

**SPORT**

APRIL 2011

# Aerobatics

OFFICIAL MAGAZINE of the INTERNATIONAL AEROBATIC CLUB

## Sportsman in a **Cub**

- **Cecilia Aragon:** Where is she now?
- **Building a Chaos:** Rans S-9





Drive one.

# 2011 Ford Fiesta



## It's A Pretty Big Deal

The all-new Ford Fiesta is loaded with substance and will deliver more than just great looks and top fuel economy. Designed to be versatile, personal and adaptable, the Fiesta delivers convenience and connectivity with exclusive SYNC voice-activated communications system and offers 15 class-exclusive features that can be tailored to fit your needs and desires. [www.ford.com](http://www.ford.com)

## The Privilege of Partnership

EAA members are eligible for special pricing on Ford Motor Company vehicles through Ford's Partner Recognition Program. To learn more on this exclusive opportunity for EAA members to save on a new Ford vehicle, please visit [www.eaa.org/ford](http://www.eaa.org/ford).



**partner**  
recognition  
VEHICLE PURCHASE PLAN

*"Whatever class she can compete in, the project will be a success for me."*

Glen Marshman

## FEATURES

**06** **Cecilia Aragon**  
Where is she now?  
by Reggie and January Paulk

**14** **Chaos**  
Building a Rans S-9  
by Glen Marshman

**19** **Engine Failure**  
by Mike Heuer

## COLUMNS

**03** / President's Page  
Doug Bartlett

**24** / Safety Corner  
Steve Johnson

**26** / Ask Allen  
Allen Silver

**28** / Just for Starters  
Greg Koontz

## DEPARTMENTS

**02** / Letter From the Editor

**04** / Newsbriefs

**30** / Contest Calendar and  
Advertisers Index

**31** / FlyMart and Classifieds

**32** / IAC Snapshot



## THE COVER

Greg Koontz flies his J-3 Cub in front of the moon in this beautiful shot.

Photo by  
Mark St. Pierre



PUBLISHER: Doug Bartlett  
IAC MANAGER: Trish Deimer  
EDITOR: Reggie Paulk  
SENIOR ART DIRECTOR: Phil Norton  
DIRECTOR OF PUBLICATIONS: Mary Jones  
COPY EDITOR: Colleen Walsh

CONTRIBUTING AUTHORS:  
Doug Bartlett      Reggie Paulk  
Mike Heuer        Allen Silver  
Steve Johnson  
Greg Koontz  
Glen Marshman  
January 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](mailto:reggie.paulk@gmail.com)

PUBLICATION ADVERTISING

MANAGER, DOMESTIC:  
Sue Anderson  
Tel: 920-426-6127  
Fax: 920-426-4828

MANAGER, EUROPEAN/ASIAN:  
Willi Tacke  
Tel: +4988841487515  
Fax: +4988841496012  
E-mail: [willi@flying-pages.com](mailto:willi@flying-pages.com)

COORDINATOR, CLASSIFIED:  
Alicia Canziani  
E-mail: [classads@eaa.org](mailto:classads@eaa.org)

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](mailto:membership@eaa.org)

The International Aerobatic Club is a division of the EAA.



EAA® and SPORT AVIATION®, the EAA Logo® and Aeronautica™ 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 © 2011 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 955-560) 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 40063731 Return undeliverable Canadian addresses to Pitney Bowes IMS, Station A, P.O. Box 54, Windsor, ON N9A 6J5.



**REGGIE PAULK**  
COMMENTARY / EDITOR'S LOG

## Thinking of the Franklins

I HAD THE PLEASURE of interviewing Cecilia Aragon for this month's issue. I used to read about her back in the early '90s, and her story was fascinating. I thought it would be appropriate to follow up and see where she is today, and the result is the story you see in these pages. If there's one common theme I could ascribe to Cecilia, it's that she won't ever give up. There's no obstacle too big to overcome, and no excuse not to make something happen if you really want it.

I've been looking through the old Technical Tips manuals the IAC published a couple of decades ago, and they are a treasure trove of stories and information many members may never have laid eyes on. I've contacted a few of the contributors and asked their permission to reprint some of these timeless pieces, so you'll get to read them over the coming months. Mike Heuer had an experience in 1980 that resonates just as loudly today. I hope you enjoy his story as much as I do.

Glen Marshman gives us his account of building a Rans S-9 for the purpose of competing on the cheap. I had the privilege of witnessing Glen's first flight in the airplane. I've never been able to watch the first flight of a kit-built airplane. It was an amazing experience to watch his little red airplane lift off into a clear blue Colorado sky for the very first time. I can only imagine Glen's nerves as he pushed the throttle forward for takeoff! He'll be bringing his test flight/aerobatic experience in a future issue.

I've been looking through the old Technical Tips manuals the IAC published a couple of decades ago, and they are a treasure trove of stories and information many members may never have laid eyes on.

As many of you may be aware, Kyle and Amanda Franklin experienced an engine failure and forced landing at an air show recently. They both were burned in the ensuing fire, and Amanda is still in critical condition as I write this. I had the opportunity to talk at length with Kyle for the story we did on his father for the January issue, and he is a very neat guy. My heartfelt sympathies and prayers go out to Kyle, Amanda, and the rest of their family. A fund has been established to help out with their medical expenses, and you can read more about it in the Newsbriefs section. **IAC**



**DOUG BARTLETT**  
COMMENTARY / PRESIDENT'S PAGE

## Send Us Your Unknowns

**THERE HAVE BEEN SOME** subtle but important changes made in the last two years that are designed to encourage regional contests throughout the United States. In the past, any chapter wishing to put on a contest had to pay an up-front insurance and sanction fee at the time it applied for a contest. This up-front cost was well more than \$1,000. However, last year the contest insurance fee was eliminated due to our safety record. This continues for the 2011 competition season. This risk is now covered in the chapter's annual insurance at no additional charge. Last year the chapters still had to pay an up-front sanctioning fee. This charge included IAC expenses to support regional contests and a fee from the National Aeronautic Association for sanctioning rights. Each contest paid the same dollar amount independent of its size. In an effort to more fairly spread the cost and encourage small start-up contests, headquarters has established a standard charge per pilot per contest. This fee will be paid to the IAC after the contest based on the number of pilots who fly. This step was taken to minimize the up-front risk and cost to smaller chapters desiring to hold a contest and gives all chapters much greater control of their costs. The number of contests increased last year, and we hope to see that continue again this season.

Greg Dungan, the chairman of our Judges Committee, has been working hard to prepare the beginning of our new online judges schools. The first classes will be available by the end of May and will be in a webinar format. The complete set of judges schools along with enhancements will be a work in progress and will take a few years to complete. It is our desire to provide a complete interactive training class with the objectives of reducing costs while maintaining and then enhancing

the quality of our content. This action was taken to reduce the time and travel requirements for many of our volunteer judges. It is provided as an alternative to those who do not have the resources to attend a chapter judging school.

The number of pilots submitting the Unknowns has been so small that almost any submitted will be flown.

I need your help on another subject. For the last several years the bank of competition Unknowns used at contests has dwindled. As a result, only a few individuals end up designing most of the Unknowns flown during the competition year. The number of pilots submitting the Unknowns has been so small that almost any Unknown submitted will be flown. This is a huge advantage to the submitting pilot and perfectly within the rules. It is a reward for volunteering your time.

How do you design an Unknown? Let me tell you the steps I take. The first step is to read Chapter 5 of the *IAC Official Contest Rules*. This chapter contains the requirements of the Unknowns for each category. The next step is the most important one in my opinion. Select a few points of knowledge or skill for the pilot to demonstrate in this flight program. These items should be based on pilot skills, not aircraft power. As an example, let's start the Advanced Unknown sequence with an inverted 1-1/2 turn spin followed by two downwind maneuvers that can be kept in the box with a 20-knot X-axis wind. This will require the

pilot to demonstrate his ability to do inverted wing-wags while holding heading and at the same time accurately place the spin on the upwind end of the box. Pilots who have learned these skills will be rewarded with a high-quality score and no penalties for improper wing-wags or outs.

To test the pilot's knowledge of the rules, let's start a 180-degree two-turn roller downwind of center box beginning on the Y-axis and draw it showing the turn to be downwind. Does the pilot know the Y-axis is nondirectional, or will he fly it as drawn and take the out? Unknowns can be designed to test a pilot's wind-correcting skills by selecting figures that allow wind-correcting opportunities but have no cross-box maneuvers. Try designing one that requires a pilot to demonstrate the ability to 3/4 snap using both the left and right foot. The list of skills and knowledge to demonstrate in Unknowns is long. Pick a few and have fun.

Recently there has been a trend to punish the Advanced and Unlimited pilots by designing an Unknown with many hard pushes. What skill does this test that cannot be tested with one or two pushes? I have seen other Unknowns designed that are questionable to fly due to altitudes. To finish an Unlimited Unknown with a tail slide and three of four push-out inverted may be legal, but is it a good test of pilot skills or an unnecessary risk?

Unknowns are simple and fun to design. All members and volunteers are welcome to submit a design; however, I am asking all competition pilots to submit one Unknown for a category they flew last year. They can be sent to the IAC in Oshkosh. With this done, our stock of Unknowns will be full again.

The weather is turning good all over the country. Get out and fly, have fun, and maintain safe aerobatic habits. **IAC**



**FUND ESTABLISHED FOR KYLE** and Amanda Franklin March 14, 2011 —Wingwalking air show performers Kyle and Amanda Franklin are hospitalized with serious injuries after they were forced to make an emergency landing while performing during Air Fiesta 2011 at the Brownsville-South Padre Island International Airport Saturday afternoon.

The Brownsville Herald reported their Waco biplane suffered an engine failure during their “Pirated Skies” performance. According to witness reports at the air show, Amanda was still on the wing when the engine sputtered. She managed to get back inside the cabin while flames shot out of the back of the engine. A witness said Kyle was able to make a semi-controlled crash into trees, got out, and was helping to pull Amanda clear of the airplane when it exploded. Both were airlifted to the burn center in San Antonio, Texas.

Donations are being handled by The Moonlight Fund, “A 501(c)(3) non-profit organization that provides 24/7 assistance to burn survivors and their family members, as well as families who have lost a loved one to a burn injury, by addressing their financial, emotional and physical needs in acute situations.”

Donations should be sent to “The Moonlight Fund” P.O. Box 1299 Bandera, TX 78003. Please specify “Franklin Fund” in the check memo. Donations can also be made through PayPal on The Moonlight Fund website.

**DAVID MARTIN NEW CHAIR** of IAC Hall of Fame Committee February 16, 2011–David Martin is being passed the torch as chairman of the Hall of Fame Committee from long-time chair Dave Lammers. The IAC thanks Dave Lammers for his excellent leadership and high standards set for the selection process of our Hall of Fame.



**EXTREME AEROSPORTS NEW US** Agent for Sbach aircraft Extreme Aerosports of Corvallis, Oregon, is pleased to announce that it has been named U.S. agent for XtremeAir’s Sbach series of aircraft.

Jim Bourke and Doug Jardine of Extreme Aerosports are ready to serve aerobatic pilots as suppliers of this fine aerobatic aircraft. Pilots can choose between the single-seat Sbach 300 or the two-seat Sbach 342 models. Both are fully capable of aerobatic competition in the unlimited class. The two-seat model also doubles as a speedy cross-country touring model, with a range of over 900 miles and a cruise speed of over 200 mph. Visit [www.ExtremeAerosports.com](http://www.ExtremeAerosports.com) to learn more.

Save on your AirVenture tickets.  
Buy online now at [AirVenture.org/tickets](http://AirVenture.org/tickets)

# Make your plans now to celebrate July the 59th.

Back in 1953 we started getting together each year with a few of our fly-in friends. Now it's AirVenture®, the World's Greatest Aviation Celebration. It's gonna be a big day. And night. All week long.

Monday, July 25  
Opening Day Concert

Tuesday, July 26  
Tribute to Bob Hoover

Wednesday, July 27  
Navy Day


Thursday, July 28  
Tribute to Burt Rutan

Friday, July 29  
Salute to Veterans

Saturday, July 30  
Night Air Show Returns

Sunday, July 31  
Big Finale, the Military Scramble

**2011**  
**AIRVENTURE**  
**OSH KOSH**  
**EAA**

Advance tickets made possible by  **JEPPESEN**



**C**ecilia Aragon began her career as a computer scientist at NASA, helping design the software for the space shuttle simulator. After a time, she went back to school to earn a doctorate, where she chose to do her thesis on the invisible airflow hazards to helicopter pilots. She won the Presidential Early Career Award for Scientists and Engineers after she developed a tool that enabled astrophysicists studying supernovae to deal with their large data sets more efficiently. She recently took a job as a professor at the University of Washington with the eScience Institute, where she will again be playing with very large data sets. That's not all of her story, though. In the 1990s, the name Cecilia Aragon was synonymous with world competition aerobatics.

# conquering Fear

BY JANUARY PAULK AND REGGIE PAULK

# conquering Fear

**YOU WOULDN'T KNOW IT** from her accomplishments, but Cecilia experienced extreme fear when it came to flying. Most of that fear could be traced back to her childhood, where she grappled with the challenge of being a minority.

"My childhood was really not that good," she says. "My parents were immigrants, and in those days, there was a lot of discrimination. When my mom and I would go to stores, I remember the woman behind the counter would turn away rather than serve us. My parents put an offer on a house, and they pulled it off the market. In junior high, I got beat up by boys who called me racial epithets."

From those experiences, Cecilia learned to be fearful. She learned to blend in and try not to look different.

"My mom told me I cried every day for most of the year when I went to kindergarten," she says. "I had a speech defect, so I was put in all the slow reading groups and had to attend speech therapy. I don't think I was a really promising child."

In 1985, Cecilia was working as a computer programmer when a friend at the company asked if she'd like to take a ride in a small airplane. Her first thought was, "Oh, that sounds really scary." Thinking the opportunity might never come again, she decided to go for it. Her friend picked her up at the Oakland airport in his Piper Archer, and they took off.

"I remember very clearly that the whole time I was thinking there was a high probability I would not survive this flight," she says. "Just



*Cecilia now flies aerobatics and gives flight instruction in her Decathlon.*

*Greg Poe's Zivko Edge 540 utilizes a wing designed by Leo Loudenslager. The similarities to Cecilia's Sabre are striking.*



after takeoff from the Oakland airport, he hands me this map and says, 'Can you tell me which radial line we're on?' There was a VOR ring on there, and he wanted to know which radial we were on. I thought, 'Oh, my God, if I don't answer this question, we're gonna crash!'"

Because of the intensity in his voice, and not wanting to interrupt his important piloting duties, Cecilia set about the task of figuring out where they were. After giving him the number, and him subsequently reporting back to ATC, they didn't crash. "So my first aviation task was a success," she says.

Flying out over the coastline, directly over the Golden Gate Bridge, then down low over the coast, she was struck by the sheer beauty of it all.

"I was like, wow," she remembers. "Look at all of these things I get to see that nobody else gets to see. You know the California coastline is probably one of the most beautiful areas in the world, and I realized that I just loved it. When I was a little girl, I always used to wish I could fly. That was my one wish, but it just didn't occur to me to use an airplane. I wanted to fly the way a bird flies, with the air against my skin, and be able to see the world around me. I'd only ridden as a passenger on

# conquering Fear



*Cecilia flies her Sabre 320 with Zivko wing over the Golden Gate Bridge.*

a jet, where you're so separated from the outside world. I didn't know how close you could come to that dream by being a pilot. That single flight helped me realize it was possible."

## OUTFLYING FEAR

As soon as she arrived back on the ground, Cecilia signed up for flying lessons the next day. It would not be an easy process for her or her hapless instructors.

"I was a really bad student," she says. "My fear was so powerful, I was basically unable to learn. Every time I drove up to the airport for my lesson, I would be scared. I would wish to myself that the weather would be bad, the instructor would be sick, or the airplane would be down for maintenance. I didn't want to admit I was afraid."

Over the years, people have asked her why she kept going, even with all of the fear. For Cecilia, the pull of flying was stronger than the push of fear. Fear was her constant companion, slowly diminishing and finally going away permanently after she'd put more than 1,000 hours in her logbook.

"If I think about the one thing I'm proudest of," she continues, "it's overcoming my own fear. It's a major thing for me, and it's kind of unusual. For many pilots, fear keeps them from actually realizing the dream."

Helping fearful fliers has become something of a specialty for Cecilia. With an understanding of all of the excuses people make to avoid flying, she has helped many people achieve their own dream of flight.

"People who are scared will actually make themselves sick," she says. "They'll come up with all sorts of excuses not to fly. I've actually taken a number of people to their private pilot licenses that, like me, were terrified of flying. People will come back and tell me they didn't think they could ever have learned to fly if they didn't have me as an instructor, because I understood when they were afraid. They say I pushed when I needed to push, and told them their excuses were BS. It's very rewarding."

Fear eventually drove Cecilia into aerobatics. After obtaining her instrument, commercial, and finally instructor certificates, she was still terrified a student might put her into a spin. Thinking it wasn't right to be afraid of this aspect of flying, she decided to do spin training, which naturally

led to aerobatic training. "I was terrified of that, too," she says.

At the time, Cecilia was teaching in a Cessna, and she wasn't sure she could handle a tailwheel airplane. "I wasn't sure I was any good," she says. She decided to go up in one of the Citabrias at Lou Fields Aviation at the Oakland airport.

"On the very first flight," she says, "we took off in a Citabria from Oakland. The way the Bay area is laid out, it takes a long time to get out of all the different controlled airspace to a place you can fly aerobatics. We drove this old 7GCA all the way out to the practice area. The instructor said he was going to demonstrate a roll. He demonstrated the roll, and I said, 'Oh, I'm really sick. We need to go back and land.' I'm sure the poor instructor was thinking, 'This one's not going to make it.'"

There is no such person who doesn't have some degree of airsickness at some point. "I promise you, I can make them sick," she says. But she's also learned how to give someone a first flight where they won't get sick, no matter how sensitive they are.

"There's a procedure for this," she says. "It's one of the things I teach people. There is a procedure for dealing with fear, and another for dealing with queasiness, and you just work on them

step-by-step. It's something you have to train for, and you have to get into shape, so it's something you can lose."

#### CONTEST TIME

After the 10-hour aerobatics course, her instructor convinced her to fly in the Basic-only contest at the Kingdom Airport. This was in 1987, two years after her first flight.

"It was a spin, a loop, and a roll," she says. "There were about 10 of us who went to this contest. I'm sure I flew really badly; I don't even remember doing the maneuvers at all. I'm sure I was really terrified and nervous, but there must have been 50 people there who all loved aerobatics as much as I did. I finally got to talk with other people who thought it was really awesome to make a loop round or turn an airplane upside down. I wanted to talk about it to everybody, but the people in my daily life thought it was kind of boring. I realized I wanted to keep competing."

It didn't take much competition for Cecilia to realize she wanted a Pitts. "That is the plane for competition aerobatics," she says. Because she was supporting herself, she didn't have the resources to buy a Pitts, so she began looking for one to rent.

## We Can Teach ANYONE to Land A Pitts

or Skybolt, Eagle, Model 12, Extra, etc.

*"We emphasize stick and rudder basics."*

- 39 years instructing in a Pitts.
- Specialize in low-time pilots, cross-winds and narrow, short runways
- Yeah, we teach acro too.

### Accommodations Available

Complete Resort Amenities, Families Welcome.

*It's Always Sunny In Phoenix*



**Budd Davisson's  
Plus 5 Aviation, LLC**

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



### Former Students Say:

*Budd is one of the best instructors I've ever flown with. He has more knowledge to share about the Pitts, and flying in general, than anyone. -Mike Melvill*

*...I had to dead stick my Pitts in and an old timer said "Nice save. Someone taught you well." Yes they did! Thanks, Budd. -Craig H.*

*My insurance company covered me, a low-time, low-tailwheel-time pilot in a single-hole Pitts largely because I went to Budd for my training. -Tom P*

*... the engine failed at low altitude and the accident investigators said that my fundamentals saved me. Thanks my friend. -Maynard H.*

**[www.airbum.com](http://www.airbum.com)**

# conquering Fear

"In the entire Bay area, the only Pitts available to rent was way up north in Santa Rosa," she says. "It was about an hour-and-15-minute drive from my house. Again, here I got lucky, because I found this wonderful instructor named Louie Robinson. He really taught me how to fly."

Determined to fly in the upcoming Sportsman contest at Delano, she needed to solo the Pitts. Before that could happen, Louie realized she was unable to get full deflection on

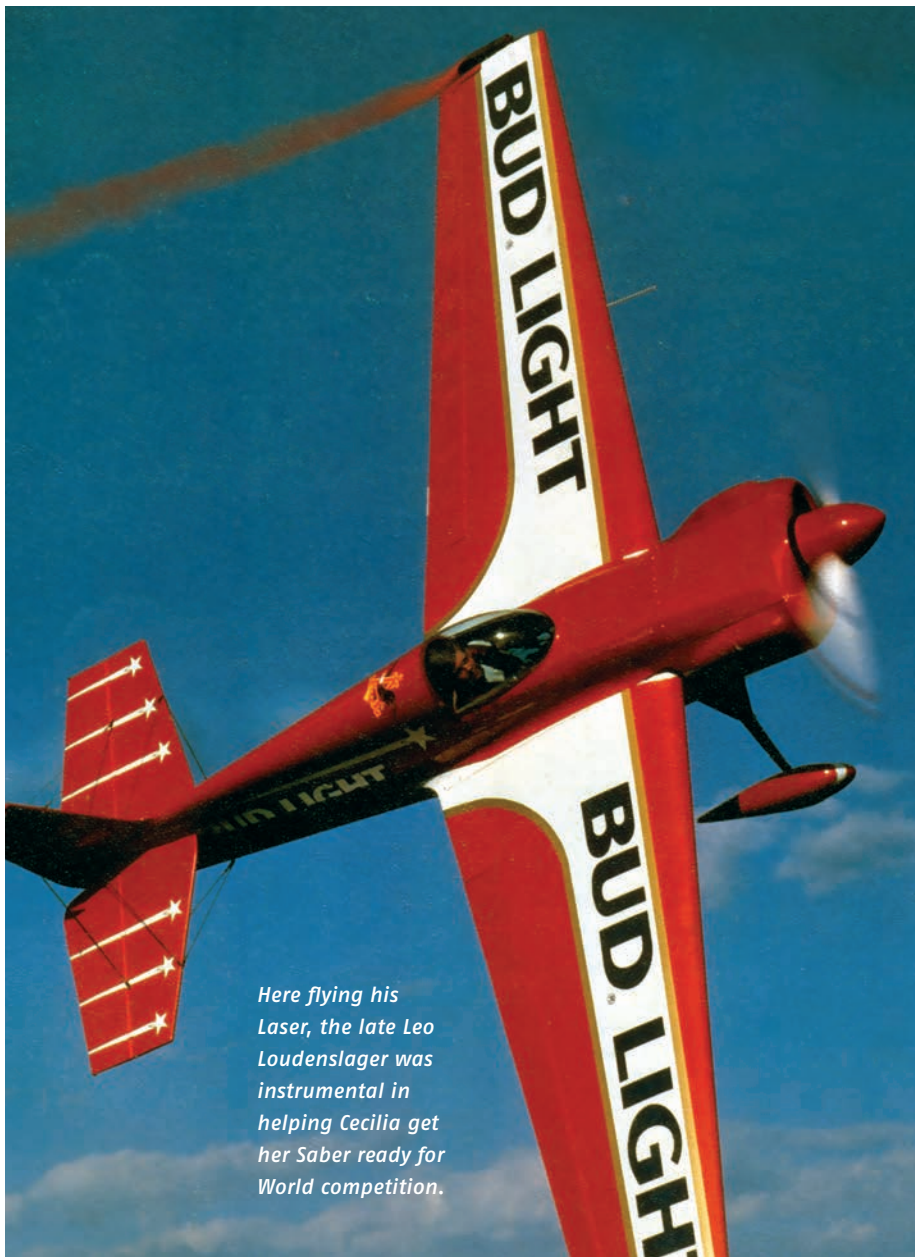
the rudder pedals due to her slight stature and told her it would be unsafe to fly solo without full deflection. She already had a slew of carefully arranged Styrofoam cushions to help better position herself in the S-2A's cockpit and was determined not to let this stop her.

"I had an idea," she says. "If I could get 2 inches on my feet, I could reach the pedals to solo the Pitts, which was my dream. I went to this old-time shoemaker in downtown Berkeley and explained what I needed. He built up the soles so they gave me these couple of inches underneath my feet. I still have them...they're pretty funny looking. On my next lesson with Louie, I walked up in my elevator shoes, and he said, 'You're gonna do it!' So he checked me out, and I soloed the Pitts."

That wasn't the only problem Cecilia overcame with the Pitts. Her 100-pound frame made her 40 pounds too light to solo the airplane, so she went to a local dive shop and purchased dive belts with 40 pounds of lead weights to install in her seat. This put the Pitts at its forward center-of-gravity (CG) limit, making control forces rather heavy.

"I went to that Sportsman contest in Delano," she continues. "I remember walking out to the plane in those shoes and saw people laughing at me. I got in the plane and flew. It was a big contest that year. I think there were 29 pilots flying Sportsman. After wiping the plane down after my flight, I walked into the terminal where all the scores were up, and someone said, 'Congratulations!' I thought they were congratulating me because I was a newcomer, and they wanted to cheer me on for getting through the flight. Then they said, 'You're in first place.' I couldn't believe it. Here were all of these people, some of whom had been flying 15-20 years—air show pilots—and I'd flown better than all these people on my second contest ever. I still have the trophy from that day."

It was at that point she became completely hooked on aerobatics. She'd found something she loved and was really good at and was determined to take it as far as she could. She was going to fly aerobatics full time. She started to instruct full time and thought of programming as something she



*Here flying his Laser, the late Leo Loudenslager was instrumental in helping Cecilia get her Saber ready for World competition.*

did part time, even though she still put in 40-hour weeks. She arranged her schedule to accommodate her flying, working 9-1 and 5-9 so she could make the drive to Livermore and back.

Moving up to Intermediate, the two-seat Pitts S-2A presented a lot of challenges due to the forward CG when flown solo. Her light weight only exacerbated the problems, and she quickly realized she needed to get a single-seat airplane. Not having the funds to purchase a Pitts outright, she decided to take out a loan.

"I found an S-1T for \$40,000, and I wanted to get a loan for 80 percent of that," she says. "The bank said I'd never had a loan, so they'd give me half of that. I told them they could give me the full amount or I'd take my business elsewhere. They gave me the loan."

She immediately fell in love with the airplane that would eventually put her on the Unlimited team.

"It was experimental," she says of the airplane. "So I could modify it. I could put 5 pounds of lead weight on the tail instead of 40 pounds in the seat. I moved the rudder pedals all the way aft, adjusted the stick, and finally had a plane that fit me. That was the plane I flew through Intermediate, Advanced, and then onto Unlimited."

Cecilia went from first solo to the World Aerobatic Championships (WAC) in under six years—a record. So how did she make the Unlimited team in a Pitts?

"At the 1989 Nationals, I was doing pretty well until it came to the Unknown," she remembers. "I looked at the Unknown, and it



*Cecilia's specially made shoes allowed her to solo the Pitts.*

had a rolling turn followed by a tail slide. If you're familiar with the Pitts S-1T, when you come out of a rolling turn, you're doing 140 mph. In order to do a good tail slide without zeroing it, you need at least 180 mph. I thought about it and realized there was a way to do it. I did the rolling turn on the extreme end of the box, then dove until I hit 180, knowing I'd take a hit on points. Then I pulled for the tail slide. I did a good rolling turn and a great tail slide and scored better than most of the people flying monoplanes, and made the team."

#### MONO A MONO?

Having made the team, Cecilia began looking for a monoplane to fly at the WAC. None of the airplanes available at that time were even close to affordable for her, so she began looking for a less expensive alternative. She happened upon a Dan Rihn-designed project gathering dust in a shop in Selma, California.

**I told them they could give me the full amount or I'd take my business elsewhere.**

Over the next year, the airplane came together with Cecilia pouring every penny available into the project. When it was finally ready to fly, the airplane wasn't quite up to snuff.

"I went out and flew for the team trainer," she says. "And he told me the airplane snapped like a Decathlon. He told me the team would be wasting their money to send me to the World's with this airplane. I was devastated. I

didn't know what to do, but somebody recommended I contact Leo Loudenslager. Here I am, this nobody, calling him up to tell him I have a problem with my airplane. He listened to me politely and said, 'If next Thursday you'll be in Dusty, Oklahoma, I will fly your airplane and tell you what to do to fix it.' Was I going to make it halfway across the country by Thursday? Yes!"

After meeting with Leo, a new wing was suggested. He'd designed a new wing being produced by Bill Zivko for an airplane called the Edge. One was available on the East Coast, so the Zivkos picked it up, brought it back, and had her airplane flying in six weeks—just in time for the WAC.

"We went to the world contest that year, and I placed fourth in the world," she says. "With almost no time in the airplane, I wasn't flying it as well as it could be flown at that point. I was still really happy with that, coming from nothing to fourth in the world is pretty darn good."

The Saber, as her airplane came to be known, flew in two subsequent world aerobatic contests with Cecilia at the controls. She also used it to fly in numerous air shows.

Today, as a full-time professor and the mother of a 15-year-old daughter, and 11-year-old son, Cecilia remains active in aviation through flight instruction. Although she no longer competes, she's pretty sure she'll drift back toward it once her kids are grown and she has a little more time on her hands. **IAC**

A high-angle, close-up photograph of a red aerobatic airplane. The aircraft is the central focus, with its wings, fuselage, and tail section visible. The text 'STRICTLY BUSINESS' is printed in black on the side of the fuselage. The background is a plain, light-colored surface, possibly a hangar floor. The overall composition is clean and professional, typical of a magazine or technical publication.

# Building the S-9

BY GLEN MARSHMAN

My goal was to build a new aerobatic airplane that would be competitive in the Intermediate category, fit the light-sport aircraft (LSA) category, be cheap to fly and maintain, and cost \$35,000 or less.



PHOTOGRAPHY COURTESY **GLEN MARSHMAN**

**WHEN THE LSA-PROPOSED RULEMAKING** came out, I thought it was a great idea. It seemed to finally be a cost effective way to have fun flying. I flew out to the Rans factory and met up with owner Randy Schlitter. I was very impressed with the factory because it was very clean and hi-tech. When I was there, I flew an S-6, the closest thing to an ultralight I'd ever flown, but it was a real airplane! In the corner of one of the Rans hangars was an S-9. It was a neat-looking little bird, so I asked about it, but it was out of production at that time and went to the back of my mind.

I built a Pitts S-1S and competed in it for years. I'd spent a ton of money on the project—equivalent to three S-9s. Wanting to do something new, it was time for me to make a change, so I called the factory and asked about the S-9. They told me they were back in production, so I reserved a production slot.

While the factory was putting the kits together, I thought about how to really make this little bird perform. The answer was simply to build it light and have a lot of horsepower.

The plans call for a Rotax 582, which produces 65 horsepower, but there's a higher-power alternative. Steve Beatty, owner of Aircrew Performance, builds a Rotax 583 that puts out close to 100 horsepower. The 583 is almost identical to the 582, but does

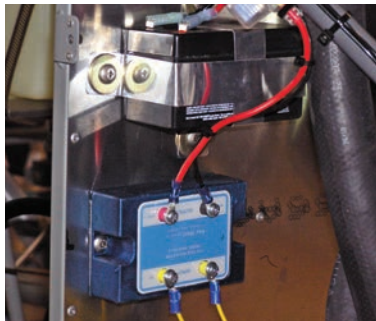
not carry an aircraft designation. Unlike the 582, the 583's single ignition is solid-state with electronic ignition control. In addition, the 583 sports the Rotax adjustable variable exhaust (RAVE), with variable exhaust ports. This combination allows the 583 to produce 97 horsepower on the same displacement as the 582. In order to use this carbureted engine on the aerobatic S-9, Mikuni pumper carbs are put in place of the standard Bing carbs. A ground-adjustable two-blade Warp Drive propeller set at 8 degrees gives a consistent 7500 rpm, and the airplane leaps forward like an Extra on takeoff.

The kit is pretty straightforward, but I'm not sure it's for a first time builder. I've built a Rans S-6, and its much higher sales volume has allowed the factory to refine the kit and plans to a greater degree than the lower production volume S-9. In addition to a large network of S-9 builders, Rans technician Ed Schwab has built an S-9 himself and is very helpful, so you're not alone during the build by any means.

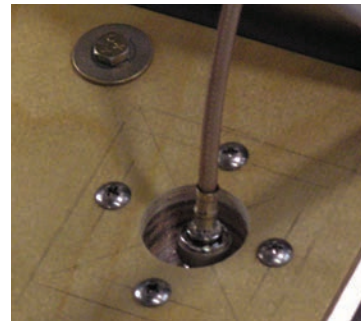
I made a lot of non-structural changes, mostly for ease of maintenance and simplification. Because I'm of smaller stature, I moved the instrument panel 7 inches aft to allow better access while seated. The configuration also allows good access to the rear



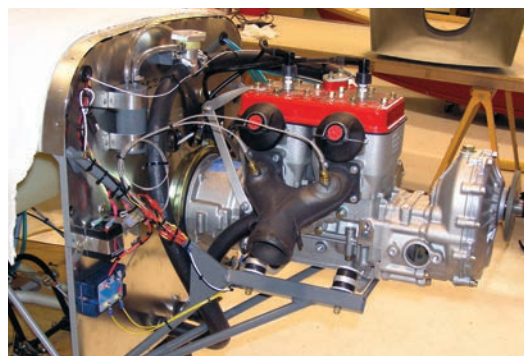
*The instrument panel is seven inches further aft for accessibility in flight and ease of maintenance.*



*A KW regulator powers the radio and transponder, and charges the battery.*



*The brake line pass-through is simple and easy to access.*



*ABOVE: The Rotax 583 engine produces 97 horsepower, 33 more than the 582 for the same weight.*

*LEFT: JB Weld was used to fit the leading-edge skin.*



LEFT: The bare fuselage frame as it comes from the factory.

RIGHT: The left wing with fuel tank and wing walk ready for installation.



ABOVE: The tuned exhaust was very challenging to install correctly. RIGHT: The wing and fuselage are checked for fit.

**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*

# HOOKER HARNESS

Featuring Ratchet Seatbelt System  
Dealer for Strong Parachutes

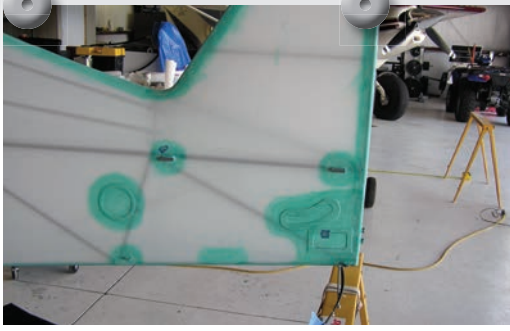
**Commercial • STC Kits • Sport  
Aerobatic • Military • Quickie**

The Hooker Harness Aerobatic System consists of a military style shoulder harness, dual military style seat belts, a crotch strap, a four piece pad set, and a stainless seat ratchet tightener.

Benefits of the Aerobatic System-

- 1) Great mechanical advantage
- 2) Pulls up to 700 lbs of pretension
- 3) Easy to operate/quick adjustment
- 4) Small enough to fit most aerobatic aircraft
- 5) Numerous different configurations available

**Hooker Custom Harness**  
324 E. Stephenson St.  
Freeport, Illinois 61032  
Phone: 815-233-5478  
FAX: 815-233-5479  
E-mail: [info@hookerharness.com](mailto:info@hookerharness.com)  
[www.hookerharness.com](http://www.hookerharness.com)



LEFT: Green glue binds the fabric to the fuselage.  
RIGHT: The Fuselage is masked and ready for paint.



LEFT: Control surfaces ready for paint.  
RIGHT: Painted and ready for mounting.



ABOVE: The cockpit has the bare minimum for aerobatic flight.



RIGHT: Glen Marshman and Strictly Business, his completed S-9.

of the instruments, making maintenance a breeze. The plans call for fabric covering aft of the firewall, but I decided to fit removable aluminum panels so I would have easy access to the rudder pedals and brakes. One structural modification I did make was to replace the stock S-9 rudder with one from the Rans S-7. This gives me about 15 percent more surface area and increases yaw authority substantially. Because the hinge points are the same, it just bolts in place.

For electrical power, I chose a KW voltage regulator. The beauty of this regulator is that it needs no minimum startup voltage. In addition to powering the radio and transponder, it tops off the miniature sealed battery I mounted to the firewall so I can listen to the radio with the engine shut off.

For paint, I contacted Dan Stewart of Stewart Systems Aircraft Paint. Stewart Systems manufactures a water-borne paint and process that is ecologically friendly. The top coat lays down differently than thinner-based urethanes. There are no fumes or combustion issues, it cleans up with water, and is eco-friendly.

I will never use anything else again.

With everything complete, my final build weight, with radio and transponder, came in at 411 pounds empty.

My configuration has created a few challenges. I tossed out everything I could to save weight. That means one 9-gallon fuel tank, no electric starter (pull-start), and no full-size battery. It is not a cross-country airplane, and I have no provision for baggage. I also use fuel-oil pre-mix to save on weight and add to safety.

The positives of building and flying the Rans S-9 are the low initial cost for a new airplane, it's also very inexpensive to fly and maintain, and it has a simple and inexpensive two-stroke engine that burns between 3 and 4 gallons per hour. I built her light and simple; the Rans S-9 is not an unlimited performing airplane, nor was it intended to be. Whatever class she can compete in, the project will be a success for me.

I'll be contributing an upcoming piece covering testing and tuning of the airplane I've named *Strictly Business*, as well as a flight report, in a future issue. **IAC**



## In the Interest of Safety

*This article originally appeared in the 1981 IAC Technical Tips Manual.*

*Mike Heuer graciously allowed us to reprint it. —Eds*

**AT LAST YEAR'S COMPETITION** at Fond du Lac, I got the opportunity to fly the prototype Stolp Starduster Corp.'s Acroduster I, SA-700. Jim Osborne of California had brought the Acroduster to Fond du Lac for pilots to fly to see what they thought of the aircraft. Three pilots were to fly it in competition.

It's a pretty little airplane, with some unusual design features, such as an all-aluminum monocoque fuselage, spring gear, and elliptical wings. Four ailerons were featured, as well as a 200-hp Lycoming with constant-speed prop.

Several pilots got to fly it before I did on that Saturday, July 27. It was a perfect day for flying, and Jim was anxious for a number of pilots to try it out.

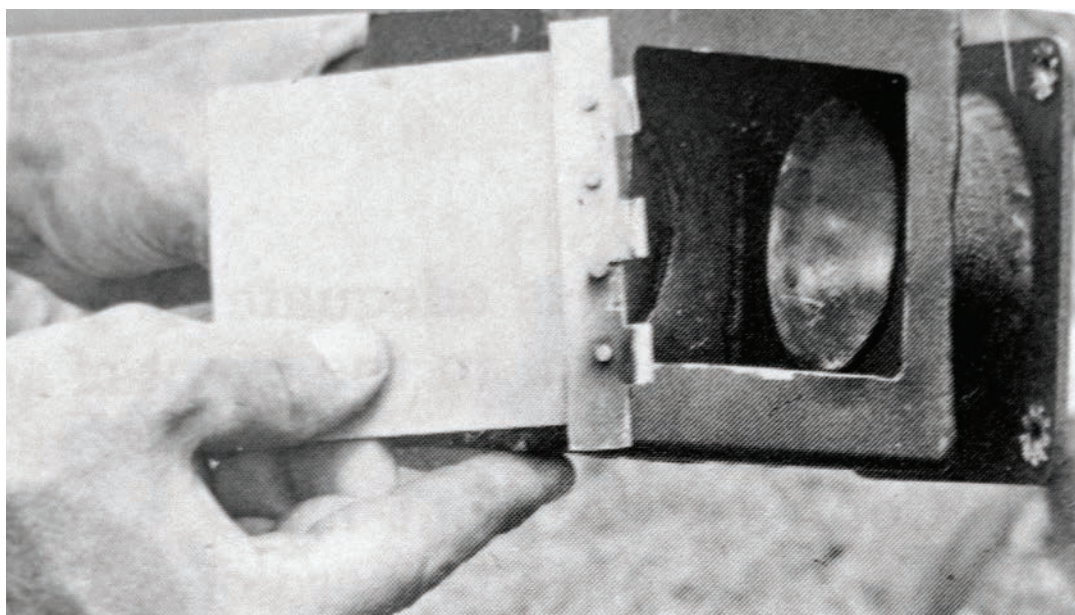
My chance came at about 11:00 a.m. It had just landed and been topped off with fuel. Jim took me through the preflight and helped me strap in and buckle up. The cockpit was a bit on the cramped side but more than adequate. Unlike a Pitts or an Acro Sport, you sit quite upright in the Acroduster, and the throttle quadrant is located high on the right and back. The instrument panel is close to your

face. Prop control and mixture were also on the left.

After taxiing out and going through the run-up, I took off. The aircraft had a very good power and takeoff performance, even though it was a little on the heavy side due to a full electrical system and a little more than 900 pounds' empty weight.

**. . . was beginning a climbing turn when the engine suddenly quit without warning.**

Climb was made at about 120-130 mph indicated airspeed (IAS), as Jim recommended. He mentioned that the airspeed was reading quite high, and the over-the-fence speed should be about 120 IAS.



*The culprit: This is the alternate air door which wore out and blocked off air to the engine. It lodged itself over the round intake visible through the box.*



I climbed out to the south of Fond du Lac, up to about 4,500 feet AGL, for some familiarization maneuvers. After a series of power-off stalls, steep turns, accelerated stalls, climbs, and glides, I rolled the airplane a couple of times and enjoyed the aircraft's one really outstanding characteristic—a tremendously high roll rate and light aileron pressures. Before I did any vertical maneuvers, however, I decided that a couple of spins should be attempted. I did one to the left, and recovery was no problem—within 90 degrees of recovery action.

I was going to do another, and at this point was beginning a climbing turn when the engine suddenly quit without warning. There was no sputter, no engine instrument indications, or anything. My early flight training came into play almost automatically, and I punched the nose down to glide speed—120 IAS—and did everything I could to get the engine restarted. The electric boost pump was on, the mixture was rich (I cycled it a couple of times to make sure), mags on (cycled to make sure), fuel on—everything in the cockpit was in order. The engine had failed at about 4,000 feet AGL, and I had initially pointed the airplane back toward the airport before fooling with the cockpit items. It became obvious immediately, however, that there was no way I was going to make the airport.

It now really began to dawn on me that I was going to have to put this airplane down in a field. With the heavy weight—full tank—and the prop in full low pitch, the airplane was rapidly falling out of the sky, and I decided selection of a field must be made as soon as possible. Complicating the fact were high power

lines running east and west, and a lack of any real good field to put it down on.

Thus, I initially selected an east-west road that looked rather clear of obstructions. I turned east and set myself up on a downwind, to make it as much like a normal landing as possible. Considering the fact that this was my first approach in the airplane, I thought I was leaving myself plenty of altitude to play with to set myself up for an approach to the road. By the time I turned base, I had 1,200 feet and 120 mph.

## “Once you select a field, stick with it.”

After turning base, two more factors complicated matters. First, there was a telephone line running down the north side of the road, and I would have to be careful in squeezing it in. Next, there were wires crossing it. Last but not least, I did not have the excess altitude or airspeed I would have liked.

Rather than suck it around and possibly high-speed stall the airplane trying to squeeze it onto the road, I elected to put the airplane down in a field just adjacent to and south of the road. This meant that I would have to make only about a 60-70 degree turn to final, rather than a full 90 degrees. This way, I would have enough altitude and airspeed to make it. My flight instructor (who happened to have been my dad, too) often told me, “Once you select a field, stick with it.” However, if I had done so in this case, I probably would not be writing this article.

As you may have guessed, the field had a crop of 3-foot high wheat in it, and right after the airplane's landing gear touched, it rapidly turned over on its back. I got out as quickly as I could, which was a bit of a problem, and got some distance between me and the airplane. The engine was cooled down, and little fuel was leaking. I tried to get my heart slowed down after I said a few choice words to myself for bending someone else's airplane. I was sick and upset that I had been responsible for this.

The police arrived shortly thereafter, and one patched me back to Fond du Lac airport. Jim Lacey and Don Muzzeroll arrived shortly thereafter. Both Jim and Don were of tremendous support at that moment I needed it most.

Jim, George Anderson of the FAA, and Jim Osborne came out later and tore the engine down to find the cause before they removed the aircraft from the field. The alternate air box, mounted on the fuel injector, had a small spring-loaded door on the side—like some Bonanzas—which would open in the event of blockage of the main air intake. What had happened is the door hinge had worn through and the door came off, blocking air to the engine and causing the subsequent engine stoppage. Engine suction had kept it in place.

The lesson from this accident is that proper maintenance and design will keep you from having to put a little airplane in a field, when you least expect it. It is also true that a good 100-hour inspection might not have uncovered this problem. Good design is essential.

My thanks go to all of the IAC members who gave me their support following this accident; I really needed it.

If the engine just had some air... **IAC**

# TWOTHOUSANDELEVEN EAA SHARE THE SPIRIT SWEEPSTAKES

## This Skycatcher. Your hangar.

The Cessna 162 Skycatcher light-sport aircraft (LSA) comes with everything you like about Cessna's traditional single-engine aircraft and so much more:

- > Garmin G300 glass cockpit
- > 1,320 maximum gross weight
- > Teledyne Continental Motors O-200D engine
- > LED overhead panel lighting
- > Dual flight control sticks
- > Main landing gear made of high-strength, tapered steel tubes
- > Forward pivoting ergonomic seats, adjustable rudder pedals, and armrests on cabin doors
- > Top-hinged gull wing doors that lift up for easy entry

**PLUS...** Fuel for the year courtesy of Shell Aviation\* (up to \$5,000)

\*Shell Oil Products US is not a sponsor of nor is it responsible for conducting this sweepstakes.



**Shell Aviation**

You'll also have a chance to win...

2011 Coleman® CTE184 Hybrid Travel Trailer from Camping World



HotSeat  
FLIGHT SIM®  
GTX Extreme  
PC Bundle



Bose® 3-2-1® GSX  
Series III DVD Home  
Entertainment System



Canon EOS 50D  
Kit with Lens



Hamilton Men's  
Khaki Pilot  
Automatic 46mm  
Watch

# www.WinAPlane.com



Drawing will be held on July 31, 2011, during EAA AirVenture Oshkosh.

A \$1 donation per coupon is appreciated. All proceeds from the Sweepstakes support EAA's historic and youth education endeavors. No donation necessary to enter by mail. A donation will not improve your chances of winning.

## IAC DIRECTORY

### EXECUTIVE OFFICE

MANAGER Trish Deimer 920-426-6574 [tdeimer@eaa.org](mailto:tdeimer@eaa.org)

### SPORT AEROBATICS EDITORIAL OFFICE

EDITOR Reggie Paulk 303-552-7963 [reggie.paulk@gmail.com](mailto:reggie.paulk@gmail.com)

### BOARD OF DIRECTORS

PRESIDENT Doug Bartlett 847-875-3339 [doug.bartlett79@gmail.com](mailto:doug.bartlett79@gmail.com)

VICE PRESIDENT Doug Sowder 509-747-5748 [dsowder@aol.com](mailto:dsowder@aol.com)

SECRETARY Ellyn Robinson 918-805-4031 [ellyn.robinson@yahoo.com](mailto:ellyn.robinson@yahoo.com)

TREASURER Bob Hart 815-363-8967 [hrtlndfrm@aol.com](mailto:hrtlndfrm@aol.com)

SOUTH CENTRAL REG. DIR. Bob Freeman 303-709-3465 [bfree.man@comcast.net](mailto:bfree.man@comcast.net)

MID-AMERICA REG. DIR. Wayne Roberts 662-226-4919 [wroberts@waco-eng.com](mailto:wroberts@waco-eng.com)

NORTHWEST REG. DIR. Klein Gilhousen 406-586-2517 [kleing@qualcomm.com](mailto:kleing@qualcomm.com)

DIRECTOR Robert Armstrong 706-549-7583 [rba@coraid.com](mailto:rba@coraid.com)

INTERNATIONAL DIRECTOR Debby Rihn-Harvey 281-470-8456 [hurricane@sbcglobal.net](mailto:hurricane@sbcglobal.net)

NORTHEAST REG. DIR. Doug Lovell 914-456-1594 [doug@wbreeze.com](mailto:doug@wbreeze.com)

SOUTHEAST REG. DIR. Tom Adams 615-384-1018 [pitts58ct@earthlink.net](mailto:pitts58ct@earthlink.net)

UNLIMITED AEROBATICS USA Norm DeWitt 650-321-8499 [norm.dewitt@gmail.com](mailto:norm.dewitt@gmail.com)

EAA REPRESENTATIVE Louis Andrew Jr. 20-921-6000 [landrew@eaa.org](mailto:landrew@eaa.org)

SOUTHWEST REGION DIR. Darren Pleasance 650-212-1806 [darren.pleasance.1995@anderson.ucla.edu](mailto:darren.pleasance.1995@anderson.ucla.edu)

PRESIDENTS EMERITUS Carl Bury 912-598-8801 [csbury@comcast.net](mailto:csbury@comcast.net)

Rob Dorsey 859-657-6340 [robd@dorseyaero.com](mailto:robd@dorseyaero.com)

Linda Hamer 815-223-8596 [l.hamerrealty@sbcglobal.net](mailto:l.hamerrealty@sbcglobal.net)

Mike Heuer 901-850-1301 [mike@mheuer.com](mailto:mike@mheuer.com)

Robert Heuer

Verne Jobst 815-385-7277 [nx211@owc.net](mailto:nx211@owc.net)

Doug McConnell 815-653-1044 [doug\\_mcconnell@comcast.net](mailto:doug_mcconnell@comcast.net)

Gerry Molitor 815-344-3239 [gmolitor@aol.com](mailto:gmolitor@aol.com)

Steve Morris 303-621-2835 [N94rv@aol.com](mailto:N94rv@aol.com)

Dr. Richard Rihn 925-938-4236 [rihnairco@aol.com](mailto:rihnairco@aol.com)

Vicki Cruse

### PROGRAM CHAIRS & COMMITTEES

ACHIEVEMENT AWARDS Lorrie Penner, Chair 513-791-7331 [penn.lorr@yahoo.com](mailto:penn.lorr@yahoo.com)

AEROBATIC INSTRUCTION AWARDS Rich Stowell, Chair 805-525-2037 [rich@richstowell.com](mailto:rich@richstowell.com)

Ellyn Robinson

CIVA RELATIONS Mike Heuer, Delegate 901-850-1301 [mike@mheuer.com](mailto:mike@mheuer.com)

Debby Rihn-Harvey, Alt. Delegate 281-470-8456 [hurricane@sbcglobal.net](mailto:hurricane@sbcglobal.net)

Doug Bartlett 847-875-3339 [Doug.bartlett79@gmail.com](mailto:Doug.bartlett79@gmail.com)

Norm DeWitt 650-321-8499 [norm.dewitt@gmail.com](mailto:norm.dewitt@gmail.com)

Greg Dungan 301-994-0083 [greg.dungan@verizon.net](mailto:greg.dungan@verizon.net)

Brian Howard 520-531-9151 [bk@newattaero.com](mailto:bk@newattaero.com)

Don Peterson 775-230-1555 [autotech@flash.net](mailto:autotech@flash.net)

Trish Deimer 920-426-6574 [tdeimer@eaa.org](mailto:tdeimer@eaa.org)

<b>COLLEGIATE PROGRAM</b>	Charles Rodriguez, Chair	618-453-9215 (B)	<a href="mailto:crod@siu.edu">crod@siu.edu</a>
	Pat Anderson	386-226-6917	<a href="mailto:andersop@erau.edu">andersop@erau.edu</a>
	E. Allan Englehardt	847-234-2325	<a href="mailto:eallanenglehardt@compuserve.com">eallanenglehardt@compuserve.com</a>
	Ryan Carlson	218-779-4096	<a href="mailto:rcarlson@aero.und.edu">rcarlson@aero.und.edu</a>
<b>COMPUTER SCORING-TECHNICAL</b>	Bob Buckley: IAC Scoring Program	719-721-8729 (B)	<a href="mailto:bwanaBawb@Comcast.net">bwanaBawb@Comcast.net</a>
	Peter Jensen: Contest Registration	408-281-8654	<a href="mailto:pmj@sbcglobal.net">pmj@sbcglobal.net</a>
	Tom Myers: IAC Scoring Chairman	650-328-2141	<a href="mailto:tom.myers@stanfordalumni.org">tom.myers@stanfordalumni.org</a>
	Randy Owens: IAC Scoring Database, Soucy, Regional Series & Collegiate Tabulations	714-250-1291	<a href="mailto:rdowens@sbcglobal.net">rdowens@sbcglobal.net</a>
	Doug Lovell: Scoring Outputs	914-456-1594	<a href="mailto:doug@wbreeze.com">doug@wbreeze.com</a>
	DJ Molny: Web	303-799-0149	<a href="mailto:djmolny@yahoo.com">djmolny@yahoo.com</a>
	Reggie Paulk: Blog, Website, Wiki	303-952-4753	<a href="mailto:reggie.paulk@gmail.com">reggie.paulk@gmail.com</a>
<b>CONTEST SANCTIONING</b>	Doug Bartlett	847-875-3339	<a href="mailto:doug.bartlett79@gmail.com">doug.bartlett79@gmail.com</a>
	Bob Hart	815-363-8967	<a href="mailto:hrtlndfrm@aol.com">hrtlndfrm@aol.com</a>
	Brian Howard	520-531-9151	<a href="mailto:bk@newattaero.com">bk@newattaero.com</a>
	Trish Deimer	920-426-6574	<a href="mailto:Tdeimer@eaa.org">Tdeimer@eaa.org</a>
<b>EXECUTIVE COMMITTEE</b>	Doug Bartlett	847-875-3339	<a href="mailto:doug.bartlett79@gmail.com">doug.bartlett79@gmail.com</a>
	Doug Sowder	509-747-5748	<a href="mailto:dsowder@aol.com">dsowder@aol.com</a>
	Ellyn Robinson	918-805-4031	<a href="mailto:ellyn.robinson@yahoo.com">ellyn.robinson@yahoo.com</a>
	Bob Hart	815-363-8967	<a href="mailto:hrtlndfrm@aol.com">hrtlndfrm@aol.com</a>
<b>FINANCE COMMITTEE</b>	Doug Bartlett	847-875-3339	<a href="mailto:doug.bartlett79@gmail.com">doug.bartlett79@gmail.com</a>
	Doug Sowder	509-747-5748	<a href="mailto:dsowder@aol.com">dsowder@aol.com</a>
	Bob Hart		
	Trish Deimer	920-426-6574	<a href="mailto:tdeimer@eaa.org">tdeimer@eaa.org</a>
<b>GLIDER AEROBATICS</b>	Klein Gilhousen	406-586-2517	<a href="mailto:kleing@qualcomm.com">kleing@qualcomm.com</a>
<b>GOV'T RELATIONS REPS</b>	Bill Finagin: National	410-263-2740	<a href="mailto:wbfagin@cs.com">wbfagin@cs.com</a>
	Doug Bartlett: Mid-America-S. Central	847-875-3339	<a href="mailto:doug.bartlett79@gmail.com">doug.bartlett79@gmail.com</a>
	Darren Pleasance: Northwest-Southwest	650-212-1806	<a href="mailto:darren.pleasance.1995@anderson.ucla.edu">darren.pleasance.1995@anderson.ucla.edu</a>
	Dennis Thompson: Northeast-Southeast	973-219-5071	<a href="mailto:dtedge2002@yahoo.com">dtedge2002@yahoo.com</a>
<b>HALL OF FAME</b>	David Martin, Chair	817-319-5510	<a href="mailto:pkakro@earthlink.net">pkakro@earthlink.net</a>
	Clyde Cable	970-227-5421	<a href="mailto:jennyfield@yahoo.com">jennyfield@yahoo.com</a>
	Bob Davis	262-248-6364	<a href="mailto:bdavis74@charter.net">bdavis74@charter.net</a>
	Linda Hamer	815-223-8596	<a href="mailto:l.hamerrealty@sbcglobal.net">l.hamerrealty@sbcglobal.net</a>
	Verne Jobst	815-385-7277	<a href="mailto:nx211@owc.net">nx211@owc.net</a>
	Clint McHenry		
	Dr. Richard Rihn	925-938-4236	<a href="mailto:rihnairco@aol.com">rihnairco@aol.com</a>
<b>HISTORIAN</b>	Mike Heuer	901-850-1301	<a href="mailto:mike@mheuer.com">mike@mheuer.com</a>
<b>ICAS LIAISON</b>	Bob Davis	262-248-6364	<a href="mailto:bdavis74@charter.net">bdavis74@charter.net</a>



**STEVE JOHNSON**  
COLUMNS / SAFETY CORNER

## The IAC Incident Management Plan



**LATE IN 2010, IAC** adopted a new Incident Response Template that is required for contests beginning in 2011 and going forward. This new template, when used, is a management tool that allows contest officials and emergency personnel to have a plan in case of an accident or incident during a contest or practice day. This template was developed by IAC competitor DJ Molny ([djmolny@gmail.com](mailto:djmolny@gmail.com)), and I appreciate his doing this work before I became the Safety Committee chair. Thanks, DJ!

The Incident Response Template should be used by the contest director (CD), as the senior manager of a contest, to ensure that an Incident Response Plan (IRP) is completed for that specific contest or practice day, and that emergency response actions, chain of command, available emergency response personnel, and equipment is identified and prepared beforehand. In the best case, the IRP is completed by the safety director

or other contest official, as the CD has many other duties already. Additionally, the plan asks certain questions of the contest officials to ensure that the officials are prepared in case of an incident or accident. The questions include how to deal with the local spectators at a contest and how to deal with the press. I have seen an engine failure at a contest where the pilot glided down to the runway, had his engine restarted, and completed the flight. (Of course, he was charged with a break penalty.) But the nonflying audience may not recognize that such an incident is not a huge emergency, and terrifying stories of “engine stalls” and airplanes falling to the ground may get started.

Conversely I have also seen an airplane engine quit at a contest, and the airplane was not able to land on the runway. There was an immediate “keystone cops” charge to the downed airplane because there was no IRP or chain of command in place. This new template would have been of tremendous value in developing a plan ahead of time for this incident. Luckily, the pilot was fine and no one was injured. Further, if your contest has the FAA as a regular presence, or if the airport is towered, the template document will help with coordination with the FAA and tower personnel.

I am the safety director for the Armed Forces Memorial Contest in May at Grenada, Mississippi, so I will be completing our Incident Response Plan from the template for this contest. This is my first time using this new document, but so far the Incident Response Template has worked well for me, identifying areas that need attention and requiring names and contact information in the places required for the responsible parties. As this is a new document for all of us this year, DJ has asked, and I ask also, for any ideas or critiques of the document so we can make this a better tool going forward.

The Incident Response Template has a quick guide at the front to assist with emergencies as they happen. This quick guide will help contest directors, chief judges, and starters coordinate

and make good decisions early in an emergency. The next section identifies the key contacts for each specific contest with names, local phone numbers, and radio frequencies, if equipped. Also, the IAC senior management contact information is listed so they can be contacted as needed. The next section is the directions for completing the rest of the template, which becomes the nuts and bolts of an Incident Response Plan for a specific contest or practice day. An airport diagram is required so contest officials can navigate the airport easily if necessary. This diagram is generally required for a waiver, so it should not be any problem. Alternate airports must be identified with bearings, distances, and frequencies for the alternate airports documented. As an aside, it would be a good idea to copy and print

## It is amazing how our memories change after time passes . . .

the alternate airport information and provide that to pilots at registration. Contest vehicles and unofficial vehicles are identified and located on the airport. The rest of the template provides planning outlines for urgent actions, short-term actions, and post-crisis actions that may need to be taken, depending on the severity of the incident.

In case an incident does occur, there is an incident log in the document that

should be used to identify the time, who, what, and where for each step of the response. It is amazing how our memories change after time passes, so immediate documentation is necessary to provide a reliable timeline.

Lastly, DJ did a great job in providing resource information. NTSB-required reporting information is provided as well as a sample press statement. Hopefully we will not need this information, but it is there if we do.

If you are a contest director or safety director for a contest, please don't hesitate to contact me if you need any help with the Incident Response Template in completing your contest plans. I am happy to assist with figuring out what is or will be needed for each contest. See you at the contests, and fly smart! **IAC**

Enjoy "Unusual Attitudes?"

# JOIN THE IAC!



Become a member of the world's largest aerobatic organization;  
**EAA's International Aerobatic Club.**

We promote the safety and enjoyment of aerobatic flying. Join today and begin receiving exclusive member benefits, including *Sport Aerobatics* magazine.

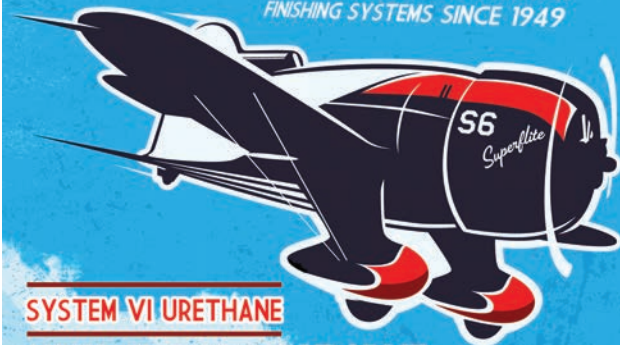
Call 800.564.6322  
or visit [www.IAC.org](http://www.IAC.org)



Photo by DeKevin Thornton

# WE'VE GOT YOU COVERED!

FABRIC COVERINGS & FINISHING SYSTEMS SINCE 1949



SYSTEM VI URETHANE

HIGH GLOSS & DURABLE!

SALES@SUPERFLITE.COM  
WWW.SUPERFLITE.COM  
FAX: 618-931-0613  
800-323-0611

# Superflite™

SMARTPHONE  
USERS SCAN HERE





**ALLEN SILVER**  
COLUMNS / ASK ALLEN

## Dazzling Down Under

**MY COLUMN THIS MONTH** will take you to Australia, where I am happy to say aerobatic flying is alive and well. I first must thank a few individuals for making this happen. It all started with an e-mail to editor Reggie Paulk, who helped me make the necessary contacts in Australia. With the help of my girlfriend, Marilyn, we made plans for what turned out to be a spectacular 15-day trip.

When local flying clubs heard we were planning a holiday in their part of the country, they jumped at the chance of having me dazzle them with my brilliance and baffle them with my BS.

Special thanks go to Anthony Crichton-Browne, an aerobatic pilot, from the Sydney area. Not only did he, his wife, and friends wine and dine us at some very Aussie locations, but also he arranged for the use of the training room at the Red Baron Flight Training School. It is located at the Bankstown Airport near Sydney and is considered the premier training facility in the area. They may be a small group (see photo 1), but they welcomed me with enthusiasm.

After that, we were off to the Gold Coast and the Brisbane area. Allen Buckley organized my presentation at Heck Field on the outskirts of Brisbane, with the help of Steve Hudson, president of the Queensland Sports Flying Club. Allen and his wife, Fran, were kind enough to put us up for several days in their lovely home and treated us royally.

I met Allen at Sun 'n Fun Fly-In at Lakeland, Florida, several years ago, when he attended one of my bailout seminars. He is almost finished rebuilding one of only two flyable Marchetti SF-260s in Australia. When Allen was in the United States I gave him the opportunity to fly the Marchetti that I've been flying for the past seven years. It was his first experience flying a Marchetti. I also sent him home with a treasure trove of manuals and drawings that he didn't have to help with his restoration project. We soon became good friends and often communicate via the Internet.



At the time of my presentation, people were still battling floodwaters that inundated the Brisbane area, but they managed to come out anyway. I would like to think they came out just to hear me speak, but the delicious “barbie” that preceded my presentation was probably the main motivator (see photo 2). More than 60 people came out on a weekday after work to hear my presentation (see photo 3). Many drove a long way, in rainy weather, to attend.

Jason King, president of the Gold Coast Flying Club, presented me with a club shirt and cap that I proudly wear (see photo 4). I must also thank Jason’s 14-year-old son, Alex, an up-and-coming pilot himself, for coming to my rescue when the computer started acting up. Every audience should have a young person in attendance who’s willing to step up, just in case the computer equipment fails at a critical moment!

At this point you are no doubt asking, “What does all this have to do with safety and answering my parachute questions?” The lesson to be learned is that these pilots went out of their way and made a deliberate effort, in questionable weather, to attend a bailout seminar. *Safety doesn’t happen by accident.* You must “Practice, practice, and practice” to make it a part of your flying routine.

I encourage you, if no safety seminars are scheduled in your area, to set one up. My seminars are free (all I ask is that my travel expenses are covered), yet few groups take advantage of them. Unfortunately, maybe because of human nature, many people are reactive instead of proactive and only schedule a safety seminar after an accident occurs. Learn from our friends down under and take a proactive approach to safety.

I don’t want to leave this column without giving you at least one practical, real-world tip about your parachute. When I travel to give safety seminars, I quite

## The lesson to be learned is that these pilots went out of their way to attend a bailout seminar.

often find parachutes so far out of adjustment that the person wearing it would have fallen out of the harness if he or she had to deploy the parachute. This is also true of many of the parachutes I receive, in my shop, from first-time customers.

Unfortunately, many parachute riggers at the local sky diving place are only familiar with sky diving parachutes. Sky diving harnesses are typically custom-made and have few, if any, adjustments. The rigger who packs your parachute may not even realize that your harness, in

most cases, must be adjusted and sized to fit you properly. It may be so far out of adjustment that you could accidentally fall out of it. *You* are responsible for making sure your parachute rigger is familiar with the type of parachute you own, wear, and trust your life to. If it doesn’t seem to fit right, talk to them about it. If you’re still in doubt, call or e-mail me. Often pilots e-mail me photos of themselves wearing their parachute, so I can see what’s going on. I always have time to help ensure that you know how to properly adjust and wear your parachute. You can also call the manufacturer for assistance. The point is that there are plenty of resources available. Remember, you will not fall out of a properly adjusted harness. My question to you is this: Is your harness adjusted properly? If you have to bail out, it’s already a bad day; don’t make it worse!

I hope to see many of you at Sun ‘n Fun. I’ll be giving my seminar on “Emergency Bailout Procedures & Survival Equipment for Pilots” on Saturday April 2 at 12:05 p.m. in Forum Tent 4. Bring your lunch and join me. I hope to meet many of you there. “Good day, Mate,” fly safely, and enjoy the upcoming flying season. **IAC**

**TAKE CHARGE OF THE SKY!**  
Quality instruction in the Southeast.  
We offer Aerobatic Lessons, Spin Training, Tailwheel and Pitts checkout.  
**STEVE WOLF, CFI.**  
Visit us at [www.wingoveraerobatics.com](http://www.wingoveraerobatics.com)



**Located at Leesburg, Florida  
1 hr from Orlando**  
**CALL 352-728-LOOP(5667)**



**GREG KOONTZ**  
COLUMNS / JUST FOR STARTERS



## The Cub

**LIKE MANY PEOPLE YOU** have heard of who are afflicted with a flying addiction, I got my start early. In about 1960 my father took me to an air show where Bevo Howard flew his incredible Bücker Jungmeister and Dick Shram did the “flying professor” comedy in a Piper Cub. I was just 7 years old, but I’ve got to tell you, I was bit right then and there. I told my dad I was going to fly air shows when I grew up. Well, I did my first air show in a Piper Cub. I flew my first contest in a Bücker. I didn’t plan either on purpose, but sometimes I feel like someone did!

I found my first Cub as a project a fellow near us had to sell, and my father’s copilot, an A&P mechanic, helped me finish the project in my mom’s basement. I flew it my senior year in high school. I was obviously very green as a pilot, and it was just more mysterious guidance that had me stumble onto an old CPTP instructor (the Civilian Pilot Training Program from World War II) who had a gazillion hours teaching in the Cubs. With his help that

Cub and I had a convergence of our existence! Cubs became a part of who I am for the rest of my life.

I currently own a 1946 Cub I fly in my air show act called “The Alabama Boys.” A few years ago we had become so busy that I bought a second Cub, a 1941 model, as a backup and “home” plane, since we trailer the air show Cub and it’s often sitting in our trailer with the wings off. I justified the second Cub with my wife by convincing her we needed another Cub for the business! She put on like it made sense because she knew I needed constant Cub flying to exist.

If you know me, you know I am an advocate of grassroots aerobatics. I constantly campaign to have a “Classic class” in competition so Cubs, Stearmans, Citabrias, and the like can compete without penalty for their non-inverted system engines. I have nothing against MX2s and Extras. I even call a few of their owners friends. I just see those machines as “point-and-shoot cameras,” and I’m an old “manual format” kind of guy. I need real



control feel and a touch of nostalgia to stir up the blood. Make it too easy and I start to miss the point.

With that understood, it's no surprise that an ad in an online airplane listing for a 1939 Clipped-Wing Cub caught my eye. I called on the cute little Cub and found out I knew the man restoring it! In fact, he had taken one of my aerobatic clinics. He had listed the plane just the night before I saw it. There were tons of photos of a full restoration just being completed! Being a sucker for things that seem like they were meant to be, I bought it.

Of course, this presented a whole new problem. My wife is a very understanding partner. She's even a pilot who, needless to say, soloed in a Cub. The

problem is she is also an accountant and practices her trade, doing more than her share of supporting us. This was going to be a tough sell. Her first question: "Why do we have *three* Cubs?" What first popped into my head was, "Because there's no room in the hangar for four," but instead I did a lot of tap dancing (like: "But honey, I need an aerobatic Cub for the shows"), and surprisingly she dropped it (for now).

So here's the plan. I want to put this Cub in a contest or two. It's been a long time since I really competed. I do need to get back into circulation a little. But I did the Super Decathlon a long time ago. I loved it (and won a few times). What I'm more interested in now is to try the Sportsman category in the minimum airplane qualified, a noninverted system 85-hp Clipped Cub! The Known flight is supposed to be written to be flyable in a Cub. I want to see if it can do it. I want to see if I can do it. I want to know if it is really doable!

Cubs have won many times. Giles Henderson used to dominate with one. The real fun of flying these little planes is modifying them with all your imagination can muster to be competitive. Things like the lightest engine with the most pull, the best prop, the tightest ailerons, and inverted fuel and oil are some of the essentials. My little yellow Cub has none of these goodies yet. It's the minimum. It's kind of the "budget" competition mount.

Right now I'm going up for some practice runs. It's not always pretty! Cubs might be in my blood, but Decathlons are in my habits. I never thought I'd call my Super D a high-performance airplane, but let me tell you, when you drop down to a Volkswagen Beetle, even your Honda Accord is a hot rod! This is going to take some practice. **IAC**

## Fly the Champions' Choice!

**mt-propeller**

*like Patty Wagstaff as shown here with her Extra 300S!!*

*Pitts S2A/S2B*



*as well as many other World Aerobatic Champions!!*



*Sukhoi SU-26*

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](mailto:info@mt-propellerusa.com)

**MT-Propeller in Germany**

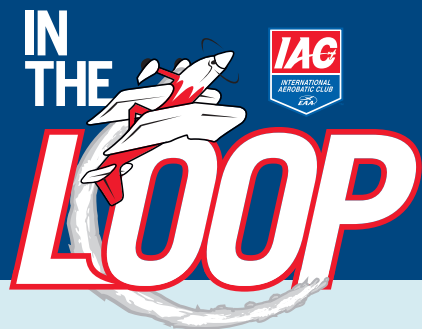
Phone: 01149-9429-94090

Fax.: 01149-9429-8432

e-mail: [sales@mt-propeller.com](mailto:sales@mt-propeller.com)



[www.mt-propeller.com](http://www.mt-propeller.com)



Stay connected with IAC's latest member benefit, the world of aerobatics on the Web, in our new e-newsletter!



To subscribe:

[www.EAA.org/newsletters](http://www.EAA.org/newsletters)



## CONTEST CALENDAR

Mark your calendars for these upcoming events. Updates at [www.IAC.org](http://www.IAC.org).

And if you're hosting a contest, post it there!

### Inland Empire Strikes Back Mini (Southwest)

Saturday, March 19 – Saturday, March 19, 2011  
 Location: Redlands Municipal (REI): Redlands, CA  
 Tel: 909-389-9020 • E-Mail: [casey@allwaysair.com](mailto:casey@allwaysair.com)  
 Website: [www.IAC36.org](http://www.IAC36.org) and [www.IAC49.org](http://www.IAC49.org)

### Phil Schacht Aerobatic Kickoff 2011 (Southeast)

Friday, March 25 – Saturday, March 26, 2011  
 Location: Keystone Heights Airpark (42L): Keystone Heights, FL  
 Tel: 718-666-2648 • E-Mail: [cd@IAC288.org](mailto:cd@IAC288.org)  
 Website: [www.IAC288.org](http://www.IAC288.org)

### Borrego Hammerhead Roundup (Southwest)

Friday, April 15 – Saturday, April 16, 2011  
 Location: Borrego Springs Airport (L08): Borrego Springs, CA  
 Tel: 714 931 7567 • E-Mail: [yjooste@gmail.com](mailto:yjooste@gmail.com)  
 Website: [www.IAC36.org](http://www.IAC36.org)

### Sebring Aerobatic Contest (Southeast)

Thursday, May 5 – Saturday, May 7, 2011  
 Location: Sebring Regional Airport (KSEF): Sebring, FL  
 Tel: 561-313-8503 • E-Mail: [soaerobatics@aol.com](mailto:soaerobatics@aol.com)  
 Website: [www.IAC23.com](http://www.IAC23.com)

### Los Angeles Gold Cup Duel in the Desert (Southwest)

Friday, May 6 – Saturday, May 7, 2011  
 Location: Apple Valley (APV): Apple Valley, CA  
 Tel: 909-389-9020 • Website: [www.IAC49.ORG](http://www.IAC49.ORG)  
 E-Mail: [Casey@allwaysair.com](mailto:Casey@allwaysair.com)

### Ben Lowell Aerial Confrontation (South Central)

Thursday, May 12 – Sunday, May 15, 2011  
 Location: Sterling Municipal Airport (STK): Sterling, CO  
 Tel: 303-514-1609 • E-Mail: [mlformey@msn.com](mailto:mlformey@msn.com)  
 Website: <http://www.IAC12.org/>

### Carolina Boogie (Northeast)

Friday, May 13 – Sunday, May 15, 2011  
 Location: Wilson Industrial (W03): Wilson, NC  
 Tel: 919 605 9585 E-Mail: [n100mp@yahoo.com](mailto:n100mp@yahoo.com)  
 Website: [www.IAC19.org](http://www.IAC19.org)

### Armed Forces Memorial (Southeast)

Friday, May 20 – Saturday, May 21, 2011  
 Location: Granada Municipal Airport (KGNF): Granada, MS  
 E-Mail: [wroberts@waco-eng.com](mailto:wroberts@waco-eng.com)  
 Website: [www.IAC27.org](http://www.IAC27.org)

### Robert L. Heuer Classic (Mid-America)

Saturday, June 4 – Sunday, June 5, 2011  
 Location: DeKalb (DKB): DeKalb, IL U.S.A.  
 Tel: 815-258-0047 • E-Mail: [jimklick@sbcglobal.net](mailto:jimklick@sbcglobal.net)  
 Website: [www.IACChapter1.org](http://www.IACChapter1.org)

### Wildwoods AcroBlast (Northeast)

Friday, June 10 – Sunday, June 12, 2011  
 Location: Cape May County (WWD): Cape May, NJ  
 Tel: 717-756-6781  
 E-Mail: [cwisman@comcast.net](mailto:cwisman@comcast.net)

### Ohio Aerobatic Open (Mid-America)

Friday, June 17 – Saturday, June 18, 2011  
 Location: Union County Airport (MRT): Marysville, OH  
 Tel: 574-721-4340 • Website: [www.IAC34.com](http://www.IAC34.com)  
 E-Mail: [jgranger@columbus.rr.com](mailto:jgranger@columbus.rr.com)

### Illinois Aerobatic Open (Mid-America)

Saturday, September 3 – Sunday, September 4, 2011  
 Location: Kankakee (IKK): Kankakee, IL  
 Tel: 815-258-0047 • Website: [www.IACChapter1.org](http://www.IACChapter1.org)  
 E-Mail: [jimklick@sbcglobal.net](mailto:jimklick@sbcglobal.net)

### Ohio Fall Frolic (Mid-America)

Saturday, October 1 – Sunday, October 2, 2011  
 Location: Bellefontaine Regional Airport (EDJ): Bellefontaine, OH  
 Tel: 513-284-5076 • Website: [www.IAC34.com](http://www.IAC34.com)  
 E-Mail: [penn.lorr@yahoo.com](mailto:penn.lorr@yahoo.com)

## APRIL ADVERTISING INDEX

ADVERTISER	PAGE	WEBSITE	PHONE
Aviators Unlimited	31	<a href="http://www.aviatorsunlimited.us">www.aviatorsunlimited.us</a>	276/614-0412
Dent-Air, Ltd.	31	<a href="mailto:wbfingagin@cs.com">wbfingagin@cs.com</a>	410/263-2740
Dylan Aviation	31	<a href="http://www.dylanaviation.com">www.dylanaviation.com</a>	772/485-6761
EAA AirVenture 2011	5	<a href="http://www.airventure.org">www.airventure.org</a>	888/322-4636
Ford Motor Company	IFC	<a href="http://www.ford.com">www.ford.com</a>	800/392-3673
Harvey & Rihn Aviation Inc.	17	<a href="http://www.harveyrihn.com">www.harveyrihn.com</a>	281/471-1675
Hooker Harness	17	<a href="http://www.hookerharness.com">www.hookerharness.com</a>	815/233-5478
MT-Propeller	29	<a href="http://www.mt-propeller.com">www.mt-propeller.com</a>	386/736-7762
Para-Phernalia	IBC	<a href="http://www.softieparachutes.com">www.softieparachutes.com</a>	360/435-7220
Plus 5 Aviation, LLC	11	<a href="http://www.airbum.com">www.airbum.com</a>	602/971-3991
Rocky Mountain Airsports, LLC	31	<a href="http://www.rockymountainairsports.com">www.rockymountainairsports.com</a>	804/815-4891
Roger Rourke Engineering	31	<a href="mailto:rogrouke@wildblue.net">rogrouke@wildblue.net</a>	661/766-2753
Silver Parachute	31	<a href="http://www.SilverParachutes.com">www.SilverParachutes.com</a>	510/785-7070
Stewarts Aircraft Service	31	<a href="http://www.stewartsaircraft.net">www.stewartsaircraft.net</a>	513/897-7717
Superflite	25	<a href="http://www.superflite.com">www.superflite.com</a>	800/323-0611
WingOver Aerobatics, LLC	27	<a href="http://www.wingoveraerobatics.com">www.wingoveraerobatics.com</a>	352/728-5667

**AEROBATIC AND SPIN TRAINING  
UPSET RECOVERY TRAINING**  
Pitts S2C  
Located at The Meadow Lake Airport  
In Colorado Springs, Co  
WWW.RockyMountainAirsports.com  
Fly@RockyMountainAirsports.com  
804-815-4891  
Greg Baker




**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 Home 410-263-2740  
Fax 410-263-4693 E-mail wbfagin@cs.com

**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

**FLY INDIANTOWN, FL**  
Aerobatic-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.

PLANS

**Swick T Plans** Convert T Craft to fully aerobatic clipped wing T Craft, meets requirements for LSA \$285.00 plus \$15.00 S@H swickclipt@aol.com, www.swickt.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.

SERVICES

**Biplane Builder Ltd.** Restoration, fabric, paint, fabrications, paperwork. with 53 completed projects, Wacos, Moth's, Champs, Pitts etc. Test flights and delivery. Indiana 812-343-8879 mike@biplanebuilder.com, www.biplanebuilder.com

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

**Bully Aeroplane Works** and Airshows provides complete airman estate and aviation collection services without the hassle and invasiveness of on-site auctions. We specialize in antique, aerobatic, and experimental aircraft and parts. References available. Contact Eric Minnis at 336-263-8558 or ericminnis@yahoo.com



**Remember,  
things don't always go  
according to plan!**



*Para-Phernalia Inc.  
Thank You!  
Kelly R. Neil*

*At Para-Phernalia we are very proud that Softie parachutes were instrumental in saving four lives in 1999.*

**SOFTIE**   
**EMERGENCY PARACHUTES**  
THE PROFESSIONALS CHOICE  
*from Para-Phernalia, Inc.*

Toll Free: 800-877-9584  
Intl: 360-435-7220  
Fax: 360-435-7272  
[www.softieparachutes.com](http://www.softieparachutes.com)



Debby Rihn-Harvey



Goody Thomas



Hector Ramirez



Jeff Boerboon



Michael Racy



Rob Holland



Robert Armstrong



Tim Just

# 2011 QUEST FOR GOLD

REPRESENTING THE USA AT THE  
26TH FAI WORLD AEROBATIC CHAMPIONSHIPS  
RAVENNA, ITALY, AUGUST 31 - SEPTEMBER 11, 2011



The team is looking for interested corporate sponsors and seeking individual tax deductible donations.

Send donations to: Unlimited Aerobatics USA, Inc., 148 Magnolia Drive, Atherton, CA 94027

or visit the team website at [www.unlimitedaerobaticusa.com](http://www.unlimitedaerobaticusa.com)

For more information, contact Norm DeWitt, President, Unlimited Aerobatics USA at 650 321-8499.