds as the glider approaches a landing. Here, the landing point is near the end of the white measuring tape on the ground.

Flaps down, count down the seconds, wait for it...wait for it...

Down – about two feet off the point

In exchange for using the field, Neal and his crew mow it and keep the turf in good shape, which it is. (Tom Richards can attest to how much work that takes. No small thing.) Neal tells me that Frank still lives in his house at the field, but with full-time care. He has dementia, with good days and worse days. As last year, I asked Neal if we could use the field for our poker run. He cleared it with Frank and with the glider schedule, and said yes. He says that Frank is always keen to have flyers use his field. It's just that the glider pilots have priority these days, which is fair enough, given that they take care of the place.

Dick Martin, Steve Beste, Allen Whatley, Rob Doak at Horse Feathers, 2017 Poker Run

Neal told me that years ago, Frank had talked about putting the field in some kind of trust so that it could continue as an airfield. But he never actually did that. When Frank goes, his two daughters will inherit Horse Feathers. Neither has any particular interest in flying. Neal says that the glider people offered to buy the property from the daughters at the market rate - about $900,000 - but that they declined. They have hope that some developer will want it and will pay $2 million or so.

This is much the same situation as we found at Harrison's (8MD5), the home field of our sister club in Maryland, CALF. Mr. Harrison and his wife both died within the past 3 years. The heirs put the property up for auction, asking $2 million or so. It didn't sell. But maybe another year. In the meantime, they rent out the fields to a farmer and let CALF continue to use the hangar and airfield. The rent covers the taxes, they have no mortgage, and who knows? The property may be worth a lot more someday.

Fortunately, YOU don't have to wait years for a sweet payday. You can land at Horse Feathers this very month. Come fly in Club 1's 2018 Poker Run on June 9th. First stop is Horse Feathers.

Fly safely,

Steve

This Month's Fly-In Destinations

To encourage all of us to get in the air more, the following is a list of fly-ins I found within (about) 100 NM of the Warrenton Airpark which are occurring in the next month. Sources are: The EAA Calendar of Events, www.flyins.com, www.socialflight.com and the Virginia Department of Aviation Calendar of Events.

Date	Event Description	Location	Distance from 7VG0
Sat, Jun 9 / 9:30-11:30AM	Young Eagles Rally	Stafford Regional Airport (KRMN)	22 NM
Sat, Jun 9 / 10AM-2PM	Women Can Fly (womencanfly.com)	Shannon Airport (KEZF)	28 NM
Sat, Jun 9 / 8:30-10:30AM	Farmville Fly-In Breakfast	Farmville Regional Airport (KFVX)	84 NM
Sat, Jun 9 / 9:30AM-3PM	Potomac Antique Aero Squadron Fly-in (formerly Horn Point Antique Fly-in)	Massey Aerodrome (MD1)	100 NM
Sat, Jun 9 / 8-11AM	EAA 540 Fly-in Cruise-in breakfast and Young Eagles flights	Smoketown Airport (S37)	111 NM
Sat, Jun 9 / 8-10:30AM	EAA 518 Fly-in Drive-in Breakfast	Mifflin County Airport (KRVL)	121 NM
Sat, Jun 9 / 8AM-12PM	EAA 748 Pancake Breakfast	Clearfield-Lawrence Airport (KFIG)	146 NM
Sat, Jun 16 / 11AM-12:30PM	EAA Chapter 1563 Monthly Meeting	Gordonsville Municipal Airport (KGVE)	35 NM
Sat, Jun 16 / 10AM-3PM	6th Annual Mid-Atlantic Gathering of RVs and Friends	Carroll County Regional Airport (KDMW)	68 NM
Sat, Jun 16 / 8-11AM	Lebanon Valley EAA Fly-in Breakfast	Deck Airport (9D4)	122 NM
Sat, Jun 16 / 2-4:30PM	Golden Age Air Museum "Flying Circus" Air Show	Grimes Airport (8N1)	130 NM
Sat, Jun 23 / 9AM-4PM	Women Can Fly (womencanfly.com)	Warrenton-Fauquier Airport (KHWY)	5 NM
Sat, Jun 23 / 8-11AM	Fly-in Drive-in Pancake Breakfast	Claremont Airport (58M)	105 NM
Sat, Jun 23 / 8:30-10AM	Chase City Monthly Fly-In, safety program at 9AM	Chase City Municipal Airport (KCXE)	117 NM
Sat, Jun 23 / 8:30-10:30AM	EAA Chapter 339 and Commemorative Air Force Old Dominion Squadron Fly-in pancake breakfast	Hampton Roads Executive Airport (KPVG)	129 NM

Date	Event Description	Location	Distance from 7VG0
Sat, Jun 23 / 9:30AM-1PM	Young Eagles Rally	Stafford Regional Airport (KRMN)	22 NM
Sun, Jun 24 / 9AM-1PM	EAA Chapter 426 Fly-in Drive-in Breakfast and Young Eagles Rides	Greater Cumberland Regional Airport (KCBE)	73 NM
Sat, Jun 30 / 11:30AM-4PM	EAA Chapter 1250 Cookout	Heritage Field Airport (KPTW)	140 NM

Debunking the Misconceptions in Flying Part 5

By Jim Heidish

This is the continuation of the series of articles that has appeared in past months' newsletters: *Debunking the Misconceptions in Flying*. Through writing and illustrating I am presenting some of the stand-out misconceptions, stating what is wrong, and then presenting what I see as the correct concept/principles and how they apply to our everyday flying. This month is about *Weight and Balance*. Its importance is overlooked many times because of misconceptions.

NOTE: These are my conclusions based on years of study and knowledge acquired by experimenting and flying experience. If one does not agree or understand, it should always be questioned and/or made clear! Never taken for granted!

Weight and Balance (W&B)

For any aircraft to perform their complete flight envelope, they need positive longitudinal stability. The pilot needs the ability to fly a whole range of AOA (angle of attack) and airspeeds with positive elevator feedback in the controls. They also need to know if they are not overweight and/or where that weight is located in the airframe. Both deal with weight and balance (W&B).

All aircraft should have a *Weight and Balance* section in the operating manual explaining very in-depth mathematical/geometrical procedures to be performed if anything is added to the aircraft that would shift its center of gravity or if the aircraft's weight and balance limits are in question. This keeps the aircraft within its useful load and with positive stability! That section is the Bible for that aircraft's weight and balance, unique to that aircraft and no other aircraft. Even though it is important enough to have a dedicated section, weight and balance is misunderstood by many pilots. Its importance is overlooked and many have misconceptions on when the procedures should be performed or if they are needed at all.

Weight and Balance Misconceptions

Pilots think weight and balance of an aircraft is a big mathematical problem to be best solved by an expert, an A&P. Also, pilots think that if they never change or add anything to their aircraft, they never need W&B performed. Some aircraft owners even find that when they have added a few pounds here and there on the aircraft like a new strobe light or that when a big person was in the next seat the elevator trim seemed to adjust the slight pitch changes the additions may have caused. Many in the unregulated do-it-yourself ultralight category say they have added on or changed everything from more powerful engines to ballistic recovery parachutes without W&B procedures and the aircraft flies great.

True or False?

It all depends!

If there are never any changes made to a certified aircraft or in fact any kit built aircraft that has undergone a complete W&B procedure when built, and it is never overloaded, it is true, there should never be any W&B problem. Also, even though it is true that the elevator trim can adjust out the pitch changes, the aircraft can also be on the edge of instability without the pilot knowing it. That new strobe light placed on the vertical stabilizer didn't weigh much, but way back on the tail far from the center of lift, it has more effect than one would think. Any aircraft that uses the pilot or passengers as a balancing force should always have simple W&B checks done as a pre-flight must! Even though many aircraft have gone through big W&B changes without any problems ,quite a few have not been as lucky, some with deadly results! Many pilots fly aircraft that are near the edge of instability (at or over the forward or aft limits) without knowing it, especially if they do not know or understand the warning signs.

The Big Problem

One of the big problems with the weight and balance procedure, the measuring and math, the plotting charts and graphs, is it really does not give one a better understanding. Like you're solving a problem, but still don't really understand what you solved! It is quite detached from flying. It really does not give one a better understanding about the aircraft's weight, center of gravity, horizontal stabilizer/elevator trim force and the center of lift and how they play a balancing act that is a major part of flying.

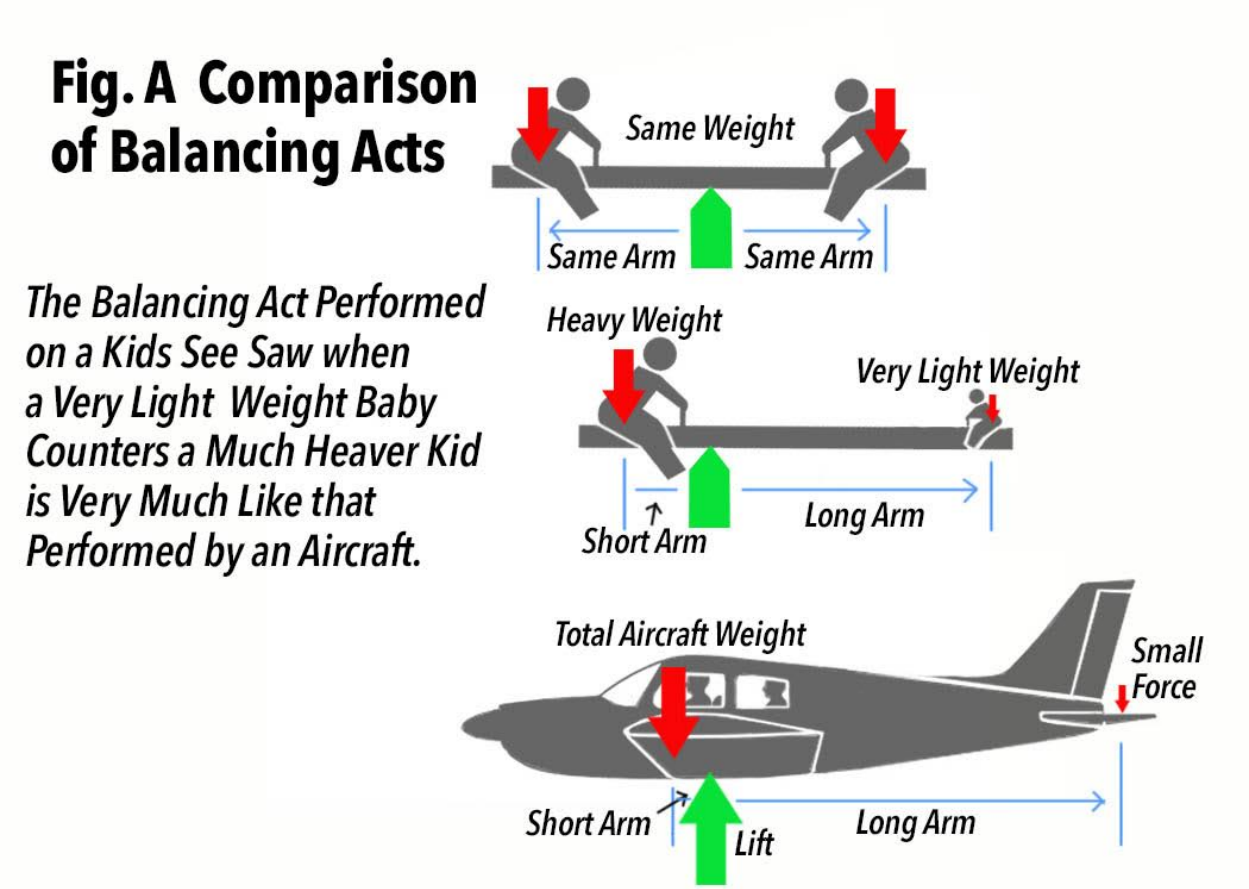
With that said, instead of going into detail on HOW a W&B is performed, lets look at the why. The why is WHY we need it, from a pilot's perspective.

Why? Because every time we fly it is really a BALANCING ACT!

The Balancing Act

Old DC-7 prop airline pilots, flying long before the high-tech autopilot took over, told stories of the balancing act they performed on most flights as passengers walked back and forth to the restrooms, and even more so when they gathered in the small rear lounge for drinks. The trim wheel was in constant motion. Even with the glass cockpits of today's jets, automation can only correct so much when it is out of balance. I personally have been moved forward into the first class section on many late night flights with few passengers. They were all on DC-9/MD-80 rear engine jets that were tail heavy without passengers in the front section of the aircraft. First Class, I never knew that my weight meant so much!

Understanding Balance



Before we look at the aircraft's balancing act, a graphic look at the comparison to a simple kid's ride called the **See Saw** is very helpful (See Fig. A). This classic ride is really a balancing act. The long board (lever arm) with a fulcrum in between where kids (weight/force) can push up and down (the torque). If two big kids weighing the same (same weight/force) are the same distance (equal lever arm) from the fulcrum the torque is in balance. if one kid pushes up it will rotate, but the other kid can counter with a push back. This is balanced torque.

Now, if a small baby replaced one of the big kids there would be an imbalance because of the weight differences and with a rotation and torque, the big kid would hit the ground. But if the fulcrum was moved very close to the big kid, giving the baby a very long lever arm, the board would rotate back and the balance would be regained.

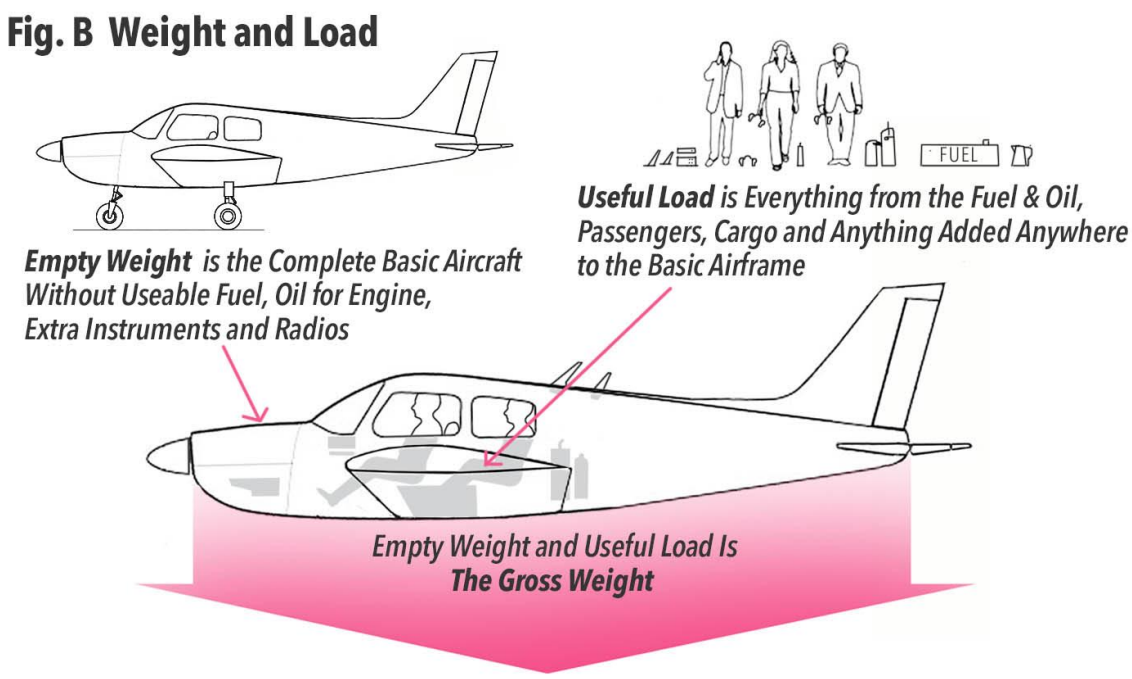
This long arm with little weight/force balancing a much heavier weight/force because of the placement of the fulcrum is much like the balancing act of an aircraft. The short arm of the aircraft's center of gravity is balanced by the long arm of the horizontal stabilizer/elevator with the wing's center of lift as the fulcrum.

To really understand the balancing act (in a conventionally configured aircraft) of the aircraft's **weight** played out between the **center of gravity** and the **horizontal stabilizer/elevator trim force**, with the **center of lift** as the fulcrum, we need to look at each player!

The Players

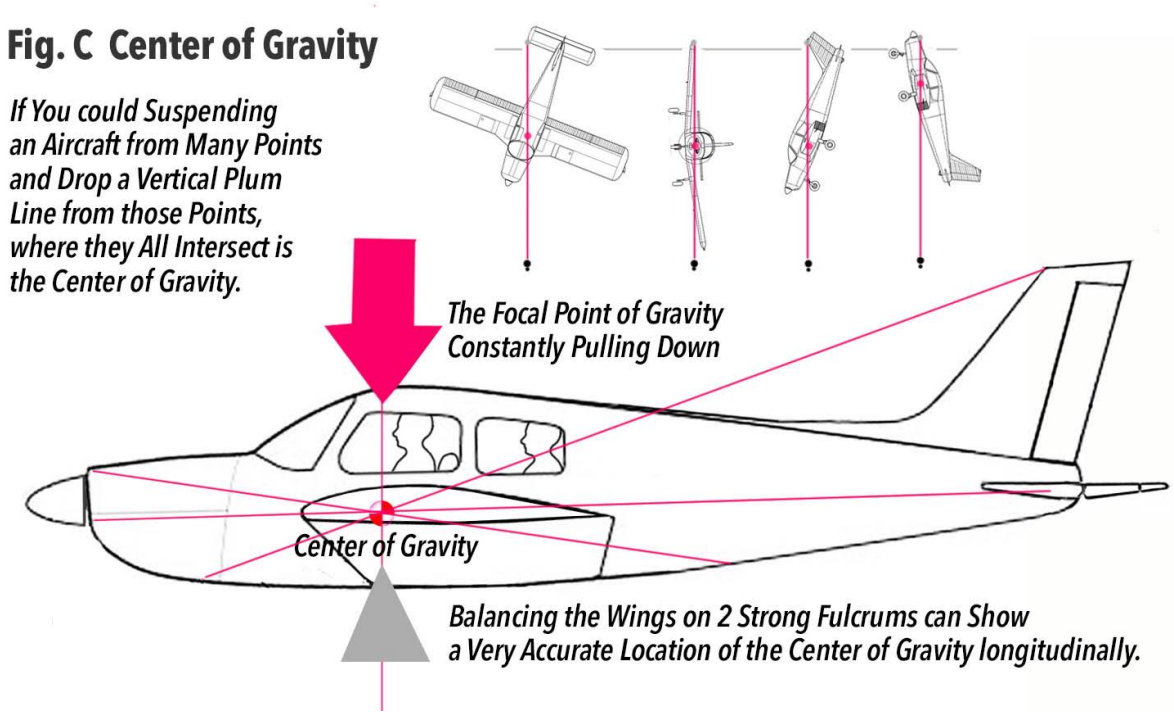
Weight and Load. Aircraft have an empty weight that is the complete basic airframe without usable fuel, oil for the engine, extra instruments and radios. What the aircraft can carry, the useful load, is everything from the fuel to passengers to cargo and anything added anywhere to the basic airframe. The useful load has a weight limit to ensure that it together with the aircraft's empty weight does not exceed the designed gross weight. We always need to remember: for every extra pound of the load the aircraft has to create an extra pound of lift! The specified location within the airframe of everything connected with the useful load is very well plotted out by design so they will not upset the aircraft's center of gravity.

One of the most overlooked parts in the weight and load calculations is air density. One may take off in the cool 55 degree early morning for a flight at gross weight with great performance, only to find that during take off at gross weight at the same airport in the 90 degree afternoon heat the aircraft is under performing. The aircraft is now overweight in the thin air! (See Fig. B)

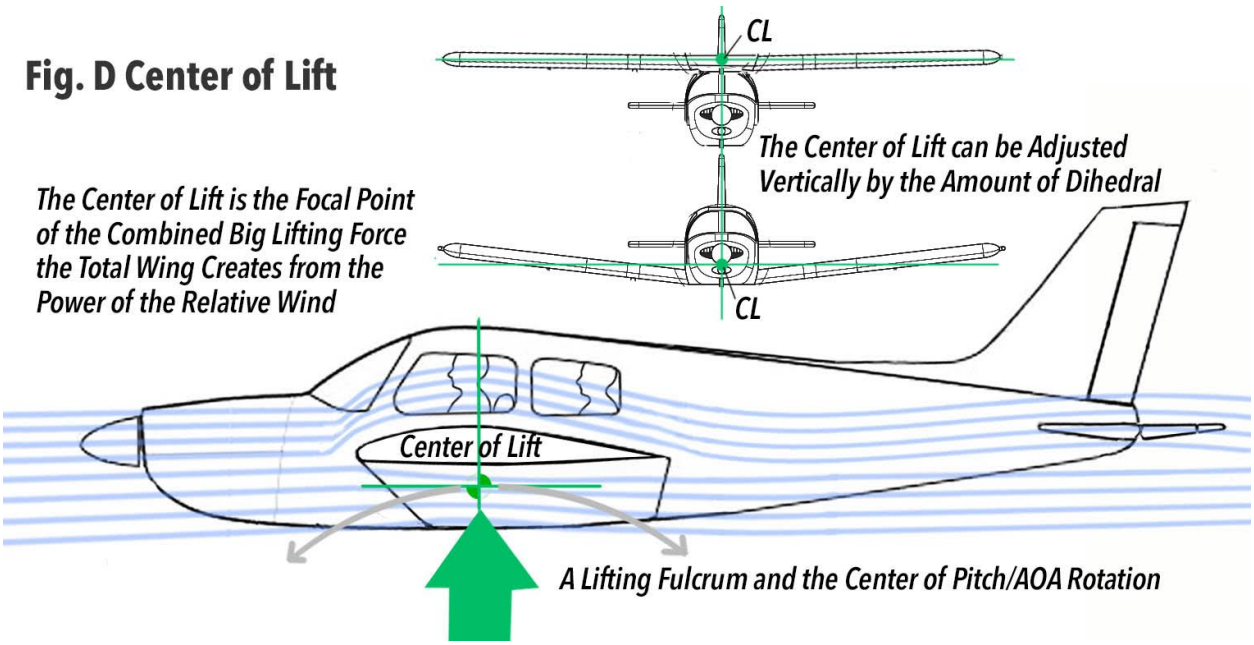


The Center of Gravity (CG) on anything, including an aircraft, can be found by suspending it from many points and dropping a plum line from the points. Where all the lines intersect is the center of gravity. In an aircraft it is really the point where the total loaded gross weight of the aircraft (aircraft, load and passengers) would balance on one point. This is the focal point or center of the big force of gravity constantly pulling down. It is not a fixed point, but has a longitudinal (nose to tail) center of gravity range with a forward and aft limit that shifts with the aircraft's use of fuel and passenger and/or load movements (explained more in Figure F). The balance point location is not as critical laterally (sideways) or vertically in the airframe, but it is very critical longitudinally (nose to tail) because it has to interact with the center of lift longitudinally for stability. You have to take the engineers' calculations of where the point should be, but most lightweight aircrafts' centers of gravity can be shown very graphically by lifting the aircraft up and

suspending the wings by two strong fulcrums (horses). A very accurate indicator of the true center of gravity longitudinally is where it balances. (See Fig. C)

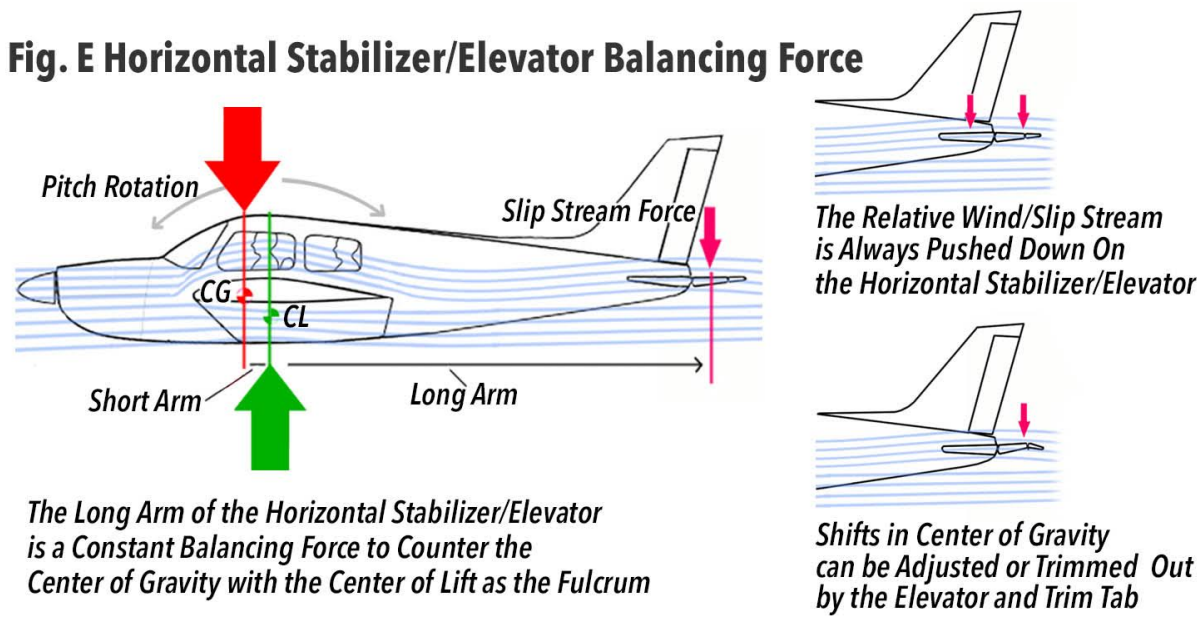


The Center of Lift (CL) is a fixed point dictated by the design of the airfoil and the shape of the wing and it is the center or focal point of the combined big lifting force the total wing creates from the relative wind. it is affected by wing sweep and dihedral. The center of lift on the airframe is high on a high wing aircraft and low on low wings, but can be adjusted vertically by the amount of dihedral. Its location is more critical longitudinally (leading edge to trailing) on the wing that span-wise because it has to interact with the center of gravity longitudinally for stability. If both sides of the wing are creating the same lift (no use of ailerons) the lateral center is considered the center of the span. We should also think of it as a lifting fulcrum and the center of pitch/AOA rotation. (See Fig. D)



The Horizontal Stabilizer/Elevator is really a balancing and trim force. Even though pilots know that the elevator controls aircraft pitch, AOA (angle of attach) and airspeed, the fixed horizontal stabilizer in the conventional configuration aircraft design is a constant balancing force to counter the center of gravity with the center of lift as the fulcrum. It is set at a slight angle on the tail section so the relative wind/slip stream is always pushing down on it. That angle is set so the amount of force needed for balancing at cruise airspeed also has the least drag from trim. We know the AOA needed for slower or faster airspeeds is set by the elevator but any small shifts in the center of gravity in flight, like fuel use, can be adjusted/trimmed out by the elevator and/or held at that trim by the trim tab.

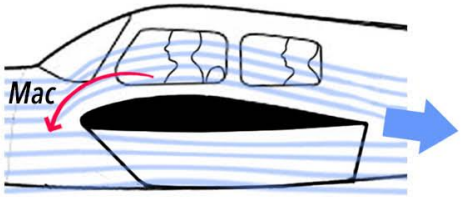
The size of the horizontal stabilizer/elevator depends on how far it is from the wing and center of lift (the so-called arm distance): the closer it is, the larger, and vice versa. Most aircraft use a longer arm (for leverage) and as small as possible stabilizer/elevator for a balancing force with the least drag. Some aircraft are designed with a stabilator - a solid unit that rotates as a whole and does the same job as the stabilizer/elevator. It has less trim drag but is very prone to being overly sensitive and is difficult to keep in adjustment if it is not designed with robust hardware. (See Fig. E)



The Supporting Players. There are two more forces that need to balance out (See Fig. F). One is the nose-down rotating moment of the wing itself caused by the circulation of the downward flow off the wing's trailing edge as it creates lift and is called the M_{ac} (*moment about the aerodynamic center*) of the airfoil. This rotation needs to be constantly trimmed out by the force of the stabilizer/elevator.

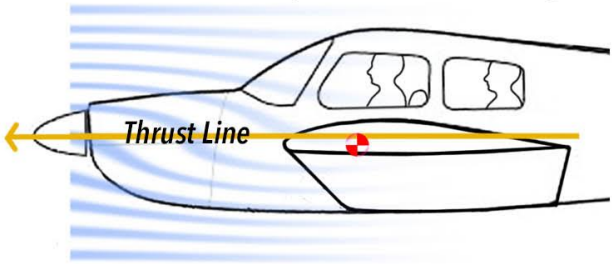
The other is the **thrust center line** of the engine/propeller. If the thrust center line runs through or close to the center of gravity, there is little trim needed. For a high-mounted pusher engine, as on many ultralights, the high thrust center line causes a rotating pitch moment with power changes that needs to be trimmed out (much more than a high tractor engine because the pusher is behind and above the center of gravity and closer to the trimming force, a shorter arm). No matter the configuration, any rotating moments are trimmed with the stabilizer/elevator. (See Fig. F)

Fig. F Mac Rotation and Thrust Center Line

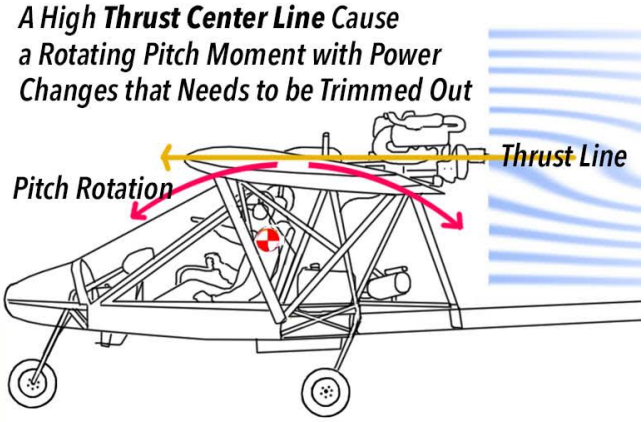


Mac *(Moment about the aerodynamic center) of the Airfoil is the Noses Down Rotating Moment of the Wing Cause by the Downward Flow Circulation Off the Wings Trailing Edge and Constantly Trimmed Out by the Force of the Stabilizer/Elevator*

A ***Thrust Center Line*** *that Runs Close To the Center of Gravity Needs little Trimming*

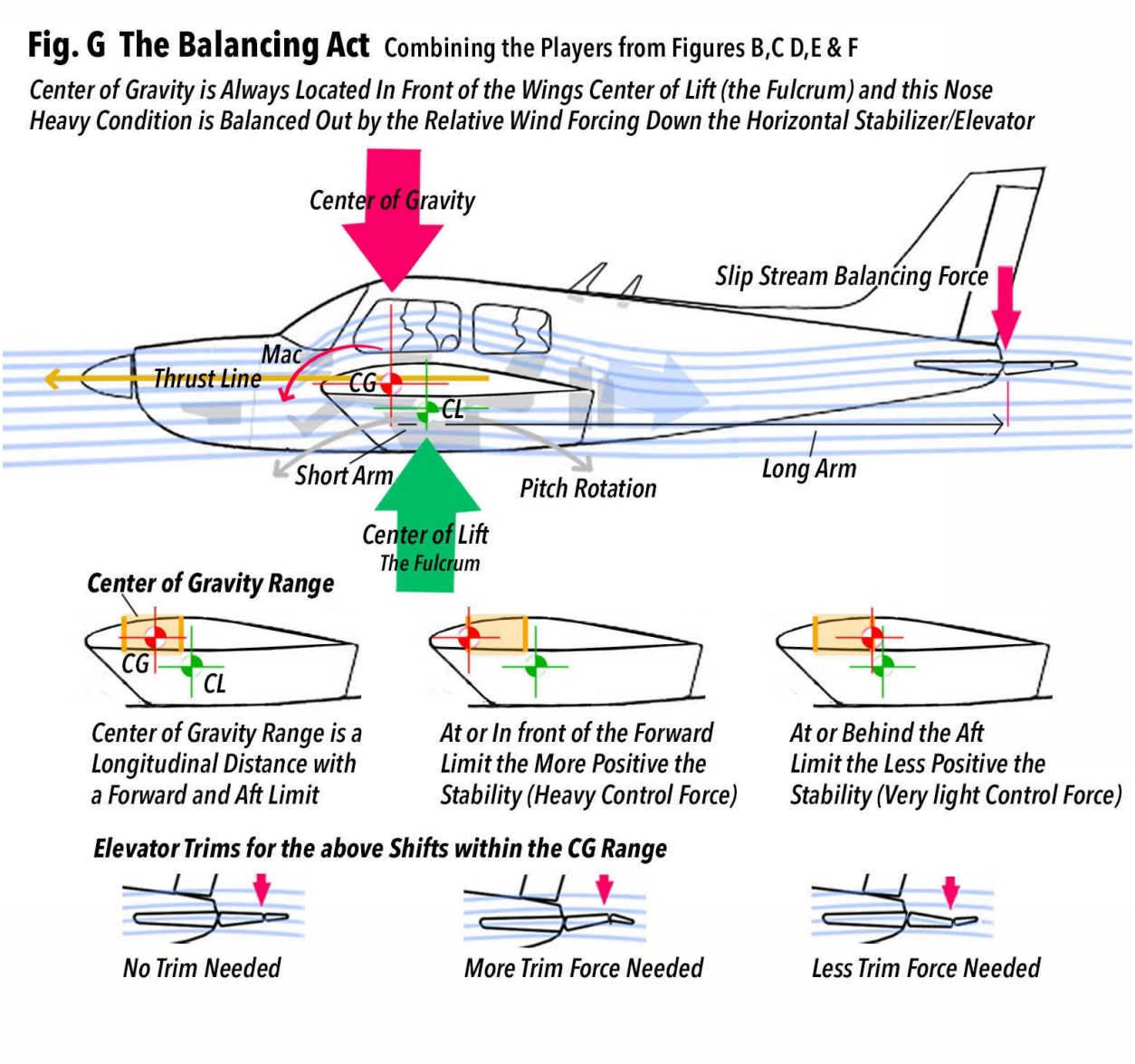


A High ***Thrust Center Line*** *Cause a Rotating Pitch Moment with Power Changes that Needs to be Trimmed Out*



Combining the Players

(from Figures B, C, D, E &F) **in the balancing act**



The interaction of the sections of the airframe described above and in Figures B, C, D, E & F will achieve positive longitudinal stability in a regularly configured aircraft if the aircraft's center of gravity is always located in front of the wing's center of lift (the fulcrum)! This nose-heavy condition is balanced out by the relative wind forcing down the horizontal stabilizer/elevator. This constant force on the long tail arm can be varied by the elevator to adjust for a slight weight shift in flight (the so-called trim), but only so much shift can be trimmed out! This shift is called the center of gravity range.

Center of Gravity Range is a longitudinal distance with a forward and aft limit. The aft limit is extremely critical because as it gets closer to the center of lift the positive stability is less (light control force). The forward limit is less critical because the farther ahead of the center of lift it is,

the more positive the stability (heavy control force). The range is set so an aircraft that is within its weight and balance requirements will always have a positive AOA control force that is not too light or too heavy, just the right feel. The elevator can easily adjust for shifts within the range and hold the new location with the trim tab.

As with a lot in flying, stability comes with trade-offs. Even though the downward force applied by the stabilizer/elevator is the counter balance of the center of gravity it has to be added to the weight the wing is lifting. There is also a drag penalty and more so when the elevator is used to trim out forward center of gravity shifts. (See Fig. G)

Meeting Minutes

May 2018

Flying Club One Meeting

Saturday, May 12, 2018
Warrenton Airpark
Warrenton, VA

Selling 50/50 tickets before meeting

Call to Order

President **Steve Beste** called the meeting to order at 11:10 A.M.

25 members present (BIG turnout!)

CONNECTIONS

Visitors & New Members

New member **Will Denkins** loves the light end of our sport, he flies a PPG. **Fabian Georges** moved here from California where he was flying GA and ultralight aircraft. He is in the market for a Quicksilver UL. Also, he made quick use of his membership by preparing our outdoor lunch today. **Grover McCall** joined the club today. He is former military, a CFI/II/G and frequent flier with **Martin Walker** in Martin's motor glider.

Visitor, **Cody Dohm** (**Bill Dohm**'s son) stopped by. He is in the U.S. Air Force and a crew chief / A&P for the front line high-tech F-22 fighters.

Old Members

The great weather brought **Gary Edgecomb** up from Gordonsville. He flew in with his colorful red, white and blue Kolb LSA. **Dick Martin**, **Monty Betts**, **Jim Heidish**, **Woody Weaver** and **Steve Beste** said they recently took advantage of the few times this year that the wind was not blowing 10 to 15 mph. Each reported finally having a smooth flight this past month. Everyone is hoping for the summer doldrums of many years ago, the good old days!

REGULAR REPORTS

Secretary: Jim Heidish reported that the April minutes were not published yet, but will be in the May Club Newsletter. They can be reviewed at the June Club meeting.

Treasurer: **Jim Birnbaum** reported that April income was $102.00, expenses were $52.74, and check book balance is $2736.95

President: **Steve Beste** reported on organizing the annual Flying Club 1 *Poker Run*. It is set for June 9 and will run before our June meeting. It will be flying out of the Warrenton Airpark at 8:30 AM to close in grass strips so everyone is back in time for Poker and the meeting. Steve will send out more information by email.

Membership Director: **Jim Birnbaum** reported that we now have 40 paid-up members. Again, he reminded members to look at the monthly email roster, where paid-up members are always listed with (2018) after their name.

Warrenton Airpark Owner: **Tom Richards** said that he still plans to build more hangars, but the big news is that he is renting out the tall end space in his big pole barn hangar to a person that restores old VW Beetles. Tom is talking to the owner of the big line of trees at the north end of the Airpark and seeing if they could be trimmed down. Some of the trees are 130 feet tall and a real obstacle in the final approach to runway 22 (landing to the south). Tom also said the DC Skydiving outfit will be operating out of the Airpark for one more season, but it may be their last.

Old Business

None

New Business

None

MONTHLY PROGRAM

None

50-50 Drawing

Winner **Tim Loehrke**

Adjourn

President, **Steve Beste** adjourned the meeting at 11:50 AM.

Cook Out

The big membership turnout loved the delicious outdoor lunch prepared by **Fabian Georges**.

Submitted by **Jim Heidish**, *Secretary*

Service Providers

Recap our standing list of service providers:

- **PPG instructor and dealer:** Michael O'Daniel, 540-270-8855
- **Aircraft instructor - CFI:** Pete Bastien, 703-568-5778
- **Trike instructor:** Pat Tyler, 202-746-4687
- **Aircraft instructor - light sport and seaplane:** Chuck Tippett, 540-905-5091
- **Ultralight (Part 103) instruction:** Tom Richards' Grass Roots Flyers, 703-568-3607
- **Machinist:** Luther Taylor, 540-222-3927
- **Welder:** Luther Taylor, 540-222-3927
- **A&P mechanic/IA (not at Airpark):** JD Ingram, 513-388-6312
- **Light Sport Condition Inspections, Rotax Certified:** Tim Loehrke, 703-618-4005

Activities

Flying Club 1 Activities Schedule

Designated Club meetings will be held the first Thursday of each month in the Centreville Regional Library, 14200 St. Germain Drive, Centreville, VA, at 7:30 PM. Others will be held at 11:00 AM at the Warrenton Airpark as shown in the 2018 schedule. Changes in time or location will be posted in this newsletter and on the Club website.

Date	Activity	Location
Sat, June 9th, 8:00 am	Poker Run	Airpark
Sat, June 9th, 11:00 am	Club meeting, fly-in and cookout at Warrenton Airpark	Airpark
Sat, July 14th, 11 am	Club meeting, fly-in and cookout at Warrenton Airpark	Airpark
Sat, August 11th, 11 am	Memorial table, monthly meeting, fly-in and cookout at Warrenton Airpark	Airpark
Sat, September 8th, 11 am	Club meeting, fly-in and cookout at Warrenton Airpark	Airpark
Sat, October 13th	Club meeting, fly-in and cookout at Warrenton Airpark	Airpark
Sat, October 24th	Club 1 Color Run Fly-out	Airpark
Thu, November 1st, 7:30 pm	Conversation, club business meeting and program	Centreville Regional Library
Sat, December 8th, 5 pm - 8 pm	Monthly meeting and Holiday Party	Airpark Club House

Classifieds

Ads will be run twice and then dropped unless resubmitted, or renewed by telephone or e-mail. Please advise the editor: **Lucy Ooi**
(Ooi.Lucy@gmail.com) when the ad is no longer needed.

Owner/Builder of Fisher Celebrity (biplane)

Looking for a Co-Owner

All wood construction, Grove one-piece spring-aluminum main gear
Powered by Rotec R2800, 7-cylinder radial engine, 100 horsepower

A tandem 2-place open cockpit biplane, cruises ∼80 MPH
Qualifies as light sport

Construction site & hangar, Warrenton Airpark (7VG0)
Project is ∼80% complete

Project includes Grove Gear, Rotec R2800, Instruments, Flying Wires and all other major components. Total value ∼$35,000

A current co-owner is offering his half of this beautiful project
(Entire aircraft sale – may be considered)

Call for additional info or to make an appointment to see this beautiful Taildragger!

Gil Coshland - (703) 618-3422
Asking $17,500 for his co-ownership

Jim T. Hill - (703) 659-8336 (Co-owner)

Weight-Shift Enthusiasts - Your prayers have been answered! A very nice up-scale trike at an affordable price...

Specifications: NorthWing Navaho (strut braced - no king-post), 2-seat Tandem

Engine: Rotax 582 blue head with C- Gear-Box and just under 300 hours total time (never over-hauled)

Well-maintained - dacron fabric and everything else looks brand new.

Many extras including Radio, GPS, Landing Lights, wheel pants, hydraulic disc brake system, wide tires, 3-blade IvoProp, 2017 Virginia License, 1,050-lb BRS parachute for safety and extra parts.

Photo below was taken at Shannon Airport. This Trike is owned by Kiho Bae, and has recently moved to Warrenton Airpark. Kiho Has asked me to advertise this at an asking price of $18,500. Incidentally, Kiho is an experienced pilot who flew C-46 Commanders in the Korean Air Force, and now flies a Robinson R-44 Helicopter and single-engine fixed-wing as well as weight-shift aircraft. He would be happy to take you for a demonstration ride. Kiho is willing to fly it to your location.

Special Price $18,500

Call Tom Richards (703) 568-3607 or Kiho at (703) 314-6262

Airfield and house for sale. Dr. Bob Karmy has long been a friend of the Club, letting us fly into Karmy's (67VA) for years. He's now retired and is selling the place. It includes a large house, with a hangar and an 1,800' grass strip just south of Woodstock in the valley. This would make a great training field. And do notice the hot tub in its own little house. The listing and pictures are here. Asking $899,000.

Contact the realtor, Shirley French. Shirley@funkhousergroup.com 540-325-4444.

Membership Dues Policy

The period of membership follows the calendar year - January through December. The renewal period starts on 1 October with regular dues at $20.00 and family at $25.00. Members who have not paid their dues by the end of February will be dropped effective 1 March and will not receive the Newsletter or Membership Roster. New members joining after 1 October will be charged $20.00 or the family rate, if applicable and will be credited will full membership for the following calendar year. Please mail payments to Flying Club 1, 8570 King Carter Street, Manassas, VA 20110. Payment can also be made at the regular monthly meeting. Please include the Membership Application form with your payment. This will be used to ensure that our records are current. A copy of the membership application is attached and also printed at the end of the Newsletter.

Jim Birmbaum
Flying Club 1
Membership Director, Treasurer

MEMBERSHIP APPLICATION

Flying 1 Club

Type of membership: ☐ **New,** ☐ **Renewal,** ☐ **Regular,** ☐ **Family membership**

Name(s): _____

Name To Go On Your Name Tag: _____

Street or PO Box:_____

City: _____ **State:** _____**Zip:** _____

Telephone, Home: _____ **Cell:** _____ **Work:** _____

Spouse's Name: _____

Emergency Contact: Name: _____ **Phone:** _____

E-mail Address: _____

Aircraft Liability Insurance through: _____

Aircraft make and model: _____ **N-Number (if any):** _____

Pilot rating(s): _____

Club Activities or Services for Which You Volunteer: _____

Information from this application will be in the club's membership roster which goes only to members.

Instructions:

1. FILL OUT THE ABOVE FORM.
2. ENCLOSE A CHECK FOR $20 ($25 FOR A FAMILY) MADE OUT TO **"FLYING CLUB 1".**
3. SEND THE FORM AND CHECK TO:
   Jim Birnbaum, Treasurer
   8570 King Carter Street
   Manassas, VA 20110-4888

To join the national USUA, go to http://www.usua.org
To join the national USPPA, go to http://www.usppa.org

Flying Club 1 General Information

The Flying Club 1 is a nonprofit, recreational club dedicated to the sport of ultralight and light sport aircraft flying.

2018 CLUB OFFICERS AND DIRECTORS

President: Steve Beste 703-321-9110

Vice President: Dick Martin 703-242-2367

Secretary: Jim Heidish 703-524-5265

Treasurer: Jim Birnbaum 703-361-7478

Events Coordinator: Robert Doak 703-897-4989

Director At Large: Pete Bastien 703-568-5778

Director At Large: Robert Doak 703-897-4989

Director At Large: Lucy Ooi 585-410-5573

2018 CLUB VOLUNTEER STAFF

Safety & Training: Vacant

Membership: Jim Birnbaum 703-361-7478

Club Artist: Jim Heidish 703-524-5265

Newsletter Editor: Lucy Ooi ("Wee")

Ooi.Lucy@gmail.com

Web Master: Steve Beste,

president@flyingclub1.org

A club is only as good as the members who volunteer to support its activities. The following listed activities with the club require member support in varying amounts. Please indicate on your membership application the function(s) (can be more than one) you will support as a Club member. All active Club members are expected to participate. However, members who live some distance away and cannot attend meetings regularly may prefer to support functions associated with Club weekend activities.

ANNUAL DUES (Jan 1-Dec 31) $20.00. Family membership (typically husband and wife): $25.00. A spouse who wishes to participate will please complete a membership application form.

CLUB WEB SITE: http://flyingclub1.org

MEETINGS are monthly, year-round. See the web site for dates and places.

THE NEWSLETTER: The newsletter is published by email on the first of every month.

SUBMITTING ITEMS FOR THE NEWSLETTER Members and non-members are encouraged to submit items for this newsletter. Send submissions to Lucy Ooi at Ooi.Lucy@gmail.com at least one week prior to the end of the month.

If you are interested in joining the U.S. Ultralight National Organization go to their website for membership information at: www.usua.org

Likewise, if you are interested in joining the U.S. Powered Paragliding Association, the National PPG Organization, go to their website for membership information at: www.usppa.org