

## CARTWHEELS

BY: LARRY LOUCKS, PRESIDENT

Happy October, it should start cooling off soon, the leaves will be falling and once again we will have to suffer through "97 Trillion" political ads because "It's Election time!"

Please come to the monthly meeting October 14th at 7:30 PM, The Elections are coming up in November, and we will be proposing a slate of candidates for Club Officers, Field Safety Officers, Flight Instructors, Field Maintenance and Membership Director.

We need to have as many members attend as possible so we can conduct official business with a quorum.

On September 16, 17, 18 we hosted the USA Team Trials for the Team USA F3D (Pylon) World Team, they are going to Australia for the 2011 Championships.

Congratulations and Thanks to the all the 2011 Team members, Ray Brown, Travis Flynn, Gary Freeman Jr. and Randy Bridge, we know you all will do a great job representing the good old USA at this World Event.

Once again our volunteers did a fantastic job of making this a really great event, we were highly complemented by all these world class competitors. **Our CD's and volunteers deserve a good cheer and thank you for supporting your club!!**

Please make time and volunteer to participate in the operation of the club, it is not hard to do, only takes a few hours per month and helps to keep a good balance of experience involved with the ongoing events, functions and business of the club.

Have fun, be safe, see ya at the meeting.

### New Members

Proposed at the September Meeting

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## PRESIDENT TO PRESIDENT

### Reach Out to Curious Observers

by Dave Mathewson, AMA President

We've all heard the saying "You only get one chance to make a good first impression." That holds true no matter if you're meeting someone in a causal setting for the first time, in a job interview, or maybe even when you're at the field getting in a couple of flights and a spectator or two stop by to watch.

Most all of us want our clubs to be active, viable, and thriving organizations. We want that new blood—and the enthusiasm that comes with it—found in new members. It's that enthusiasm that supplements and compliments what the more longtime members of the club bring to the table. For a club to reach its potential it takes the guidance of its experienced members coupled with the zeal and passion found in its newer members.

Many spectators who stop by the field already have an interest in model aviation. After all, they've taken the time to stop by to see what's going on. Sometimes all it takes to turn that spectator from an interested observer into a new modeler and member of your club is to simply take a few minutes to walk over and say hello. Chances are the spectator will have some questions about model aviation. And, since we all like to talk about our hobby, my bet is that you will enjoy the conversation.

Many of us have been in the hobby for so long it's hard to remember what it was like when we first decided we were interested in modeling. But I'll bet for many of us we got involved after visiting a local hobby shop and then taking a trip to the local field. And I'll also bet, for many of us, when we visited that field, we were befriended by one of the club's members and that's what really sparked our interest in becoming modelers. For many it was that first contact that resulted in a lifetime of enjoyment as modelers, and the friendships and camaraderie that resulted from belonging to a club.

The next time someone stops by your field to watch the action, why not take a moment to greet them? That one simple act may result in gaining a new member of the model aviation community, a new member of your club, and quite possibly a new friend. All of this is possible with just one simple act of outreach. You only get one chance to make a good first impression.

**Our next club meeting is:  
Thursday October 14th at FTE.  
Plan to attend and see what's new.**

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*Courtesy and  
common sense keep  
R/C modeling fun  
for everyone.*

**Club Corner  
The Club Corner**

*by Jim Wallen,*

How involved are you in your local club? Perhaps you just want to pay your dues and go fly your planes when you want. Maybe you volunteer to cut the weeds on a tidy-up day at the field but you don't want to do much more. Maybe you seldom go to a club meeting or perhaps you make it a point to attend all of them.

Have you ever submitted an article for your club newsletter? Do you go to some of the club social functions? Have you ever cornered your club field marshal to share with him or her some ideas you would like to see implemented? Do you show up for your training night at the field to help out? Keep in mind that all skill levels can find a role to help out with the new guys and kids!

Have you ever had the urge to put together a fund-raiser for the club? Can you find a way to show up early for club meetings and help with setting up refreshments? Have you ever thought about setting up a Valentine Day Fun-Fly to get some of the ladies involved? Did you ever think about becoming a club officer?

You get the point. The list goes on and on. You will find that the clubs that have more people involved tend to prosper and those that don't tend to stagnate and even fail. We all know that 10% of the members do 90% of the work. It doesn't have to be that way!

If you are in any sort of leadership role in your club, think about ways to motivate some folks and change that ratio. Things do not just happen by themselves. It takes you to initiate change. Take that first step and watch how your club benefits.

**IRCC Meeting Minutes**

September 2, 2010

*Minutes recorded by:*

*George Nauck, Secretary*

*Dale Anderson for George this Month*

President Larry called meeting to order at 7:30pm  
Minutes of previous meeting approved by acclamation.

President Larry gave the Treasurer's/Financial Report:

Purchased new tractor from Grove Equipment  
Negotiated better rates through Regions Bank and moved accounts there as a result

President/Treasurer authorized to move funds within accounts

All officers authorized to sign checks

New weed eater purchased

Cash flow discussed and is positive

Membership reported at 95 members to date

President Larry led discussion of field options, now that our field is up for sale. A committee is seriously looking at options, and several are coming up for consideration. Membership will be kept informed of progress.  
Field maintenance report given:

Tractor shed completed thanks especially to David, Ian and Dale

Weed killer needed for spots on runway and other areas

Field in good shape

Events:

FAI World Team Trials-Pylon Racing IRCC is host club, great honor for our club; national team competition plus guest competitors from other countries will be present. Sept. 16-19...club closed to general flying.

IMAA District 5 Mini-Fest will be at our club on Oct. 22-24

Monster Planes is Oct. 7-9

Heli Spectacular was discussed...question whether it will happen this year

David Raff informed club of Plant City Chamber of Commerce event "Planes, Trains and Automobiles", April 23<sup>rd</sup> '11. RC planes and demo flights and static display opportunities for our members.

Ian Clark was voted unanimously to receive the Sportsmanship Award for the month...well deserved!

50/50 completed

A new member presented antique (early) transmitter and servo's for display.

President Larry adjourned the meeting at approximately 8:45pm.

**Misplaced Center of Gravity**

*From The Greater Detroit Soaring and Hiking Society*

Misplaced center of gravity (CG) is a perennial killer of newbies and old pros alike. Since it's almost building season, this is a good time to go over the basics. A new airplane with the wrong CG location is almost a guaranteed crash. (I can write authoritatively about this since I've screwed it up so often myself.) If you're an experienced builder/pilot please bear with me, I'll try to pass information to the newer guys without talking down to you.

The basic deal: any and all airfoils in any fluid—air, water, peanut oil, whatever—share this perverse characteristic: when they move through a fluid at a slight angle (the angle of attack), they experience lift forces that act "as if" they are ahead of the CG. This effect makes the foil want to tumble. We've all seen this since we were kids. When you toss a simple strip of wood or a wing-shaped piece of paper and expect it to fly, it won't! It starts tumbling right

The IRCC monthly club meeting will be held at FTE near the Lakeland Airport. The next meeting will be on Thursday October 14<sup>th</sup> and starts promptly at 7:30pm. Remember to bring a chair if you want to have a seat.

away.

To stabilize the main wing, most airplanes (and birds) use the same approach. The CG is placed a small distance forward of the center-of-lift of the wing. The slightly forward CG overcomes any natural pitching-up moment of the main airfoil and makes the "plane" want to pitch forward and down. This overall pitch-down tendency can then easily be controlled by a force (normally down) from a stabilizer/elevator mounted rearward of the main airfoil.

You might ask why the initial step of adjusting the CG ahead of the foil wasn't good enough to control the foil. Why do we need the additional step of adding a rear stabilizer? The answer is that the CG needs to be only a very small distance ahead of the center-of-lift and, if the wing has no other form of stabilization, its location is sensitive and difficult to maintain. On the other hand, a small stabilizer mounted some distance behind (or ahead of the wing as in the case of a canard) makes the job relatively easy. The farther away from the CG the stabilizer is located, the smaller it needs to be. At the extremes, planes with long fuselages like a Blaster hand launch or a super-ship can use what appears to be a relatively small stabilizer. Aircraft with very short distances from CG to stabilizer need relatively large stabilizer-elevators. Flying wings recurve the entire airfoil or use full-span elevons to act as stabilizers.

Let's go through some of the implications of CG location: The farther forward of the airfoil center of lift you put the CG, the more stabilizer down force you need. Generating lift, even in the down direction, generates drag. The more lift, the more drag. So, a plane with CG too far forward will need a stab set to a high-lift, high-drag condition in the down direction. Think of the center of lift of the main wing as kind of a fulcrum or pivot point. The farther forward the CG is from that point, the longer its effective moment arm becomes and the harder it is for the elevator at the other end of the "Teeter-Totter" to swing it around. This makes the model less responsive to elevator control and the airplane can feel sluggish. (This is only a partial reason for control insensitivity but I won't turn this article into a book.) Even though forward CG makes an airplane less sensitive and increases overall drag slightly, the slower response time can be a good thing for beginners if it isn't overdone.

Going the other way: as CG is moved rearward and closer to the center-of-lift, the required stabilizer down force will decrease and the airplane will become more sensitive to elevator, but eventually the model will get twitchy and hard to control. If the CG gets on top of the center of lift, the plane will become neutrally stable and won't automatically tend to pull out of a dive. It's for this reason that we use a "dive test" to help fine-tune the CG location. It's not a perfect test, but it is helpful. If you're not familiar with how to do it, ask one of the old dogs.

Okay, but you've gotta get the plane set up initially before you can even go out and do a dive test ... how do you get close "on the bench?" Mother Nature helps us here, because the center of lift of almost all airfoils tends to act as if it's at a point about 25% from the leading edge of the wing. (To become more accurate, it's 25% of the "effective chord length" for the leading edge of the "effective chord.") A

simple general rule is that the CG should initially be set at 23-25% of the average chord of the wing. (For a flying wing this should be 16-20% of the effective chord.) Most modern kits and plans show an initial CG location, but a surprising number of older kits don't. And, more troubling, even with modern kits, some of the locations shown are just plain wrong! If you don't know how to determine the effective chord for a given wing, I can quickly show you how.

I don't mean to belabor the moment-arm thing, but the longer the relative moment arm of an airplane (the longer the wing-stab distance of the "longer legged" plane is), the more tolerant it will be of CG location. A long-bodied glider with CG at 33% might fly beautifully while a short-bodied fun-fly plane or scale model with CG at 33% could be uncontrollable.

Be smart: make darn sure that the CG is at or slightly forward of the 25% point for your initial flight with a new plane! Don't bring it home in a garbage bag! After you know how the thing flies, you can adjust the CG rearward to suit your own nervous system.

Last year Wolfie talked me into buying one of the Great Planes balancing stands. If I recall it was about 19 bucks but it's been the best plane saver I've had for some time. When I started using it I was embarrassed to find that the CG locations of some of my planes weren't where I thought they were. I'd been careful balancing them with wing supports, string hangers and so on, but they were off enough to make the planes seem like poor flying machines. They weren't. They were just improperly balanced

### FAI F3D Team Trials 2011

By: Scott Smith and Rick Rude  
aka: Pylon Guys

Well hello guys, I guess you are wondering how the USA F3D Team Trials went? In one word **FANTASTIC!!** All the competitors were very pleased with the site and commented on how friendly and helpful everyone was to them. For our foreign pilots in the event, we had 3 pilots from Guatemala, 1 from Mexico and 1 from Venezuela. For the Americans, we had 3 from Florida, 3 from California and 1 from Texas.

The entire practice and event was sunny, slightly breezy with lows in the 70's and highs in the low 90's. Thursday practice went good, with about 7 pilots putting in practice flights and the Imperial R/C Club setting up the field. I believe we lost 1 plane Thursday to a wing failure, but the engine and electronics were all recovered. By Friday, all of the pilots had arrived (*except for Travis Flynn*), and the skies were filled with the sweet sounds of high performance racing aircraft. Gary Freeman had an awesome pole 3 strike just to show everyone what not to do! Gabriel Tohhan also had a partial wing failure; the plane was lost off site, but was located and recovered nearly intact.

Saturday we got rolling right at 9AM, and let me tell

you the flying was intense. Lots of fast laps and a quick turn around with all the pilots. We began the day with the foreign pilots flying 2 plane heats, but decided to move them to 1 plane heats like the US pilots since we had the time. Only 2 planes were lost (*Jamie DeLaVega in Rd. 5, Gabriel Tohhan in rd. 7; both planes recovered*) and despite missing the first round, Travis Flynn was leading the pack by the end of round 7. We finished round 7 just after 3PM.

Sunday we started out with some photos of all the guys, and then began round 8 just after 9AM. Round 8 was a real standings changer, with 4 out of 7 of the USA pilots pulling a DNF. This made for an interesting top 5 in the USA battle with all the positions literally changing every single round. Lee Vonderhey after a hard day Saturday, decided to sit back and enjoy the show. This one went to the wire for the last 2 spots on the team. The only racing incident was on round 11 when Gabriel Tohhan came off of turn 1 and impacted the ground 1/2 way to turn 2. Despite his losses, take a look at Gabriel's finish in his first F3D event. I guess persistence does pay off!

## [Coming Area Events](#)

### **Monster Planes**

October 7 – 9  
Lakeland Airport  
[www.franktiano.com](http://www.franktiano.com)

### **IRCC / IMAA Dist. 5 Mini Fest**

October 22 – 24  
[www.imperialclub.com](http://www.imperialclub.com)  
David DeWitt CD  
863-838-4459 [Benz425@aol.com](mailto:Benz425@aol.com)

IRCC Helicopter  
TBA

Congratulations to the top three at the USA FAI Qualifier hosted by the IRCC

Travis Flynn, Randy Bridge, Gary Freeman



I just want to think the club members that helped out at this event. Everyone there thought we had a great club and really appreciated the work the guys did all day long during the race. Everything was handled professionally and honestly and the racers appreciated it very much. Our club came away from this event with a very good reputation even from the California boys.... *Rick Ruede*



The competitors who came from all parts to compete



