Newsletter of the Pikes Peak Radio Control Club
AMA Club Number 179
Volume 36, Number 12 – November, 2008
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Next Club Meeting:
Wednesday, November 5th, 2008
7:00 PM at the ELIC
(East Library Info Center)
Pikes Peak Public Library
(on Union)

Newsletter Columns

By Larry K. Laughlin

Sorry about the lack on contributions to our newsletter these last few months. I bought another house and had to go into high gear giving it a major face-lift when my other house sold unexpectedly fast (I knew I priced it too low!).

All the while, I was still trying to participate in as many RC events as possible as I worked my shop & business out of boxes. Frankly, it's all caught with me a bit now and I'm beat!

I also had to blow off my plans to host a PPRC Fun-Fly event this year, which I hope to try again for in 09. Fortunately, PPRC has a wonderful monthly contributor in Keith Davis. His columns are terrific and I'm sure I speak for all when I say, keep up the wonderful writing Keith. Great stuff!

All of this moving business has caused me to compile a bunch of stuff earmarked for Jefco's Auction, coming up the first weekend of Feb 09. It's surely not to soon to be thinking about it, as it always seems to right around the corner. We tend to put these tasks off, (preparing items FOR SALE), until the very last minute. So why not start preparing now? Polish the item(s) up, list the features and set them aside, ready to take to the Jefco Fairgrounds Friday afternoon or Saturday morning, the first day of the Auction.

Our field - PPRC's field has never looked better and I've managed to make it out there a few times since our War Bird meet to work out. We're so lucky to have such a great place to fly.

I've also dashed up to Chatfield a few times to fly the jets, but the State Park Rangers have become somewhat hostile towards the larger, faster airplanes. Pilots must keep their over-flights contained within a fairly narrow area and violators are rewarded with a $50 fine by eager young Rangers. And no, I myself, have not had the pleasure of contributing to the State Park in this fashion – yet!

The full size airport in Limon is still available for larger airplanes and jets as well. For me, it's probably about the same drive as is Chatfield too.

As my shop starts to take shape, I'll finally be able to follow through and get some of these modeling projects completed. Unfortunately, they're all far too massive. Perhaps when the winter snow comes, I'll be trapped and forced to stay in my shop for hours on end!

'They call me Mr. Flutter' - 'Flutter' you say? Yep, I've seen a bit of Flutter recently. I've written a little below about one such occasion (War Birds over the Rockies), but more recently, I was at the controls again when flutter occurred on the airplane I was flying.

Rob Waggoner asked if I like to try his new 50cc Red Bull Extra 300 he's been flying. "You bet", I said. Rob had 10-12 flights on this airplane already, but it's always nice to get another pilot's feedback on fine tuning its flight characteristics and all.

Shortly after taking the sticks, I couldn't help but notice how Rob's Extra rolled very slowly to the left. It wasn't a minute after commenting on that, that we both noticed massive flutter on both wings. The airplane was high and I immediately attempted to fly it down to pattern height in its slowest possible manner, but all aileron authority was lost. Rudder commands on this type of airplane have nearly zero affect either, so all I could do was to try to minimize the damage upon impact since I couldn't level the wing. Clearly, there was no hope of getting back to the runway safely. As luck would have it, the airplane landed slowly and fairly flat, although still knocking off the engine and landing gear.

Post crash inspection showed both aileron servos dismounted from the wing. It's hard to say exactly when one or both departed the wing, but bad things happen fast when flutter occurs. My best guess is that both servos came loose just after the flutter occurred, thereby leaving the wing to do its own

thing. Those huge ailerons must have overwhelmed the servos early on.

My own Dave Patrick 50cc size Extra 300 is notorious for Aileron Flutter, thereby demanding two very strong servos per Aileron surface to keep flutter at bay. This might be the answer for Rob's wing too. Fortunately, Rob's airplane will live again, with a bit winter's effort on the workbench.

Had any interesting flights lately? What projects are YOU working on? Why not share it here in our newsletter guys? Go ahead, sit down and punch out a brief column. Believe me, you'll feel so much better after sharing just one story. After all, we're all doing the same thing, aren't we? Building, crashing, fixing, flying?

Economy?
Let Your Voice Be Heard!

By Frank Tuxworth

The general membership meeting is where the annual dues discussion and decision is made. Come on out and participate in this critical discussion.

Member Badges & Safety

By Frank Tuxworth

At the last meeting considerable discussion was held regarding frequency pins, AMA cards, member badges, etc. With the advent of the new and ever-growing popularity of the 2.4G system, the necessity for holding a frequency pin is questionable for those using 2.4. It was pointed out that, by definition, there was no change for those using the 72H system. Of greatest concern was the necessity of identifying all flyers as legitimate club members. It was felt that having 2 separate locations for AMA cards was not as accurate for identifying all present. Therefore new 2.4 pins have been placed in the box in the place of some of the older "Ham" frequency pins and the clips have been removed from the shade area. It was emphasized that it is EVERY MEMBER'S individual and collective responsibility to be a safety officer and monitor all goings-on at the field. This certainly means that all are equally responsible to make sure that all those flying are legitimately doing so.

We recently had an incident where there was an individual flying at our field claiming to be an AMA member and a guest of a member in good standing when neither was true. The AMA legal department told me that we as a club are not liable for damages done by a non-member but an individual having damage done to himself or his property by a non-member is on his own in seeking payment for those damages.

So, as a reminder, each and every member is required by our PPRCC safety rules to have their membership button and AMA card on their person at all times while flying. ONLY an AMA card is to be put in the frequency pin box. If you need more than one pin, a photocopy of your AMA card is certainly appropriate for an extra pin location.

On a closely related subject, more and more club regulations are being ignored at the field. The "No Parking" signs apply to all members equally. We have ample designated parking areas at the field which do NOT include the areas around the bleachers, in front of the shed, and obstructing gates through the fence. Parking long enough to unload and then moving your vehicle is certainly the manner in which all members are equally serviced. Also, there is a separate parking are designated for those with trailers. In addition, the work benches are there for all members' use equally and are not intended for a personal storage area for extra airplanes, field boxes, lunch pails, jackets and no telling what else while one is there. All please be considerate of all the other club members who have paid the same dues that you did and deserve the same privileges.

The Warbird Corner

By Keith Davis

Winter is just around the corner and you're already wondering what you are going to with your free time when it's too cold to fly outside. Work on airplane winter projects, start that airplane shopping list for next year, or just spend more time with your wife or girlfriend?

Well you don't have to do any of that. Pueblo has a real nice site to see. It's called the "Fred E. Weisbrod" Air Museum, located right next to the Pueblo airport. Admission is about $7.00 per person.

I went there a few months ago to check it out. If you are a B-24 Liberator fan (Kirby?), that's the place to go. Pueblo airfield used to be a B-24 and a B-29 training base during WWII. This museum is dedicated to the B-24. It has all types of displays, small scale models of B-24s, both plastic and RC, photographs, and art work. Surprisingly, it does not have a real B-24 there, but it does have a real B-29 Superfortress inside the hanger.

There are also many other types real aircraft on display, both inside the hanger and outside on the museum grounds. You can view military planes and jets, from WWI to the Vietnam War. You can actually walk to the aircraft and get some nice

photos. Many other museums that I have been to, the displays are roped off to keep the spectators back.

The museum is run by volunteer WWII veteran pilots and crewmembers. I think I did more talking to the pilots than I did looking at the exhibits! They do have some interesting stories to tell.

So this winter, when you are staring out the window because you can't fly, take a 30 minute drive down to the museum and check it out. The museum does have a website for more information and pictures.

Did You Know? In level flight, the B-25 Mitchell bomber flew slightly at a "nose high" attitude. This caused the plane to have about 40 gallons of unusable fuel remaining in the tanks. So the pilots figured out that if they flew with flaps about ¼ down, it would level the plane, use the 40 gallons and extend their flight range.

Did You Know? The Northrop F-5 Freedom fighter (combat version) and the T-38 Talon (trainer version) was a highly successful twin-engine multi-role jet. So Northrop decided to improve on it, gave it a single engine, improved it avionics and ordinance package and was to be sold for export. No countries wanted it.

Warbirds Over the Rockies

By Larry K. Laughlin

Adam asked me to report on the event at our monthly PPRC meeting, just last night. I did, briefly, but this is a better way to do it.

Here's what Brian O'Meara had to say:

Warbirds Over The Rockies over the last five years has grown into the premier event of its kind in the country. Our board did an excellent job and their 9 months of planning really paid off. The last two years at Love Air have only served to showcase the event, due to the excellent participation of all the members of the club who have poured their hard earned time and energy, into insuring the event's success. The runway improvements and the addition of the grass in the infield did not go unnoticed by the pilots, especially those from the mid-west who are used to thick grass flying fields.

It appears that we attracted 114 pilots from 16 states. It's difficult to list all of the highlights of the event in this brief overview, however the full sized fly over, the pyrotechnic display, the noon time air show and Colonel Thacker's remarks at the banquet are at the top of the list. He was the absolute star of the weekend. As you know the Colonel was one of the B-17 pilots that flew unarmed into the attack at Pearl Harbor. He also holds the worlds speed record from Hawaii to New York, non-stop in a P-82. In addition to fighting in three wars for the U.S, he participated in the test pilot program with Chuck Yeager during the time that the sound barrier was broken. If you missed the banquet you missed the experience of a lifetime. At 92 years young, the colonel is a legend worthy of our praise and he is a true American Hero.

We distributed in excess of $15,000 dollars worth of merchandise, of which, $5,000 was handed out at the banquet. Our hats are also off to the university for the great job they did in hosting the banquet. The prime rib was outstanding! All in all the weather held and we witnessed phenomenal airplanes and world class pilots. We are looking forward to doing it all again next year.

Thanks Again to all involved with Love Air!
Brian O'Meara

By the way – THIS just in too: Brian O'Meara has just won the big Scale Master competition in Sarasota, Florida. He did it with his newest Sea Fury and this is the 3rd Scale Masters win in Brian's modeling career!

In addition to winning 'the Big prize', Brian also won HIGHEST SINGLE FLIGHT ROUND; BEST MILITARY; and MOST REALISTIC AIRPLANE OF THE MEET!

Larry's Observation – In case you're living under a rock somewhere, this last Sept 26, 27 & 28. Brian O'Meara and his host, LoveAir RC, put on another terrific event as they were blessed with nearly perfect weather all the while. This event is surely covered in many of our favorite RC magazines. There are even more terrific pictures (100 or so) at this web site:

http://warbirdsovertherockies2008.shutterfly.com/

Thanks to several LoveAir members, especially Dan St. John with that long camera lens for contributing!

Whether spectator or participant, it's clear how much effort has gone into this event. Years and years have refined the list of duties required by all and that's what makes a production of this

magnitude so successful! Brian clearly pours his heart into this event and his boundless energy is contagious to all. The pay off in the end makes it all worth while too. No doubt, Brian O'Meara and the LoveAir RC Club as a whole have set the 'high bar' for our local War Bird events along the Front Range, if not the nation. Believe, you want to be there again next year!

Many of you remember this same event being held at the Jefco flying site, within Chatfield State Park. Brian's departure surely did cause a little controversy, but all of that non-sense has been put behind most everyone now. The enormous budget required (I'm guessing nearly $20K) and the huge restrains of Chatfield State Park made for very difficult challenges trying to put on such a grand production. The LoveAir club, in comparison, ALLOWS for over-night camping and RVs right on site; vendor tents; full size aircraft fly-overs; unlimited airspace for RC fly-overs; room for 4,000 to 5,000 spectators per day; and most importantly, a $5 per person entry fee to help recover some of the expenses (along with food & vendor sales, etc.). All of this is impossible to manage within the confines of Chatfield State Park rules and the Jefco Club hierarchy as a whole. And who knows, this event could possibly outgrow LoveAir's fine facility as well.

Several clubs along the Front Range (our own included) host considerably smaller, low key War Bird events and I'd have to say these are generally 'warm up' events in comparison. Brian's gala is the Grand Daddy of them all and we're all blessed to have it so nearby (only 2 hours up Hwy 25 from Colorado Springs). Think about it: You'd generally have to drive 15 to 30 hours to attend anything like this elsewhere.

My experience at this event – On Wednesday & Thursday, a lot of the out of town participants start to gather, some making this a week long venture. It's a good time to fly and get all of the bugs worked out in your birds. Come Friday though, it starts to get a little crowded. There's still a lot of flying to be had, but the pits & parking are clearly starting to become congested.

On Saturday and again on Sunday, all of the big production scheduled events start to emerge. Brian cashes in his chips for the full size fly-overs; the vendor tents are buzzing with activities, food is generally available and everyone is trying to get their stick time in. It's pretty much none stop from sunrise to sunset. On Saturday evening, Brian & LoveAir hosts a wonderful dinner & awards banquet, complete with an outstanding auction where many pilots walked out with huge grins on their faces (our own John Fay being one of those BIG winners). Well worth attending, definitely!

I arrived Thursday AM and positioned my trailer with four airplanes on board near the pit area. I parked the RV elsewhere, leaving room for more arrivals as the cars, trucks, RVs and trailers continued to stream in. BTW, 131 pilots registered and NOBODY brings just one airplane! Yep, there was a lot to see at this event!

I prepped the TamJet F-18 Super-hornet and put my first flight of the day on it around noon. Right after take-off, I retracted the gear and its ten doors, but as I came around, completing one circuit, the doors we're open and the gear was hanging down! Huh? TamJet's little 'gear saver' did its job. This device will command the doors to open and extend the gear down and locked should your on board air supply diminish to what ever your preset lowest pressure is set too (in my case, I choose 60 lbs minimum). BTW, this $115 device should be installed on ANY airplane with complex retractable gear & doors!

I inspected a couple of suspect air lines (of which there are many) and thought I had fixed the problem. I put 110 lbs of air in, tested the gear once again in the UP position and all appeared good. So back in the air she went, only to have the exact same problem appear!

I think I said, "Oh darn it" – yeah, that's what I said!

Back in the pits, I flipped the airplane over, aired it up and this time, I could barely hear the air leaking over the singing digital servos. I attempted to fix it through the gear doors, but my next flight test proved my fix was no good. Again, TamJet's little 'gear saver' paid off big, throwing the gear down once again. Darn – I had to pull the engine to get at the bad hose(s) beneath.

Fast forward to Friday morning now. The engine has been reinstalled and all suspect air hoses have been replaced. Once again, I put the F-18 up. Low and behold, the gear stayed up and the ten gear doors were closed. Oh goodie – now I can finally start 'busting a few laps' with this beauty. With everything cleaned up, I was able to lower the nose and push the throttle up to max. I was surprised by how fast the airplane was flying. I had no wing tanks, missiles or ordinance hanging off the wings, so in it's cleanest possible configuration, it really booked at full throttle. In fact, I'd have to say this is the fastest model airplane I've ever flown, clearly capable of 300 MPH.

So all was looking good, but as I rounded another high speed turn from downwind to base leg, I could hear what seemed to be a popping sound, a lot like a back-firing engine. Huh? Turbines don't back fire! As I turned from Base to high overhead, the sound got louder. Just as the airplane came into clear view overhead, still carrying a lot of speed, I could see the problem. Just as I saw it, about 100 other people saw it and yelled out "FLUTTERRRRRRR" and oh crap, was there flutter! The entire tail section of the F-18 was nothing but a blur and the sound I was hear was indeed, ALL of

the tail feathers singing out in unison as they vibrated together. Not good, not good at all and need I tell you what normally follows such a catastrophic occurrence.

I jerked the throttle stick to off and gently pulled the elevator back, attempting to point her up and slow the airplane. The F-18 shot up to a spec and the flutter stopped. With that, I lowered to the flaps and gear, everything to full dirty. Thankfully, I still had good control over the airplane, but I dared not allow any speed to build. I flew one or two circuits to get back down slowly while assuring all controls were still in good working order. All appeared good, so I entered the pattern for landing and she settled down right on the mark as she had so many times before.

Here's is where Composite built airplanes hang tough! Very few airplanes would have survived such an enormous flutter as this. Thankfully, TamJet's built a very strong airframe and those digital servos hung in there strong. Other than one small rudder servo blown up, everything else was OK. However, upon post flight inspection, I found all four tail feathers very loose and sloppy. It was Friday, late morning, so I was able to call Tam Nguyen in San Jose, the TamJet's F-18's designer. I said, "Tam, you're F-18 fluttered !!! "

Tam said, "When was the last time you re-tightened all of the rudder and elevator brackets in the tail section"? Huh? Re-tighten?

Tam delivered the bad news – in order to correct the flutter issue, I was going to have to remove everything! That would involve pulling the engine, bypass, tail pipe and air tanks. Then the elevators and brackets! A huge job. But what heck, I had all day Friday to get it done and with Jim Terry's fine help, we were able to re-tighten, re-secure and re-install everything successfully.

Come Saturday morning, the F-18 was ready to fly again!

Man, this airplane was a lot of work, but well worth it. From that point all, I couldn't get fuel back into it fast enough. I'd fly, refuel, fly again, refuel and this went on through Sunday until I couldn't stand anymore. And I swear, this airplane would easily win a spot landing contest, as it was wonderfully predicable upon touch down. What a bird!

BTW, the left rudder servo had to be removed from the previous fluttering so I merely taped the left rudder fixed, proving once again how over-rated rudders are. Well, the winds were right down the runway, so NOT having to deal with crosswinds helped!

This winter's mission is to get paint splashed onto the F-18 and build a pile of neat things to daggle beneath the wings. Primer gray just doesn't get it any more.