

SPORT

Aerobatics

FEBRUARY 2010

OFFICIAL MAGAZINE of the INTERNATIONAL AEROBATIC CLUB



Acro
Fun in a
Clipped
Cub

First Contest

**The Most Difficult
Maneuver**

JUST A REMINDER...

You can buy your tickets online now and save time and money.

Go to www.airventure.org/tickets
and get to the fun faster...and cheaper.

SEE YOU THERE!



JULY 26 - AUGUST 1



SPORT Aerobatics

CONTENTS

Vol. 39 No.2 February 2010

A PUBLICATION OF THE INTERNATIONAL AEROBATICS CLUB

I love flying the airplane, but as soon as I let Harry Barr fly it, I knew I was probably going to lose it.

Paul Muhle

FEATURES

- 6** **Acro Cubby** •
Clipped Cub for short
Budd Davisson

- 14** **First Contest**
2/50: First Impressions
Lise Lemeland

- 22** **The Most Difficult Maneuver**
Getting back on the ground
Tony Johnstone, MD, MCFI-A

COLUMNS

- 03** / President's Page
Doug Bartlett

- 28** / Ask Allen
Allen Silver

- 32** / Insurance
Ryan Birr

DEPARTMENTS

- 02** / Letter from the Editor

- 04** / Newsbriefs

- 30** / Contest Calendar

- 31** / Fly Mart & Classifieds



THE COVER

Builder Paul Muhle (left), and owner, air show pilot Harry Barr with the Acro Cubby.
Photos by Tyson Rininger.



Publisher: Doug Bartlett
IAC Manager: Trish Deimer
Editor: Reggie Paulk
Senior Art Director: Phil Norton
Interim Dir. of Publications: Mary Jones
Copy Editor: Colleen Walsh

Contributing Authors:

Doug Bartlett	Tony Johnstone, M.D.
Ryan Birr	Lise Lemeland
Budd Davison	Reggie Paulk

IAC Correspondence

International Aerobatic Club, P.O. Box 3086
 Oshkosh, WI 54903-3086
 Tel: 920.426.6574 • Fax: 920.426.6579
 E-mail: reggie.paulk@gmail.com

Advertising Director
 Katrina Bradshaw Tel: 920.426.6836
 E-mail: kbradshaw@eaa.org

Representatives:

NORTHEAST: Ken Ross

Tel: 609.822.3750 Fax: 609.957.5650
 E-mail: kr40@comcast.net

SOUTHEAST: Chester Baumgartner

Tel: 727.532.4640 Fax: 727.532.4630
 E-mail: cbaum11@mindspring.com

CENTRAL: Gary Worden & Todd Reese

Tel: 800.444.9932 Fax: 816.741.6458
 E-mail: gary.worden@spc-mag.com

todd@spc-mag.com

MOUNTAIN & PACIFIC: John Gibson

Tel: 916.784.9593 Fax: 510.217.3796
 E-mail: john.gibson@spc-mag.com

EUROPE: Willi Tacke

Tel: +49(0)716980871 Fax: +49(0)8841/496012
 E-mail: willi@flying-pages.com

Mailing: Change of address, lost or damaged magazines, back issues.

EAA-IAC Membership Services

Tel: 800.843.3612 Fax: 920.426.6761
 E-mail: membership@eaa.org

The International Aerobatic Club is a division of the EAA.



WWW.IAC.ORG



WWW.EAA.ORG

EAA® and SPORT AVIATION®, the EAA Logo® and Aerobatica™ are registered trademarks and service marks of the Experimental Aircraft Association, Inc. The use of these trademarks and service marks without the permission of the Experimental Aircraft Association, Inc. is strictly prohibited. Copyright © 2009 by the International Aerobatic Club, Inc. All rights reserved.

The International Aerobatic Club, Inc. is a division of EAA and of the NAA.

A STATEMENT OF POLICY The International Aerobatic Club, Inc. cannot assume responsibility for the accuracy of the material presented by the authors of the articles in the magazine. The pages of Sport Aerobatics are offered as a clearing house of information and a forum for the exchange of opinions and ideas. The individual reader must evaluate this material for himself and use it as he sees fit. Every effort is made to present materials of wide interest that will be of help to the majority. Likewise we cannot guarantee nor endorse any product offered through our advertising. We invite constructive criticism and welcome any report of inferior merchandise obtained through our advertising so that corrective measures can be taken. *Sport Aerobatics* (USPS 953-560) is owned by the International Aerobatic Club, Inc., and is published monthly at EAA Aviation Center, Editorial Department, P.O. Box 3086, 3000 Poberezny Rd., Oshkosh, WI 54903-3086. Periodical Postage is paid at Oshkosh Post Office, Oshkosh, Wisconsin 54901 and other post offices. Membership rate for the International Aerobatic Club, Inc., is \$45.00 per 12-month period of which \$18.00 is for the subscription to *Sport Aerobatics*. Manuscripts submitted for publication become the property of the International Aerobatic Club, Inc. Photographs will be returned upon request of the author. High resolution images are requested to assure the best quality reproduction.

POSTMASTER: Send address changes to *Sport Aerobatics*, P.O. Box 3086, Oshkosh, WI 54903-3086. PM 40065731 Return undeliverable Canadian addresses to Pitney Bowes IMS, Station A, P.O. Box 54, Windsor, ON N9A 6J5.



REGGIE PAULK
 COMMENTARY / EDITORS LOG

Climate Shift

FOR MOST PEOPLE, FEBRUARY means there's a whole bunch of winter left to go. For me, February is the month when life begins to get back to normal after the insanity of the holidays. February is a great month to begin planning for the warmer months ahead.

For IACers, the competition season fast approaches, and it's time to check out the latest Known sequences and begin rehearsing for the big win. For those of you familiar with the online ACRO Exploder, an opt-in e-mail

list, you'll notice

there has been

a lot of jealousy emanating from pilots of northern climes toward those located in the Sunbelt states of California and Florida. Many of the tongue-in-cheek exchanges debate the topic of a Florida-based pilot's ability to jump into his

open cockpit wearing a T-shirt, take a ride, and not freeze to death. One pilot from a decidedly colder climate lamented having to chip ice away from his hangar door just to get it to open. Others suggested pushing back the release of the Known sequence to a warmer month, while some pushed to handicap those souls lucky enough to be located where it's possible to wear shorts to the airport in February. One Colorado pilot suggested limiting

manifold pressure to 21 inches or lower to be fair to the pilots in the high mountain state.

If you're a member of the IAC, you might want to check out the ACRO Exploder. Although the language, at times, can be quite crass, and troublemaking trolls lurk about, there are plenty of instances when useful dialogue occurs. The participants' high level of experience may also surprise you. Amusingly, unsuspecting know-it-alls are quick to have their hats handed to them. Those with

genuine questions or concerns about aerobatics, aircraft, or piloting will usually get a helpful response from this unique group of experts and enthusiasts. If, for example, you're looking for that particular spring in the tail of your Pitts, you'll be sure to find it on the ACRO Exploder.

Personally, I've been using the ACRO Exploder as a general weather forecaster.

These arctic cold fronts we've been getting are

brutal, but I was always alerted to them when the ACRO Exploder group came to life. Pilots are a busy bunch, so you can always tell when they're stuck inside with their computers and BlackBerry phones.

If you'd like to sign up, just navigate your way to http://AerobaticsWeb.org/iac_exploder.html.

There, you'll find an address field and an option to subscribe or unsubscribe. Have fun! **IAC**

Please submit news, comments, articles, or suggestions to: reggie.paulk@gmail.com



DOUG BARTLETT
COMMENTARY / PRESIDENT'S PAGE

EAA's Umbrella Benefits the IAC

THE INTERNATIONAL AEROBATIC CLUB is a division of the EAA, and we are headquartered in Oshkosh, Wisconsin. No news there, but at times some members ask what benefit we have as IAC members being under the umbrella of such a large group as EAA. There are far too many benefits to list here; however, I have exciting news to pass on to all of our members that shows why the EAA is a great parent organization.

Over the last several years we have seen a slow but steady decrease in participation in regional aerobatic contests. The declining number of pilots has put a greater financial strain on the smaller chapters and smaller contests. At IAC headquarters, we were looking at better ways to minimize the costs of contests and how to more evenly spread these costs to all competitors. Karen Kryzaniak at EAA Risk Management had a different idea. Karen took a look at the excellent safety record of the IAC competitions and worked with our contest insurer, Global Aerospace Insurance Company, to negotiate a much lower cost for contest insurance. She was so successful in her efforts that she was able to inform me last December that the cost of insurance for regional contests in the 2010 season would be \$0. That is not a misprint; there will be zero cost to insure regional aerobatic contests for this season. Further, the 2010 annual insurance cost for each chapter will remain at the 2009 rate. This is actually the fourth year in a row that we have not seen an increase.

This is just one example of how EAA is working to help the membership of the IAC. It has taken our safety record and

combined it with the volume of insurance the EAA purchases to negotiate a better rate for our chapters. Karen, thank you for a job well done.

Insurance was the biggest fixed cost of running a contest. In an effort to help grow the number of contests throughout the IAC, headquarters has passed the insurance savings directly on to the chapters. In an effort to keep costs down for all pilots, I am asking that these savings be passed on to all pilots participating at regional contests. Let us all continue to focus on safety and reap the many rewards that it brings us.

Before I move on to talk a bit more on regional contests, I would like to pass on a safety tip. As pilots, we all know the value of checklists. They provide us with a systematic method of minimizing devia-

tions from our normal procedures. I find them to be particularly useful when I am excited, under stress, or just in a hurry. When I am getting ready to compete, stress and anxiety also come into play. Because of this, I have prepared an aerobatic checklist that works to minimize errors. I would encourage any aerobatic pilot to do the same.

One of the items on my checklist is "oil cap secure." Leaving the oil cap off a Sukhoi 29 (it is about the size of your hand) leads to a very exciting adventure that begins on your first inverted figure. A few others are "wing tanks empty," "altimeter set to 0," and "harness attached and tightened." Develop a checklist for your

aircraft and use it as standard practice. Aerobatics is always exciting, and a checklist will help you keep it safe.

Some regional contests never have problems getting volunteers, while a few others often appear to be struggling for help. I have found the most successful contests are the ones that provide a social and educational experience for the aerobatic enthusiast as well as a competitive arena for the pilot. Please remember the IAC has about nine aerobatic enthusiasts for every competition pilot. There is no better place to share our sport and our knowledge than at a regional contest.

What better place for an experienced Unlimited pilot to share his knowledge of how to wind correct a figure? Where better to help a young pilot learn the art of good sequence design? An experienced pilot can share his methods of critiquing other pilots. These 15-minute

classes can be planned ahead of time and pulled out whenever there is a weather break or a lull in the action. That is why I call them "hip pocket" classes. They can be pulled out of your hip pocket at any moment to provide knowledge and training to other IAC members.

As we move into the beginning of a new competition year, I am asking that all members take the time to share their knowledge with others in our club. Take the time to provide social and educational opportunities for all members and not just for the ones who choose to test their skill in a competitive arena. Good luck in the coming season and, as always, fly safely. **IAC**

**"Aerobatics
is always
exciting . . ."**



Gone West: Bill Thomas

BY ALAN R. MAURER, M.D.

IT WAS BACK IN 1977 when I first met Bill Thomas. He had a flight school at New Tamiami Airport in Miami called Fly for Fun.

I wanted to learn aerobatics and over the next two years probably logged more than 100 hours of dual with Bill, both in the Pitts and a Decathlon I bought.

Bill was a superb instructor and had a passion for aerobatics that really showed.

He started his career in the grocery business in New York, but sold his supermarkets after 23 years and devoted the rest of his career to aerobatics. He logged more than 8,000 hours while instructing. My first loop, as well as my first lomcevak, was with Bill. He had countless students from all over the world at his Fly for Fun flight school.

Bill entered his first contest in 1969 using a borrowed Citabria and went on to the United States Aerobic Team. In 1984, he was the U.S. judge for the World Aerobic Championships in Hungary.

He was a great guy to be around, and if you were interested in aerobatics, you always learned something speaking to him. His enthusiasm was infectious.

Bill died just around Thanksgiving at the age of 85. In the world of aerobatics, he was one of the very best, and his books on aerobatics are outstanding; every aerobatic pilot should own them.

He and I had lunch together a few months ago at the Venice airport just before he left Florida to be closer to his family in Virginia. I will remember our many flight hours together—especially when he was sitting behind me with a rolled-up newspaper and would hit me in the head when I messed up a loop or a snap roll. I was proud to be his friend.

If, on a clear dark night, you look up at the stars and see some funny lines, it's Bill with the smoke on. He always ended notes with the phrase "Happy Landings."

Happy landings, Bill. We will miss you. **IAC**

Editor's Note: Bill Thomas was a member of the United States Aerobic Team in France in 1972, and in Russia in 1976. Bill was inducted into the IAC Hall of Fame in 2002. He wrote two books: *Fly for Fun* and *Fly for Fun to Win*.

CORRECTIONS: Our Apologies

In the **November** issue, the caption for the cover photo was incorrect. The aircraft on the cover photo only partially belonged to the Spanish team, and were flying over Spain, not England. The proper attribution is as follows: Blue Sukhoi SU-26M, Anselmo Gomez & Juan Velarde (Spain), Red Sukhoi SU-26M, Castor Fantoba (Spain), Yellow & Red Extra 300S, Antonio Ideias (Portugal). In the **December** issue, the pilot who received the Lycoming 180-Horsepower Trophy was Phillip Gragg, who flew his 180 HP Pitts S-1S to 7th place in Sportsman with an 81.01%. Also in December, Bill Denton's name was misspelled for the Fred Leidig Trophy.



Drive one.

WE SPEAK CAR. And Apparently Quite Well.



Enjoy the privilege of partnership

EAA Members who are considering the purchase or lease of a new Ford Motor Company vehicle should be sure to take advantage of the opportunity to save with the Ford Partner Recognition Program.

Get your personal identification number (PIN) and learn about the great value of Partner Recognition/X-Plan at www.fordpartner.com

Certain restrictions apply. Available at participating dealers. Please refer to www.eaa.org.



2010 Ford Fusion + Hybrid

The most fuel-efficient midsize sedan in America.

Now *Motor Trend's* 2010 Car of the Year.



partner
recognition
VEHICLE PURCHASE PLAN



The Muhle/Barr
**Acro
Cubby**



BY BUDD DAVISSON, WITH PHOTOS BY TYSON RINGER

THE CLIPPED CUB OCCUPIES an aero niche all its own. For one thing, it can be a light-sport aircraft aerobat. For another, to most eyes it's as cute as a bug, with perfect proportions. It's a terrific entry-level aerobatic airplane. It has a docile soul. It is one of the most perfect sport airplanes out there, assuming you aren't into doing vertical-eights and outside rollers and just want to burn 3 gallons of fuel while having half an hour of nonlevel fun.



BUT WAIT...WE'RE NOT SUPPOSED to be talking about the clipped Cub. We're supposed to be discussing the Muhle/Barr Acro Cubby. Though they are closely related; there's a big difference.

It looks like a clipped Cub, flies like a clipped Cub (only better), and sounds like a clipped Cub, but the Paul Muhle creation, now owned by Harry Barr, most certainly isn't a clipped Cub—if nothing else because there's no Cub in it. None. Zero. Almost everything on it was hand-crafted by Paul in his Columbus, Nebraska, workshop. Plus, he based it on some components from a Wag-Aero Cubby kit, and Piper's lawyers decided long ago that Wag-Aero couldn't call its airplane a Cub. So, it's definitely not a clipped Cub.

Paul, who drifted into construction with his brother almost directly out of high school, is a second-generation fly-in warrior. His dad was a student pilot and took

him to the EAA fly-in convention in Rockford, Illinois, when he was still a little kid.

THE URGE TO BUILD

Paul says he always wanted to build an airplane. Like many sport pilots, he started with models, and always intended to learn to fly. Supporting his wife and kids was a priority, however, so Paul focused on housing construction for many years. He did eventually learn to fly in an old Aeronca Chief. He knew early on that he wanted to do aerobatics, so he bought a 7KCAB Citabria. Predictably, it wasn't enough. "I wanted more," Paul says.

"More" in Paul's case led him to building his first airplane, an Acrosport II, in 1992. Paul took it to Oshkosh in 1993 and was floored when it won Reserve Grand Champion Plans Built. Later, in 1994, it won Grand Champion. He recalls gleefully, "We weren't building to be a prize winner. It just worked out that way!"

Paul was doing a lot of aerobatics in the Acrosport, but the plane still wasn't doing what he wanted it to do. "Truth is," he says, "I originally wanted to build a Pitts, but I didn't think I could fly one—I'd heard all the old wives tales, which I now know aren't true—so I started building a One Design using Schennemann's wing kit."

He then continued what was to become a Muhle Tradition: He took the airplane to EAA AirVenture Oshkosh 2000 and this time won Grand Champion Plans Built. It was obvious he was getting good at the airplane building thing, and he was ready for a new challenge.

"I was enjoying the One Design," Paul states. "But the truth is, I'm more of a biplane kind of guy." By that time, Paul had flown enough that the Pitts no longer intimidated him. "I started on an S-1SS, which is the four-cylinder Pitts with the Super Stinker ailerons. Actually, what I built was a modified Wolf-Pitts with the plywood leading edges, slicker cowl, the whole nine yards."

With that airplane the Muhle trophy-winning streak continued. It won

Grand Champion Plans Built at its first showing at Oshkosh 2007.

Soon after his win with the modified Wolf-Pitts, Paul realized he'd been doing residential construction for nearly 30 years. "I was a little burned out," he admits. "I needed to spend more time building airplanes and less time building a company, so I started on the Cub, or more correctly, the Acro Cubby."

CUSTOM CUBBY

So why did Paul choose the Cub? "Like most aerobatic guys, I like to look at clipped Cubs," he says. "Plus they are a barrel of fun to fly." He also didn't worry about an engine quitting nearly as much as with something like a Pitts or One Design. "Out here in Nebraska," Paul jokes, "the entire state is your runway, so engine failures are generally a nonevent." Paul also says that he'd always wanted to own one. So, since he was on a roll, building rag-and-tube airplanes, he decided to build one from scratch, or as close to scratch as possible. Paul started with most of a

"Out here in Nebraska," Paul jokes, the entire state is your runway, so engine failures are generally a nonevent."

Wag-Aero kit, but modified and changed just about everything.

"Wag-Aero has a really comprehensive program built around their Cubby," Paul says. "You can buy plans or complete welded kits for several versions of the airplane, including a J-3-like bird, a military L-4, and a clipped version. On a stock Cub, clipping them means cutting 40-½ inches out of the root of the wing, not the tip. So the ailerons stay the same length but are moved in toward the fuselage and this is the way it works with the Cubby too. So you have fairly short wings but really long ailerons. To speed things along, I opted to use

Wag-Aero's welded fuselage, which still let me do some mods before I had it powder-coated.

"I used a Continental O-200, and I wanted the nose to look really nice, not like a J-3, so I used a Wag-Aero nosebowl and built the boot cowl and cowling to match. That was fairly easy compared to trying to figure out exactly where the firewall should be mounted so the lines flowed from the panel to the spinner. Once I got it all lined up, I cut a section of the nosebowl out and re-glassed it so the spinner flowed back a little like a Wolf Pitts."

One nice thing about building your own "not-a-Cub" is that you can



Paul Muhle (left), and Harry Barr with their mutual friend on the AirVenture Oshkosh grounds in 2009.



incorporate lots of little details that not only make the airplane more unique but more functional. Paul continues:

"The latch on the bottom of the wing that holds the door window up is operated by a cable from inside the cockpit, and I built aluminum into the area behind the baggage door to be used as the ground plane, when mounting the antennas."

"I expected to fly this to air shows and set it up for a little cross-country comfort. Very slow cross-country comfort."

Cub interiors are noted for their Spartan simplicity and for being difficult to paint. The odd, completely surrounding shape makes it tough to get an even, and good finish throughout. Imagine trying to paint the inside of a garbage can. Paul found a way to make it easier:

"I ran stripes down the sides of the interior to give a break in the painted surface. This

way, rather than painting the entire thing at one time, I could mask off one area and work at getting a good paint job in that area, then move on to the rest. It makes the whole process more predictable and less tedious.

"The instrument panel is more Super Cub than anything else, as it is flat, rather than being curved like a J-3, which makes it much easier to set up a modern appearing and more functional instrument grouping. I expected to fly this to air shows and set it up for a little cross-country comfort. Very slow cross-country comfort. And the windshield is $\frac{1}{4}$ inch, which not only protects me in case of bird strikes at aerobatic entry speeds, but also blocks just a little noise. The brake pedals, by the way, are still heel brakes, but the brakes are 6 x 6 Clevelands and the wheel pants are Skybolt."

The typical Cub that everyone knows and loves often has a flat belly, but Paul went a different route with his spirited Cubby.

"I broke up that big flat area with a stringer that brought the fabric down a little, which not only makes it look better, but it gave me plenty of room to run the crank case breather out



HARRY BARR: What Does a Mustang Driver Want With a Clipped Cub?

Harry Barr is one of those guys everyone in the Midwest aerobatic community knows. Or knows about. Associated with nationally known Duncan Aviation in Lincoln, Nebraska, he's also one of the more active members of the Midwest Aerobatic Club. He can't avoid being one of the higher-profile Midwest pilots because he's just as likely to be seen flying his P-51 Mustang in an air show routine as his Hyperbiplane or One Design. So, why purchase Paul Muhle's clipped Cub/Acro Cubby when he has that kind of hardware in his hangar?

Harry explains, "I've been doing the Cub-on-a-truck routine in Midwest air shows for years. Generally I'd use a stock 65-hp Cub. That has always worked well, but when I saw Paul's airplane I thought it would broaden the excitement of the Shortest Runway act because I could do some aerobatics in it, come down, land on the truck, then take off and do some more aerobatics. Besides, it's an incredibly beautiful airplane and fun to fly. It sure looks good parked next to the Mustang."

"I love flying the airplane," Paul says, "but as soon as I let Harry Barr, one of our local air show pilots, fly it, I knew I was probably going to lose it."



to the tail plus allowing some of the wiring to run in the same area."

UP AND AWAY

When the J-3 Cub was designed the concept of "control feel" was totally different than what we're used to today—system friction was just something to be tolerated. But Paul, having already spoiled himself with the controls of his Pitts and One Design, wasn't going along with that feel.

"I went out of my way to make sure the system is really clean, including using ball bearing pulleys. It's hardly like a Pitts, but it certainly is nothing like people expect. They expect it to feel like a traditional old Piper, like you're sawing wood with the cables, but it definitely isn't. I even servoed the trim tab on the elevator to get the pressures down. The ailerons are nice and clean, but they still have the pressures of a Citabria, which isn't terrible, but, like I said, it isn't a Pitts."

There's always a temptation to hotrod the engine when building a little aerobatic airplane, but Paul was wisely conservative in this area.

"Even though the O-200 is often hopped up, you have to ask 'why?' This isn't a racer and you can't get enough more horsepower out of it to even feel the difference on such a high drag airframe. So, I had a stock overhaul done by Central Cylinders in Omaha. The only thing we changed was they machined a spot for a fuel pump, and we mounted a gear driven, 12 amp B&C alternator in the back to charge the batteries for the radio, but we have no starter.

"The airplane is set up for an inverted fuel system and the header tank already has the flop tube, but I haven't gone to the Ellison yet. That's coming. But, the fuel system is all ready to go. Counting the header tank, I ended up with 20 gallons total including the two 8-gallon wing tanks, which is about three hours more fuel than I'm likely to ever need."

"I went with the Stits Poly-Fiber system all the way through cover to the color, but the color is PPG's Concept with flex agent added."

Airplanes with this kind of detail and all around "niceness" are often extremely heavy, usually because of adding too much paint, but Paul was able to restrain himself and the airplane came out weighing 824

pounds on a set of digital scales. That's actually pretty light considering the high-quality of finish on the airplane.

"I love flying the airplane," Paul says, "but as soon as I let Harry Barr, one of our local air show pilots, fly it, I knew I was probably going to lose it. He had been stopping by the shop while I was building it, offering this suggestion and that... most of which I followed. The first time he flew it, he took off his shoes because he didn't want to leave marks on the urethaned floorboards.

"A couple days later he made me an offer I'd be silly to refuse, so it is now part of his air show act and shares a hangar with his P-51 Mustang just down the road in Lincoln. I had hoped to fly the airplane for a few years, using it as a billboard for my business, then moving on to the next project, but I had to take the opportunity when offered. Plus, it has gone to a really good home, so I don't feel too bad about it. On top of that, Harry will let me fly it any time I want, so it's not all bad."

We agree: It doesn't sound bad at all. **IAC**



PHOTO BY PHIL HIGH

An advertisement for Softie Emergency Parachutes. The background features a large, white, ribbed emergency chute against a dark, cloudy sky. The text "Who would ever think 24 feet of nylon could feel so good?" is written in a stylized, italicized font across the center. To the left, the words "RELIABLE", "COMFORTABLE", "LIGHTWEIGHT", and "CUSTOM FIT" are listed vertically. The Softie logo, consisting of the word "SOFTIE" in bold letters with a registered trademark symbol, and "Emergency Parachutes" in a bold, italicized font, is prominently displayed. Below the logo, the tagline "THE PROFESSIONALS CHOICE" is written. Contact information is provided: "Voice: 360-435-7220", "Fax: 360 435-7272", and the website "www.softieparachutes.com".

*Who would ever think
24 feet of nylon could
feel so good?*

RELIABLE
COMFORTABLE
LIGHTWEIGHT
CUSTOM FIT

SOFTIE®
Emergency Parachutes
THE PROFESSIONALS CHOICE

Voice: 360-435-7220
Fax: 360 435-7272
www.softieparachutes.com



2/50: Impressions *of a* First-Time Competitor

BY LISE LEMELAND

EDITOR'S NOTE: THIS IS the last of three parts of Lise's foray into the world of aerobatics. Please see the December '09 and January '10 issues for her first two parts.

PHOTO BY LAURIE ZALESKI



{ **MY 11TH FLIGHT IN N50YY**, a fresh new Super Decathlon, was already starting out a bit differently than the 10 previous ones. It was a hot, sweaty, Saturday morning in August, and as I took off from an unfamiliar Runway 1 with my instructor in the back seat, I was feeling more than a bit distracted. My instructions were to find a golf course, climb to 3,000 feet (no higher, no lower), fly a tight holding pattern, switch to the box frequency 122.52, and await clearance to the aerobatic hold. *Where the heck was that little golf course?* I thought to myself. *Not good...they're probably all chuckling about the girl who couldn't find the first hold, let alone the box!*



A FAINT AND IRREGULAR noise in my headset was bothering me, but I was mentally shooing it away as I scanned the ground, until bingo! I sighted the landmark. As I put the airplane in a tight bank, I refocused on the headset sound. Holy cow! It was my own breathing! You've got to get a grip, I told myself, you know you can do this! I took a deep breath and reminded myself that this was for fun. I was not here to prove anything, at least so I thought...but I was, after all, only one of two women competing out of a field of roughly 50 competitors. A loud voice in my headset yanked me back to reality. It was the chief judge clearing me to the box! Here we go...

A CONTEST in HONOR of ANOTHER WOMAN
This was my first aerobatic competition, and I was flying in the Primary category at the Kathy Jaffe Challenge contest held in Lumberton, New Jersey. In the late '90s, the energetic Kathy Jaffe was then president of IAC Chapter 52. One chapter member recalled, "She threw herself into it (aerobatics) and kept us all together. She had more ambition and guts than anyone I've ever met."

Regrettably, Kathy perished while practicing aerobatics some years ago. Since then, to honor her memory and the contributions she made to the sport, the Chapter 52 people hold their annual contest in her name. And, the more I learned about Kathy and came to appreciate her drive and determination, the more pleased I was to be flying at a contest in her name.

FIRST COMPETITION FLIGHT

Being my first time ever at a contest, there was much to learn. I knew this would be an experience I would never forget. What led such a neophyte as myself to compete so early in my training?

One factor was the Doug Yost Memorial Aerobic Scholarship (see "Training Notes," *Sport Aerobatics*, January 2010 issue) I had won just a month prior, which provided funding for some aerobatic training. Another

ABOVE: Left to right: Weston Liu, Lise Lemeland, Mark Rogge, John Perkins, Marc Nathanson (my instructor), Farrell Woods. BELOW: The first day's pilot briefing was held outdoors.



factor was having an experienced instructor who artfully built my confidence and furthered my desire to do aerobatics. And the remaining factor is my love for challenges and adventure. Even though I'm a mother of three, I'm an artist/athlete hybrid, with a good dose of kick-up-your-heels. And besides, by setting my own personal goals high, I give myself more room to dream! So why not compete?

Off I went, excited to fly and anticipating my practice time slots. But the first thing I learned about aerobatic contests is that old man weather is the real contest director. Marginal conditions kept my airplane, and many others, from flying into Lumberton to do the essential practice in the aerobatic box. So show time was also the first time I got to see the box.

As one of the five competitors in the Primary category, I navigated my Super Decathlon around the invisible perimeter of the box. I was surprised at how difficult it was to get oriented. Landmarks from the aerial photograph I studied before my flight looked so small and insignificant.

I executed my three wing-wags, each with a little more confidence, and registered my instructor Marc's encouraging voice through my headset: "You're the girl, kiddo, go get 'em!" I smiled and began to relax—a little—as I dove into the Primary sequence, which (by the way) I had really only come to know in the prior week.

The 2009 official Primary sequence was a 45-degree upline, a one-turn spin, a half-Cuban, a loop, a 180-degree competition turn, and a roll. Piece of cake, you might be saying. But to a complete novice, this was huge. Though mostly a rush of activity, some aspects of my first flight remain quite clear. I recall that my figures were performed to varying degrees of mediocrity, sometimes even edging on acceptable. And regardless of the results, I was ecstatic to have flown the entire routine.

When asked by fellow pilots how I performed, I answered like a veteran. "I don't know," I said casually. "I don't think I zeroed any figures...." In actuality, I had no idea how I did! I truly did

not have the perspective or distance to judge myself, but I am told this improves with experience.

When the scores were posted, my instructor congratulated me, saying mine were excellent, considering my experience, of course. I was in fourth

warmly by the contest staff (many of whom were women) and promptly asked if I was there to volunteer. I grinned and answered, "Actually, I'm here to fly!" (Was I offended? Not at all, I was rather amused.) Then excitement erupted all around me. Everyone was full of con-

**"And regardless of the results,
I was ecstatic to have flown the
entire routine."**

place, trailing the first three competitors by about 12 points. Number five was 142 points behind me.

TWO OUT OF 50

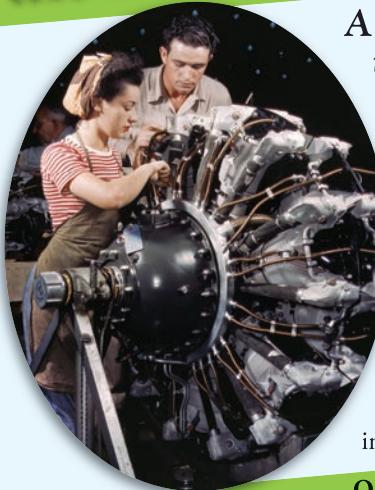
Leaving the numbers and figures behind for a moment, what was it like to be one of the two female pilots competing?

When I first walked into the registration area at the contest, I was greeted

gratulations with lots of pats on the back, saying, "You've got to win this for us!" and "Make us proud!" Gee, talk about pressure!

After the personal introductions, I dutifully listened to an abbreviated history of women in aerobatics, recognizing many of the names. I filled out the obligatory registration forms and paid my fees. Then I was whisked away,

Despite Advances in Technology, Maintaining Your Vision is Still the Best Way to Keep Flying.



A Unique Supplement to Support Eye Health*

MacuHealth™ with LMZ³ contains ALL three carotenoids found in the retina to help maintain eye health throughout our later years.*

This formula combines powerful antioxidants that help protect tissues against the potentially damaging effects of harmful blue light and is designed specially to support macular health.*

Patented formula contains Meso-Zeaxanthin, the only carotenoid found exclusively in the macula.



ORDER NOW!
Visit <http://www.marco.com/LMZ3>
Use Discount Code LOVE2FLY

MARCO

*These statements have not been evaluated by the Food and Drug Administration.
This product is not intended to diagnose, treat, cure, or prevent any disease.

www.marco.com | www.TheDifferenceisMarco.com | 800.874.5274 | 904.642.9330

introduced to IAC Chapter 52 Treasurer and Board Member Doug Lovell, and told he would be my first contest mentor, until my instructor (who was weather delayed) arrived. In the hours that followed and throughout the entire contest, there were many other people in addition to Doug, both men and women, who generously took me under their wing, providing help and support of my aerobatics endeavor.



Briefing inside, last day. Paul Russo (Chapter 35 on Lise's left).

NEW ROUTINES, NEW FRIENDS

There were pilot briefings every day, where all of the men—and the two women—gathered. This is where we received the details of the day's activities and procedures. I was immediately conscious of my female pilot status but not bothered by it. I had seen the roster of competitors and noticed that my fellow female was competing at the Sportsman level. She was a seasoned aerobatic pilot, who had recently been grounded by an episode of the "wobbles." I met her the second day, and though our paths didn't cross often, she was always friendly and reassuring. I mused about more women's names appearing on the roster in the future, and in higher categories, too. And, maybe I'd be one of them!

This being my first contest, I found it quite challenging to navigate the maze of information

that needed to be assimilated. Yet, as a woman competitor in a male-dominated sport, contrary to my fears, I did not find the challenge any greater. In fact, the willingness of the other pilots to lend a hand and provide information, irrespective of their age or experience, made all the difference. Being new to the scene and being female can make social barriers tougher to overcome. Fortunately for me, I came to the contest already having met, and flown with, some of the Chapter 35 competitors. They, in addition to many of the 52 members, included me at every social gathering and made me feel welcome.

HUMOR AND HUMILITY

The first day had its funny moments, too. About an hour before my first flight, all I wanted was some privacy to go over my sequence of figures and memorize the frequencies and rules for climbing to holding patterns. I looked around, wandering from building to building, but everywhere were pilots, staff, and spectators. In desperate need of a quiet place, I finally ended up in the ladies'

room! Not a very glamorous way to make my entry into competition aerobatics, I thought to myself, even if no one noticed me duck out. But it did the trick; I was able to visualize my flight in peace and quiet!

I also got many curious looks over the sunglasses when I revealed that I was a 7-month-old private pilot. Pretty much a newborn in the world of aviation, I had just passed my private pilot checkride in January of the same year, so many aspects of flying were (and still are) new to me. But I am certain that I received even more encouragement because of it!

WOMEN IN AEROBATICS

Things are different for women in aviation, sometimes in not so subtle ways. In 2008, the FAA's statistics show an estimated 207,000 active certificated male private pilots versus

about 15,000 active certificated female private pilots. Women are the minority, both in general aviation and the professional aviation world, and the statistics in aerobatics are even more extreme. In the IAC regional chapter contests results for 2009, I found no more than four women competing at any single contest. Often there were none (or one), and the overall average was two female competitors.

There have been times when I have wondered if women learn differently, or fly differently, but those questions have long-since been replaced by more important and more relevant ones. For example, how am I going to pay for the aerobatic airplane I need to buy? (Just kidding.)

“They, in addition to many of the 52 members, included me at every social gathering and made me feel welcome.”

Seriously, why aren't there more women engaged in the sport of aerobatics? The question is misleading because upon closer inspection, one discovers there are many women involved in competition aerobatics—just not as pilots. In no way do I intend to diminish the organization that happens on the ground, which makes these events possible. Many women (and men) put a great deal of time and effort into every aspect of running the contest, and they deserve our utmost recognition and respect. But I would like to see women equally involved on all levels of the contests, including competing.



ABOVE: Lise Lemeland assisting judge Farrell Woods (going over sequence).

BETWEEN: Lise's instructor, Marc Nathanson, in his Pitts.





SECOND COMPETITION FLIGHT

It had been a long day since my first contest flight that morning. I spent the afternoon melting in the heat on the judges' line and had just returned to the fixed base operator to quench my relentless thirst. I was sitting with Marc, going over my score sheet, when it was

“... I would like to see women equally involved on all levels of the contests, including competing.”

announced that Primary would fly again. Despite the surprise announcement, this time, I wasn't as nervous. I was excited to have another chance to improve my scores. Because of the time of day, to complete the flights for the Primary category all competitors were flying back to back. Since three of the pilots were sharing two airplanes, this would mean some quick shuffling between airplanes.

I headed to my Decathlon to suit up. The heat was stifling. The sun was hotter than it

had been all day, and I crouched in the shadow of the wing to stay cool. Soon it was time to start the engine, taxi into position, and wait for my devoted instructor to jump in with me. And I mean literally jump; his feet barely touched the ground from one airplane to the next. I would be his third flight in a row. The man is a hero, I thought, how does he do it? I was sweating buckets, but aside from the knot in my stomach, I was a lot calmer than before the morning flight.

We took off and headed straight for the box. Since we were the only category flying, there was no need for a hold. “Lise Lemeland, you are cleared to enter the box.” Here we go again! I wagged my wings, entered the box, and pulled nice and hard for the 45-degree upline. I remembered to bump the stick to make the angles sharper... so far so good. My spin entry was good. I kicked left rudder, entered the spin, and watched for the runway to come around... but I initiated the spin recovery too late and came out off heading. Overspun—darn! Not much I could do but try and sneak a little slip in there to correct my heading and hope the judges didn't notice. (It didn't work. Two

judges zeroed me, and I received low scores on the figure by the other three. Ouch!)

My half-Cuban was better, I thought, and my loop, too. I don't even remember which way I performed the 180-degree turn, but I did it just fine. I finished with the slow roll and kept the nose from dipping. All front-page news for this greenie! After I exited the box, I shouted to Marc, "That was sooooooooo fun!" to which he laughed and told me I did great.

THE RESULTS

My scores? Not bad considering my botched spin exit. Some of the comments on the half-Cuban were conflicting: "shallow after" and "steep after," but overall my scores improved on everything but the spin. I ended up staying in fourth place, with a score 3.5 percent behind number three. I won the highest-scoring first-time competitor award (a plaque for my kids!).

But let's keep things straight: I'm no aerobatic wonder girl. I didn't win. But in

Mark Rogge's Super Decathlon N50YY, flown by Lise Lemeland.



this sport, scores and standings don't tell the whole story. I found competition aerobatics to be a personal test: a place to assess the limits of my flying abilities in a safe, controlled setting.

Through volunteering, and watching other people's flights, I learned a lot. For

me, the contest was an amazing, positive experience. I discovered a lot about myself. And in the end, being one woman of two competing was not all that significant. Learning that I had the guts, the perseverance, and the spirit to go through with the contest was what really mattered. **IAC**

HARVEY & RIHN AVIATION INC.
101 AIRPORT BLVD. LAPORTE, TX 77571 (281) 471-1675

AEROBATICS
Basic through Unlimited
Competition & Sport
Safety & Proficiency
Basic & Advanced Spins

MAINTENANCE FACILITIES
We specialize in
Fabric
Tailwheel
Aerobatic Aircraft Repair

Pitts S-2B
Super Decathlon
Citabria

Owned and operated by Debbie Rihn-Harvey



Skip Stewart Airshows
Modified Pitts covered in Superflite System VI

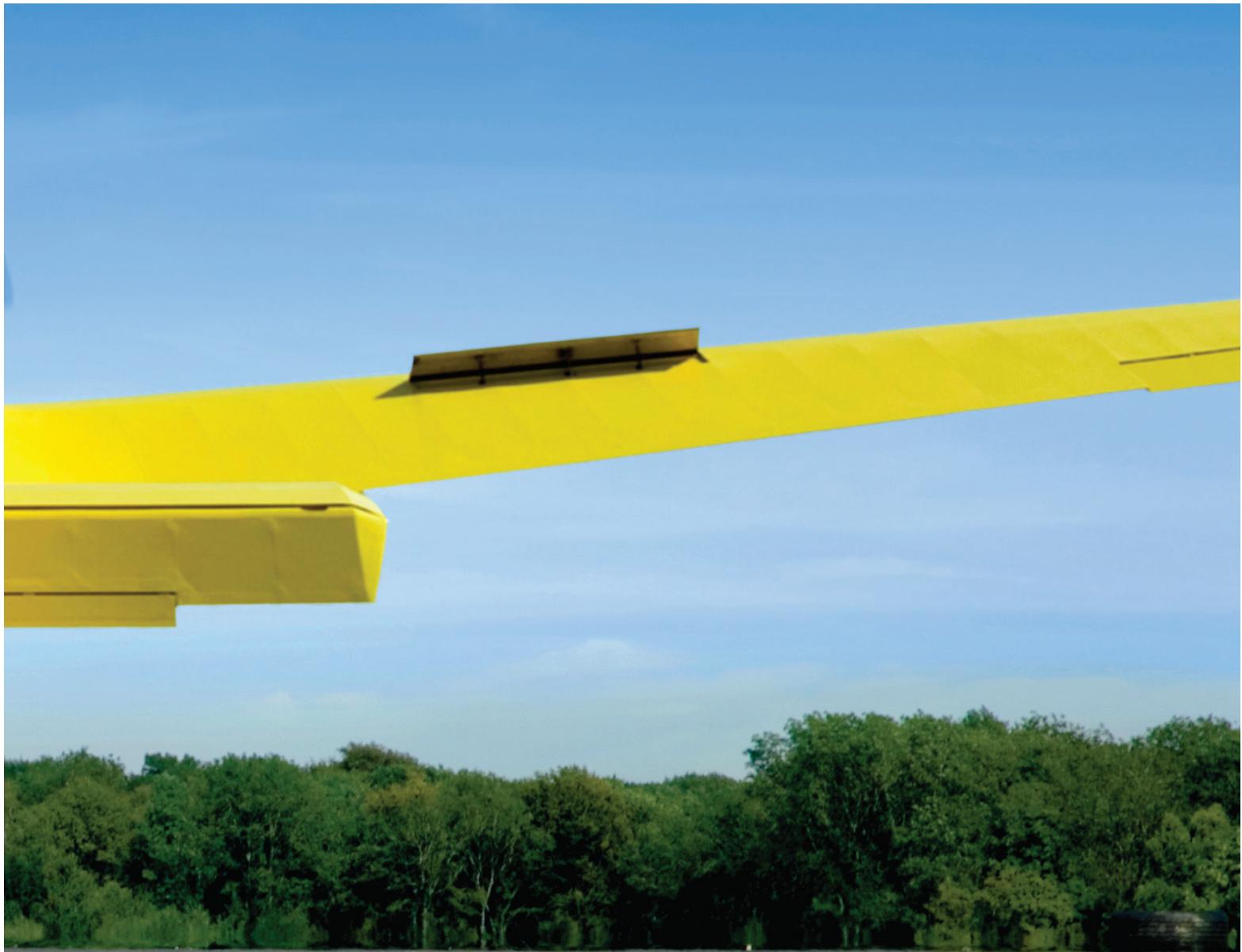


Fabric Covering & Finish Systems

System I Dope. System VI Urethane. Fabric & Tapes. Covering Accessories. Paint Accessories. Safety & Spraying Equipment.

Superflite, Inc. 3701 Hwy 162. Granite City, IL 62040
Ph. 800-323-0611 Fx. 618-931-0613
www.superflite.com





The Most Difficult Maneuver

Getting back on the ground!

FLYING AEROBATICS CAN BE exhilarating, challenging, rewarding, and, occasionally, frightening. There is nothing more satisfying than a hesitation roll with points so sharp they could slice bread, or a hammerhead that feels like the airplane had a nail driven through the fuselage as it rotated over the top. But sometimes the most demanding part of the flight is the maneuver that ends every one—the landing.

BY TONY JOHNSTONE, MD, MCFI-A

WITH FEW EXCEPTIONS, AEROBATIC aircraft are conventional-gear, or "taildraggers." Most pilots in this modern era learn to fly in tricycle-gear airplanes. The first step in learning aerobatics is often learning to take off and land an airplane with the little wheel in the back. In fact, most aerobatic schools advertise tailwheel training in addition to aerobatic flying. There is nothing magical or particularly difficult about flying a taildragger, but it does require a higher level of stick-and-rudder ability than some of the more pedantic craft that dominate general aviation today.



TAIL DRAGGING

Until the 1950s, pretty much every pilot learned to fly in a conventional-gear airplane. Every one of the hundreds of thousands of World War II pilots (my own dad included) started out in a Stearman, Tiger Moth, Bücker Jungmann, or something similar. Most operational airplanes in that conflict had tail wheels. Tricycle gear began appearing on transports and bombers and spread to smaller

"Never count on the engine to get you to the runway."

civilian types with the Piper Tri-Pacer, Beech Bonanza, and the Cessna 172/182. When the C-140 morphed into the C-150 in 1959, the die was cast. Tricycle gear became the norm, the tail wheel became the exception, and fewer and fewer pilots knew how to fly them. Eventually in the early 1990s, the FAA mandated a specific endorsement to fly a conventional-gear airplane.

The tail wheel configuration has some very definite advantages. The smaller wheel weighs less and contributes far less drag than a nose wheel, and it contributes less mass to the engine area—which can be significant when considering gyroscopic forces. It provides better ground clearance and handling on rough or grass strips. The downside is the location of the center of gravity (CG) aft of the main gear, making the airplane directionally unstable like a wheelbarrow; the back of the airplane spends a considerable amount of time trying to catch up with the front (the tail chasing the dog!). Also, with the nose in the air, forward visibility may be limited, or nonexistent. This can be very disturbing until one gets used to the idea.

Some tailwheel airplanes have pretty benign landing characteristics, and some are notoriously challenging (the Pitts family comes to mind right away). This is not intended to be a type-specific how-to article, but the principles of landing any tailwheel airplane safely are the same.

POSITION

Any good landing starts on the downwind leg. Establishing a consistent habit of positioning, speed, and attitude will make the final result easier. Pay attention to wind speed and direction, and always check the wind indicator visually no matter what the automated weather observing system says. If you fly the downwind at a consistent speed, strong wind will be obvious by your groundspeed. If you have GPS, a quick check will give you a hint, or just look outside and see how fast the runway is going by! Maintaining a constant distance from the runway will also give a good idea of crosswind. If you have to crab toward the runway on left downwind, you will have a right crosswind on landing and you will tend to undershoot the turn to final. Conversely, a crab away from the runway will potentially cause an overshoot on the base-to-final turn, with the specter of the stall-spin scenario rearing its ugly head.

Maintain speed on the downwind; then, once you are abeam the touchdown point, close the throttle, and pitch for your desired approach speed. This should be no more than 1.3 Vs (Stall Speed), with up to 10 knots for half of any wind gust factor. I believe strongly in the old adage "Never count on the engine to get you to the runway." If you make every approach power-off, every landing becomes an exercise in precision. My own habit is to stay a little high, then slip as necessary to get the end result you

want. Most symmetrical-winged airplanes come down pretty quickly once the power comes off. This is due to the somewhat higher angles of attack required to generate the same lift as a cambered airfoil at lower speeds. In the Decathlon in which I do most of my teaching, 70 mph is the target speed, no more than 80 if the wind is blowing (in Kansas it's pretty much blowing 10-20 knots all the time!). In the Pitts, 100 mph seems to be the magic number.

Once the pitch is established for the speed you want, TRIM the airplane. If the trim is properly set, all you need to do is steer. Assuming we have kept the pattern in fairly tight, the base leg will be short, so roll the airplane level long enough to look at the runway and get the sight picture you want. In an airplane with limited forward visibility, flying a slightly curved final will keep the runway in sight. Figure out if you are high or low. If you seem low, adding a little power to get you back to the desired flight path is a good idea at this point; if high, be ready to slip on final.

Once you turn final, the runway may disappear from view, hidden behind the engine in front of you. This can be disconcerting at first, but remember, if you can't see it, it must be underneath you! Use your peripheral vision to stay oriented, or use a slip to see ahead.



PHOTO BY DENNIS BIELA

IAC Currently Taking Officer/Director Nominations!

Here is what is needed to run:

- 1. Candidate Petition form** with 10 current IAC member signatures – Petition located in “Members Only” on www.iac.org under “Leadership.” Each member can sign a petition form and email it, all names do not have to be placed on one form. Written emails as endorsement will **not** be accepted, it must be on the petition form.
- 2. Current photo** emailed as a jpeg.
- 3. Resume/Bio** that must be less than 1,000 words.
- 4. The Nominations Chair must receive the above before March 18, 2010 deadline.** Send completed petitions to:

Ann Salcedo, 20117 SW 54th Place,
Fort Lauderdale, FL 33332-1548.
Fax: 954-434-7498
Cell Phone: 954-605-0170
or email: AnnSalcedoRN@aol.com.



Featuring ratchet seatbelt system

Hooker Custom Harness

324 E. Stephenson St.
Freeport, Illinois 61032
Phone: (815) 233-5478
FAX: (815) 233-5479
E-Mail: info@hookerharness.com
www.hookerharness.com

— Dealer for Strong Parachutes —

THREE POINTERS

Let's talk about three-point landings first; then we'll deal with wheel landings.

Resist the urge to start the flare too soon. If you start pitching up too early, angle-of-attack increase also results in significant increase in drag as we near the stall. If you flare too high, the airplane may start descending at a much higher rate than you want, resulting in a hard touchdown. In most aerobatic types I have flown, maintaining a constant pitch attitude down into ground effect, then pitching for three-point attitude, works well. Establishing three-point position is key. The last thing one should always do

"Rolling the wheels smoothly onto the runway is just cool!"

prior to opening the throttle on takeoff is get a good look at the profile of the nose against the horizon—look and see where the cowl and the ground line up; this is what you need to see in the flare. Once this is established, discipline yourself to hold it and wait. If the speed was right coming over the numbers and you don't flare too high, touchdown will occur just about the time the airplane runs out of energy.

The ingrained instinct from initial training in a tricycle gear is to continue to come back on the stick all the way through the flare, touching down nose-high on the main gear. If you rotate through the correct attitude in a conventional-gear aircraft, however, the airplane will touch down tail-first, potentially quite hard, followed by the main gear slamming into the ground. I have actually had a student burst a tail wheel tire in my Decathlon when he did just that, quicker than I could catch it.

Once the wheels are on the ground, the fun potentially begins. We now have the problem of decelerating mass behind the main gear trying to catch up with the front as the airplane slows. The most important factor in maintaining directional control on rollout is to make sure the airplane is tracking absolutely straight down the runway at the moment of touchdown; then expect to use your feet to keep it that way. Any crosswind control inputs (i.e., use the AILERONS!) should be held, and bear in mind

as the airplane slows, increasingly large deflections may be needed to compensate for decreased airflow over the control surface. Increasing back elevator will help keep the tail wheel pinned to the ground; however, this may also result in tail wheel shimmy, which can feel like someone is trying to shake the tail off the airplane! If shimmy does start, unloading the tail wheel by bringing the stick forward will usually stop it right away.

FREE WHEELING

Now, what about wheel landings? This is a technique not available to the tricycle pilot—which I find indispensable in landing in the strong crosswinds that often blow across my home base in Southern Kansas. Basically, the airplane is flown onto the ground at minimum sink rate in a level attitude, touching down on the main gear at higher-than-stall speed. Keeping the tail up in the airflow gives better directional control through the rollout. A little power can be added if necessary.

The wheel landing may not be an option for some aircraft, depending on the amount of clearance between the tip of the prop and the ground in level pitch. It's a good idea to lift the tail up to level with the airplane on the ramp to see how much distance there is between them. Many pilots are somewhat afraid of wheel landings due to fear of a prop strike, so if you see what space you have, that can be a confidence builder. It's also not a bad idea to raise the tail high enough for the prop to almost touch the ground, and sit in the cockpit to see what the attitude looks like so you'll know when you're getting close. You might be surprised how far you can push the nose over without the prop clipping the runway, but you also may see how little latitude exists (an S-1 Pitts with a two-blade prop is a good example).

Assuming the airplane can be safely wheel-landed, it can be a very satisfying end to a perfect practice session. Rolling the wheels smoothly onto the runway is just cool! I like to fly the approach just a little faster, 75-80 mph in the Decathlon, which leaves a little extra energy available for the flare and touchdown. As the airplane flies into ground effect, look at the end of the runway, hold level pitch, and try to "fly formation with the runway" until the wheels touch. If the sink rate is too high, add a whisper of power to slow it, and resist the urge to pitch the nose up, as this will increase the likelihood of a bounce.

The instant the wheels touch, add a touch of forward stick. This accomplishes two things. First, it transfers weight onto the main gear, but most importantly, it decreases angle of attack and, therefore, lift.

This is critical to a successful wheel landing. As the wheels touch, the instinct is to come back on the stick just like in a tricycle airplane. The airplane will also tend to pitch nose-up as the wheels touch due to the CG being aft of the main gear. The problem is, we are still carrying flying speed, and increasing the angle of attack will increase lift, causing us to go flying again. The airplane bounces, then bleeds off energy rapidly, and may come back down harder the second time, making the second bounce worse. The pilot may worsen the situation by trying to force the nose back down. Over the years, I have witnessed some truly spectacular landings caused by this.

The key is timing; get the forward stick in at the moment of touchdown, and be prepared to increase it as the airplane slows. This will keep the tail up



and the rudder effective for the maximum time. With practice, most airplanes can be brought almost to a stop with the tail still in the air. This will make your tail wheel tires last almost forever!

Landing tailwheel airplanes consistently well is something we should all practice just as diligently as every other maneuver. Getting back on the ground safely shouldn't be anxiety provoking for any of us! **IAC**

You're **cleared** to stay connected.



EAA's **online** community

Participate...
in group discussions
and forums

Access...
personalized news,
weather & events

Connect...
with like-minded
aviation enthusiasts

REGISTER
at www.oshkosh365.org

You Can't Scare Us!



We Can Teach ANYONE to Land a Pitts!

- 37 Years Experience.
- Train for Skybolt, Eagle, Model 12, S-1S, etc.
- We love crosswinds.
- We love low time pilots.
- We love narrow, short runways.
- Yeah, we love akro too.

Stay at Our Place. Families Welcome!

Pool Area



Budd Davisson's Plus 5 • SportAERO

602-971-3991 • buddairbum@cox.net • Phoenix, AZ 85028

Visit us at www.airbum.com



ALLEN SILVER
COLUMNS / ASK ALLEN

Pocket Change

Q: WHAT DOES HAVING loose objects in your pocket or in your passengers' pockets have to do with bailing out of a perfectly good aircraft?

A: AS MUCH AS I would like to claim a bottle of fine wine for saving your life after you successfully bailed out of your crippled aircraft, I would rather have you take some basic precautions. Remember, takeoffs are voluntary, but landings are mandatory. Whether you land in your aircraft or under an open parachute, you're coming back to earth and it's your choice. You preflight your aircraft and check the oil and kick the tires, but do you ask your passengers to remove all loose objects from their pockets? A loose cell phone, pen, or quarter flying around your cockpit can get lodged under a rudder pedal or possibly caught around a bell crank, jamming a rudder cable. (I've seen bent quarters wrapped around a bell crank.) It could remain lodged for a long time before it rears its ugly head. It's a simple problem to prevent, but each year I hear of such items almost causing someone to choose a parachute as the desired means of landing. They were lucky and say they learned a valuable lesson. I wonder how many unfortunate accidents are results of such items making controlled flight impossible? The

investigation usually results in pilot error as the probable cause. The investigators find nothing conclusive because the cell phone, pen, quarter, or whatever went flying after the accident. I fly a Marchetti SF-260, and before we did any aerobatics, some on purpose, we had the floorboards removed and found several plastic ties that were lying there waiting to lodge themselves somewhere and potentially cause a problem. If you want to make a parachute jump, I suggest you go to a local sky-diving center. I don't want to get a call from you or see you on the evening news trying to explain why you bailed out of your aircraft.

Q: HOW DO I properly stow excess leg or chest straps?

A: IT'S YOUR ATTENTION to the little details that makes the difference in surviving a scary situation or becoming a statistic. Many people haven't even considered that there might be a better way to stow the excess webbing on their parachute straps, but I have. It can mean the difference when getting out of your parachute harness in a hurry, especially if you just survived a bailout and are being dragged across the



ground in high winds. Getting a serious case of road rash or worse could possibly be prevented by something as simple as how you stow your excess leg and/or chest straps. Stowing the excess straps properly will make loosening them in a timely manner much easier because they're not obstructing you reaching and loosening them (see **Photo 1**). You'll notice in Photo 1 that the improper stowing of the excess leg strap prevents me from seeing, grasping, and loosening the adjustable V-ring in a hurry. I suggest you also consider carrying a hook knife like the one on my mini survival kit (SMAK Paks). Being dragged across a rough field strewn with rocks and boulders and then going through a barbed wire fence at the other end can be life-threatening, and getting out of your harness quickly is a critical part of you surviving a bailout. The time to prepare is before you have a problem. Now let's take a look at **Photo 2**. By doing something as simple as properly stowing the excess webbing on your chest and leg straps, you can make it easier to grasp the V-ring. Once you have a hold of your V-ring or other adjustable adapter, simply lift/pull it up 90 degrees (perpendicular to the webbing). By pulling up quickly and firmly with your hand and fingers, the webbing will loosen, making it easier to undo the snaps and get out of your harness.

Q: MY PARACHUTE AND the container that holds my parachute are both over 20 years old. Can I put a new parachute in the old container?

A: THE QUICK ANSWER is yes, because there is no set law saying you can't.

However, every manufacturer of pilot emergency parachutes in the United States wants its equipment out of service in 20 years. Now pay attention, because this means not only the parachute, but the harness/container that holds the chute as well. The 20-year service life is a very good number. It gives a fudge factor of about five years. Twenty-five years and later are usually the times I find parachutes affected by excessive UV damage or just plain wear and tear that could render them non-airworthy. Having to make an emergency bailout is stressful enough, especially if you have to keep your fingers crossed hoping your relic doesn't come apart at the seams.

Q: HOW DO I box and ship my parachute—especially during winter?

A: I'VE COVERED THIS before, but this is the time of year I get water-soaked boxes delivered to my shop. I feel a quick reminder is in order. Most arrive properly protected, but I've already had two parachutes arrive that were damp because they were not in their protective carry bags or in a plastic garbage bag. I suggest you always ship in both. Please don't place your parachute loose in the box. Your parachute could take several days to air and dry if it gets wet. What if it wasn't water? Then you may have a costly problem on your hands.

Remember the slogan "Pay me now or pay me later?" It's your choice. **IAC**

I'll be at Sun 'n Fun. Stop and say hello.

I should be giving one or two bailout seminars, and I'll also be in the Para-Phernalia booth pretending to work. Allen@SilverParachutes.com

Fly the Champions' Choice!

mt-propeller



Experience the performance edge with „*The Winners' Propeller*“!

Available for virtually every aerobatic aircraft, for custom built airplanes like i.e. Lancair, Velocity, Glasair or RV and also for many certified aircrafts. Order your custom designed propeller today!

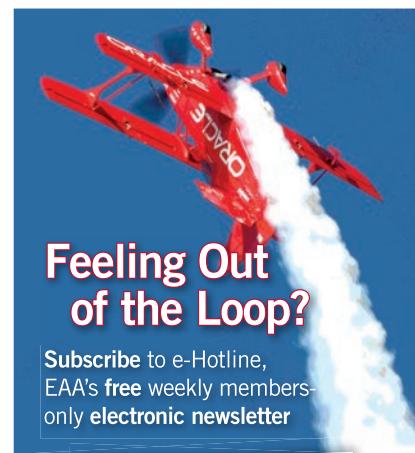
Please contact: **MT-Propeller USA, Inc. in Florida**

Phone: (386) 736-7762
Fax: (386) 736-7696
e-mail: info@mt-propellerusa.com

MT-Propeller in Germany

Phone: 01149-9429-94090
Fax.: 01149-9429-8432
e-mail: sales@mt-propeller.com

www.mt-propeller.com



Feeling Out of the Loop?

Subscribe to e-Hotline, EAA's free weekly members-only electronic newsletter



To start receiving e-Hotline this week, visit www.EAA.org/newsletters

CONTEST CALENDAR DEPARTMENTS



// **Phil Schacht Aerobatic Kick-off (Southeast)**

Friday, March 19 – Saturday, March 20, 2010

Location: Keystone Airpark (4J): Keystone Heights, FL

Phone: 386-383-5151

E-Mail: carolinalenz@yahoo.com

Website: www.iac288.org

// **Borrego Hammerhead Roundup (Southwest)**

Friday, April 9 – Saturday, April 10, 2010

Location: Borrego Valley Airport (L08): Borrego Springs, CA

Phone: 714-512-2531

E-Mail: webmaster@iac36.org

Website: www.iac36.org

// **Armed Forces Memorial (Southeast)**

Friday, May 14 – Saturday, May 15, 2010

Location: Grenada Municipal (KGNF): Grenada, MS

Phone: 662-417-5698

E-Mail: wroberts@waco-eng.com

Website: www.iac27.org (under construction)

// **Jersey Skylands Aerobatic Championships (Northeast)**

Friday, May 14 – Sunday, May 16, 2010

Location: Greenwood Lake Airport (4N1): West Milford, NJ

Phone: 1-908-635-2815

E-Mail: stephenseidel@embarqmail.com

Website: www.iac52.org

// **Southeast Aerobic Open (Southeast)**

Friday, June 4 – Saturday, June 5, 2010

Location: Tara (4A7): Hampton (Atlanta), GA

Phone: 706-326-4877

E-Mail: marty.flournoy@fcrealtors.com

// **Lone Star Aerobic Contest (South Central)**

Friday, June 11 – Saturday, June 12, 2010

Location: Grayson County (GYI): Sherman/Denison, TX

Phone: 469-713-4505

E-Mail: Loop4fun@aol.com

Website: www.IAC24.org

MARK YOUR CALENDARS
for these upcoming contests.
A complete list, and the latest
calendar, is at www.IAC.org.
And, if you're hosting a con-
test, let the world know by
posting it there!

// **Ohio Aerobatic Open (Mid-America)**

Friday, June 18 – Saturday, June 19, 2010

Location: Union county (MRT): Marysville, OH

Region: Mid-America

Phone: 614-505-6555

E-Mail: jgranger@columbus.rr.com

Website: www.iac34.com

// **Apple Cup 25th Anniversary (Northwest)**

Friday, June 18 – Saturday, June 19, 2010

Location: Ephrata Municipal Airport (KEPH): Ephrata, WA

Phone: 603-860-4456

E-Mail: AppleCupCD@gmail.com

Website: www.iac67.org

// **Midwest Aerobatic Club Challenge (South Central)**

Saturday, June 26 – Sunday, June 27, 2010

Location: Seward Municipal Airport (SWT): Seward, NB

Phone: 402-785-1060

E-Mail: lynn.bowes@hotmail.com

Website: www.2connect.us/mac80

// **Michigan Aerobatic Open (Mid-America)**

Saturday, July 10 – Saturday, July 10, 2010

Location: Jackson County – Reynolds Field (KJXN): Jackson, MI

Phone: 734-255-2263

E-Mail: rtbutts@live.com

// **Doug Yost Challenge (Mid-America)**

Saturday, August 14 – Sunday, August 15, 2010

Location: Spencer Municipal Airport (KSPW): Spencer, IA

Phone: 712-335-0744

E-Mail: Aaron.mccartan@gmail.com

Website: www.iac78.org

// **Rebel Regional (Southeast)**

Friday, September 10 – Saturday, September 11, 2010

Location: Everett-Stewart Regional (KUCY): Union City, TN

Phone: 731-420-4053

E-Mail: nagriffin36@charter.net

FLY MART

STEWARTS AIRCRAFT SERVICE
Red Stewart Airfield-Waynesville, Ohio-Est. 1946

**Basic and Advanced Aerobatics
Emergency Maneuver/Upset Training
Tailwheel Training
PT17 Stearman Training
Pitts Special Transition**

★ taildragger@go-concepts.com
(513) 897-7717
www.stewartsaircraft.net



DENT-AIR, LTD.
FACTORY DEALER FOR PITTS SPECIAL
Located At Lee Airport
Annapolis, Maryland

Aerobatics & Spin Training
Pitts Sighting Devices
BILL FINAGIN

Hangar 410-956-0047
Fax 410-263-4693

Home 410-263-2740
E-mail wbfina@cs.com



FOR SALE

**World's Only
Smoke-Ring Aerobatics**
Successful 12-year
Air Show Performer Business
Now Booking thru 2010
www.herb-ditto.com
262-334-6127

FLY INDIANTOWN, FL

Aerobic-Spin-Tail Wheel Five Star Venue

- ★ Location - SE Florida
- ★ Master CFI - Aerobatic
- ★ Proven course syllabus
- ★ Super Decathlon or Pitts S2
- ★ Authentic country inn

Schedule today:
Jim Alsip 772-485-6761
www.dylanaviation.com

★ AcroBelt ★

5-Point Ratchet Seatbelt System
Customized To Fit Your Aircraft

Details at:

www.SilverParachutes.com

plus

- Great Deals on New & Used Parachutes
- Bailout Safety Seminars
- Complete Rigging Services
- S.M.A.K. PAK™ Parachute Survival Kits

Silver Parachute Sales & Service
Phone: 510-785-7070
Email: Allen@SilverParachutes.com

AVIATORS UNLIMITED

Aerobatic & Spin Training
Tail Wheel Training
Pitts S2C / J3 Cub / Citabria
Acro & Sport Aircraft Maintenance

Johnny White

276-614-0412

www.aviatorsunlimited.us

CLASSIFIEDS

MISCELLANEOUS

Sukhoi 29 - Gear leg adaptors for Cleveland wheel and brake conversions.

Call Pete at **520-906-0770**.

www.aerolist.org, Aviations' Leading Marketplace

PARACHUTES

Great Deals on New & Used Parachutes. Silver Parachute Sales is a name you have trusted since 1972. When service counts, it pays to shop around. Largest dealer for SOFTIE parachutes. FAA Master Rigger and Examiner. **510-785-7070** Allen@silverparachutes.com. For prices, safety articles and other services, visit www.SilverParachutes.com

Parachute Shop, Don Mayer's Factory authorized for Strong, Squadron, Softie, National, Aviator, Used Parachutes, Repairs and Repacking, Master Riggers Services **800-872-2488, 978-433-8550**, www.parachuteshop.com.

REAL ESTATE

River Fly-In Condominium, Merritt Island, Florida, now taking reservations. The ultimate heaven on earth for pilots and boaters. www.riverflyin.com. Phone **321-636-6631**.

ONE DESIGN COMPONENTS



Everything you need for your ONE DESIGN.
From Spinner to Tail Wheel
For a FREE Catalogue/price list call or write
ROGER ROURKE ENGINEERING
890 Ballinger Canyon Rd.
Maricopa, Ca. 93252
Tel: 661/766/2753
rogourke@wildblue.net

CLASSIFIED ADVERTISING RATES: Classified Word Ads: \$5.50 per 10 words (rounded to the nearest 10 words), 180 words maximum, with boldface lead-in on first line. Classified Display Ads: One column wide (2.167 inches) by 1, 2, or 3 inches high at \$20 per inch. No frequency discounts. Rates cover one insertion per issue. Classified ads not accepted via phone. Payment must accompany order. Word ads may be sent via e-mail (classads@eaa.org) using credit card payment. Include name on card, complete address, type of card, card number, and expiration date. Make checks payable to IAC. Address advertising correspondence and/or inquiries on rates and mechanical requirements to: Classified Ad Manager, P.O. Box 3086, Oshkosh, WI 54903-3086. **Deadline** for display ads, space reservations or cancellations is seven weeks prior to publication date. i.e., April 10th for June issue, etc. However, ad materials/copy can be received at a later date providing space has been reserved. Classified ads accepted daily for next available issue.



RYAN BIRR
COLUMNS / INSURANCE



Policy Points

INSURANCE POLICIES ARE THE sum of a variety of parts; all policies include sections titled *Declarations, Insuring Agreement, Condition, Definitions, Exclusions, and Endorsements*. But it seems that when our customers actually sit down to read their policy, most of their questions end up being about the exclusions in the policy. You know...those sections that scream "I know I promised that to you, but I really didn't mean to say that!" Many times, unfortunately, the exclusions in your policy typically end up being our nemesis as well as yours regarding the policy language.

Often, insurance policy exclusions are the result of an insurance company's experience with a particular loss it has had and its subsequent desire not to experience the ill effects of inadequate policy language again. It may also be wary of statutes or legislation in individual states that might adversely affect its insurance policy formats. This is an interesting point because an insurance company's particular character, or aversion to certain types of claims, can become a part of the policy, often buried within its exclusionary language. This is where each company's policy can vary dramatically and where buyers need to be aware when changing from one policy to a new policy.

Policy exclusions generally can be divided into three categories: those losses over which no one really has any control or that are catastrophic in nature (war, nuclear detonation, Y2K); those losses no insurance company would consider covering (intentional loss by the insured, unlawful use, wear and tear, pollution); and those losses everyone agreed in advance would be excluded (uncovered uses, uncovered territory, unapproved pilots, etc.). Every policy has a list of general exclusions that read nearly identically regarding the first two in this list,

and each company drafts individual language for the last type of intended exclusions. Some companies broadly describe these types of exclusions, and some companies use multiple pages in the policy to narrowly and explicitly describe these exclusions.

"I THOUGHT I WAS COVERED FOR THAT..."

Often problems for us regarding insurance policy exclusions are 1) the insured doesn't read the policy to identify policy exclusions affecting him or her and/or 2) the insured doesn't understand the policy exclusions after reading the policy. We can hardly blame anyone who doesn't completely understand his or her insurance policy, but it's difficult for us to educate every one of our clients with a simple cover letter or a summary of the policy about all that is contained in the contract. We cannot recite all the policy restrictions in our summary documents because we aren't issuing the insurance policy.

" . . . buyers
need to be
aware . . . "

I have heard that insurance policies eventually get filed away, or thrown in the garbage, or even used as door stops at the hangar...but the fact is, insurance policies are legal contractual documents in which both you and the insurance company agree to comply with certain obligations. It is not likely that the insurance company is going to waiver from its obligations; therefore, it is imperative that you comply with your obligations to get the most from the insurance you purchased. You must make time to read your insurance contract and call your insurance broker so any questions or ambiguity about your policy can be resolved. This is so that you'll have your loss, if you should ever have one, covered by the insurance contract as you expected it would be. **IAC**



100% FRESHRUNK COTTON KIDS' SHIRTS

Purple, toddler sizes
Aerobatics hearts & Pitts
with IAC Oshkosh WI
All sizes \$13.99

7265422732071.....2t
7265422733071.....3t
7265422735071.....4t
7265422738071.....5-6t



Pink, toddler sizes.
Fly Girl. All sizes \$13.99

7265422232011.....2t
7265422233011.....3t
7265422235011.....4t
7265422238011.....5-6t

TO ORDER, CALL
800-843-3612

Royal Blue or
Athletic Gold, youth
sizes. *Got Aerobatics?*
All sizes \$14.99

7265423240061.....7y
7265423242061.....8-10y
7265423244061.....10-12y
7265423247061.....14-16y



Kelly Green, toddler sizes.
Future air show pilot.
All sizes \$13.99

7265421732051.....2t
7265421733051.....3t
7265421735051.....4t
7265421738051.....5-6t



OFFICIAL
INSURANCE
PROGRAM

- Exclusive insurance products
- Unparalleled customer service
- Web-based insurance quoting
- Aerobatic school insurance
- IAC sponsor and supporter
- The experts in aviation insurance

Photo by Mike Shore • [mikesshorephoto.com](#)



ALWAYS RIGHT THERE WITH YOU



NORTHWEST INSURANCE GROUP, INC.
www.nwinsurance.net • 800-693-7053



BERKLEY AVIATION

A Berkley Company

Meeting the aviation
insurance needs of the IAC
and its members.