

SPORT

March 2018

Aerobatics

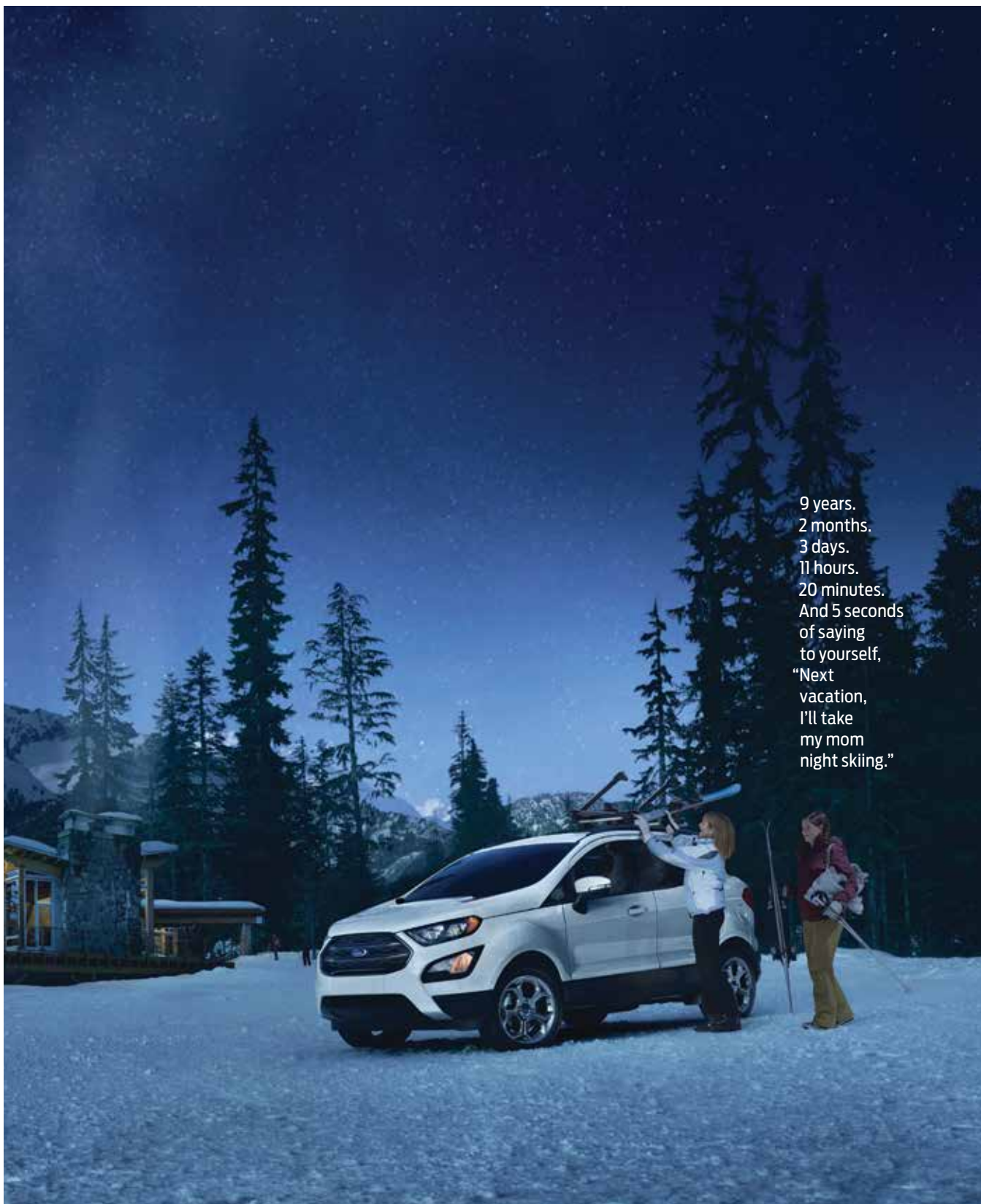
OFFICIAL MAGAZINE of the INTERNATIONAL AEROBATIC CLUB



**Meet The
New Kids
On The Block**

plus
**Fitness For
Aerobatics**





9 years.
2 months.
3 days.
11 hours.
20 minutes.
And 5 seconds
of saying
to yourself,
"Next
vacation,
I'll take
my mom
night skiing."

Intelligent 4WD. Just one of the ways we help your first-ever happen.

THE FIRST-EVER ECOSPORT IS HERE.

Available 4WD. 2018 EcoSport. U.S./Canada markets.



Go Further

CONTENTS

A pilot's first consideration should be to maintain a healthy body weight and good aerobic and muscular fitness to help the body sustain adequate cerebral blood pressure, stabilize posture during extremes, and permit one to strain with less effort during high *g*-forces.

— Rick Volker

FEATURES

7 A Team Is Born!

by Dagmar Kress

12 A Freshman Aerobat

by Sam Robinson

14 Getting the Band Back Together

by Michael Lents

18 Focus on the Food

by Cyndi Allard

22 Maximizing Aerobatic Flight Fitness

by Rick Volker

26 The Road to Romania

by Aaron McCartan

DEPARTMENTS

3 President's Page

Mike Heuer

4 Lines & Angles

6 Programs & Committees

Jordan Ashley

28 Brilliance and Buffoonery

Beth E. Stanton

29 Contest Calendar

30 Meet a Member

Gary DeBaun



COVER

Collegiate students from MSU. Denver, Brooks Dickerson in the blue Extreme Decathlon and Jenna Coffman with Nick Slabakov in the orange Extreme Decathlon, fly with coach Dagmar Kress in her Pitts S-2C. Photo by Mitch Bowers/imagewerx.us.

PUBLISHER: Mike Heuer president@iac.org

EDITOR: Evan Peers editor@iac.org

EXECUTIVE DIRECTOR: Lorrie Penner
920-479-0597 execdir@iac.org

CONTRIBUTING AUTHORS:

Cyndi Allard Michael Lents
Jordan Ashley Aaron McCartan
Jenna Coffman Sam Robinson
Gary DeBaun Beth Stanton
Mike Heuer Rick Volker
Dagmar Kress

IAC CORRESPONDENCE

International Aerobatic Club, P.O. Box 3086
Oshkosh, WI 54903-3086
Tel: 920-426-6574 • Fax: 920-426-6579
E-mail: execdir@iac.org

ADVERTISING

Vice President of Business Development:
Dave Chaimson dchaimson@eaa.org

Advertising Manager:
Sue Anderson sanderson@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

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 © 2018 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. CPC 40612608

Letters

With regard to your President's Page in the January 2018 *Sport Aerobatics*, Dan and Dick Rihn were not the only father-son combination in the Unlimited category. Maybe they were in the United States, but in Germany my son and I participated in the 2011 German Aerobatic Championship in the Unlimited category (third place for me, seventh for my son, Theo). At that time I was 56 years old and my son was 26. Our aircraft was a highly modified Laser.

Best wishes from Germany.
Rudolf Hankers, IAC
10378, and Theo Hankers,
IAC 437614

Herr Hankers: Thank you very much for your e-mail, and I apologize for this error. I am delighted to hear that both you and your son flew in Unlimited at the German Nationals in 2011. I see you have been a member since 1984. Thank you for your longtime support of IAC! I hope to meet you one day when I come to Europe again.

Mike Heuer, IAC President, IAC 4

SUBMISSIONS: Photos, articles, news, and letters to the editor intended for publication should be e-mailed to editor@iac.org. Please include your IAC number, city, and state/country. Letters should be concise, polite, and to the point. All letters are subject to editing for clarity and length.

INTERNATIONAL AEROBATIC CLUB LEADERSHIP www.iac.org/yellow-pages

President: Mike Heuer
Vice President: Robert Armstrong
Secretary: Lynn Bowes
Treasurer: Bob Hart
Executive Director: Lorrie Penner

Board of Directors:
Northeast Region Director: Rob Holland
Southeast Region Director: Mike Rinker
Mid-America Region Director: Gerry Molitor
South Central Region Director: Ron Schreck
Northwest Region Director: Peggy Riedinger
Southwest Region Director: Tim Just
International Director: Debby Rihn-Harvey
Director: Bruce Ballew
Director: Bob Freeman
EAA Representative: Norm DeWitt
NAA Representative: Greg Principato

President's Page

The Beginning of a New Year

MIKE HEUER, IAC President, IAC 4



We've spent a new year on the open aviation and aerobatics calendar. It is almost an exciting time for all of us as we look forward to the wonderful activities the IAC has to offer. There is no substitute for "becoming involved" - be a chapter or a club, an volunteer, and in all cases, as someone who enjoys this very special realm of flying and the people who populate our organization.

When the 2017 season began, it was a clean, cold start. 43 chapters had flown in IAC-associated competitions and 106 of those were in the Unlimited category. These numbers have been fairly stable over the years with little change. Though we always hope and plan for our members to grow, much of that responsibility falls to our chapters who are responsible for a calendar of its regional competitions. We are always looking at ways to improve current participation and welcome your ideas at any time. In fact, for a lot of new people to the sport, healthy for any organization, but it is also important to retain the participants we already have, and that needs improvement.

The IAC is a very transparent and open organization - a tradition that dates back to our foundation. At the bottom of this page you will find my e-mail address. You can also find my office's, director's, or committee chair's contact information on our website. It is important to share your input with your organization's leaders as so many of the improvements we make come from the bottom up.

I really enjoy my phone calls and e-mails with members, and it is great to stay in touch with friends from all over the world. As I have often written, the IAC brought so many experiences and people into my life that would never have been possible had I not joined our crew as an active pilot and not interested myself in sport aviation. When you venture into EAA's other affiliated organizations, you open up great new doors. That is one of the most significant values of being a part of the EAA family of organizations. Air Venture is Oshkosh is where we all come together in one place in one time.

Speaking of Air Venture, it goes without saying that planning for IAC's involvement and participation in the world's largest and most important aviation event is a year-round project. In 2018, our theme will continue as the 10th anniversary of the last flight of the 101st Air Transport Group - the 101st Airborne Division.

Remember - Now this beautiful aircraft at the U.S. Nationals in September, and its creator, Don Williams, will continue its construction and plans of his design, and we hope for a large turnout to fly in Oshkosh. This has been a member of the 101st since 1976 and formerly flew a P-51 in competition. In fact, he and his father, Dick Rihn, were the only father-son combination who flew in Unlimited together at the same time. Dick was president of the IAC from 1984 to 1988 and also a very good friend and strong supporter of aerobatics in California for decades. It will be a very special celebration for everyone.

Accompanying the One Design gathering will be a special exhibit inside the IAC pavilion that has become one of our hallmarks. Why is this important? Why do we focus on aerobatics and cross-country flight?

There are several answers to this. First, airplanes like the P-51, Eagle, and RC-119 have made their mark in aerobatics, and without them creative and successful designs, there would be a much smaller aerobatic sport today. These types of aircraft in the hands of pilots can be used to demonstrate concepts around the world. The time change is necessary because of their intent to create an airplane that would be flown in a single category of its own, putting performance differences aside in determining winners. While it was a great idea, it did not take off, and today a single-design category more externally defined from our rules. They said, many of these types are flying in the hands of very talented owners and pilots. It seemed that sport flying in a new way and generated a great deal of debate and discussion as to the direction competition was taking at the time.

When all of these airplanes share in an inventory to the experimental amateur-built movement - the very heart of EAA. Some were really plane built, others were constructed from kits, and some like the EXTRA are factory built and certified airplanes whose owners were built with airplanes like the Laser and freestyle class. What could be more appropriate than celebrating those outstanding aircraft at EAA AirVenture?

My best wishes to everyone for a healthy, safe, and happy new year!

Please send your comments, questions, or suggestions to president@iac.org.

www.iac.org

Achievement Awards: Brittany Nielsen
Annual Awards: Patty Anderson
CIVA Relations: Mike Heuer
Collegiate Program: Jordan Ashley
Contest Sanctioning: Mike Heuer
Editorial Committee: Mike Heuer
Executive Committee: Mike Heuer
Finance Committee: Bob Hart
Glider Aerobatics: Jason Stephens
Government Relations: Bruce Ballew
Hall of Fame Committee: David Martin
IAC Historian: Mike Heuer
ICAS Liaison: Rob Holland
Judges Program: Weston Liu
Known Sequence Committee: Brian Howard
Membership: Doug McConnell
Nominations: Doug Sowder
Rules Committee: Brian Howard
Safety Committee: Tim Brill
Technical Committee: Tom Myers

President's Page

My Last Column, for the Second Time

MIKE HEUER, IAC PRESIDENT, IAC 4



As I will be retiring from the IAC presidency on March 19, this will be my last message to the membership on this page. Health issues have interfered with my work for the IAC, and I felt I could not perform at 100 percent as your president. I leave you in good hands and will continue to be active in the IAC, aiding our membership as time and energy permits. I cannot begin to describe what a wonderful experience this has been since I flew my first contest in 1968. I looked back at how many of these columns I have written through the years, and this article came to No. 151.

While times have changed and the sport and organization have evolved, we still have in place all of the bedrock programs that have been the basis of our success for nearly 50 years. One of my goals as president has always been to recruit the best people to serve in our cadre of key volunteers and to administer our various programs and the U.S. National Aerobatic Championships. We have an outstanding team in place that will remain after my retirement, and I can state without hesitation, they are doing their best for you, the member.

It is always an impossible task to recognize everyone in these pages. So few do so much for so many. Most do not seek the limelight, recognition, awards, medals, or trophies. They just want to be a part of a great organization and a larger cause. What can be accomplished by a small group of volunteers has always been astonishing to me. I have tried to provide leadership and vision, and others have stepped up to do so much of the work.

What are our challenges for the future, and what will new administrations face? There are many issues aside from attracting more and new people to the sport, which will require fine-tuning membership programs as well as new ideas. Chapters are incredibly vital to this as they are the local contacts for new people and can provide that important mentoring and guidance to those just learning about aerobatics as well as competition. We also have to do what we can to bring more women into the sport. A relatively small number of women are competing today, but it is very encouraging to note that nine women were

among the three collegiate teams that competed in 2017. One of the highlights for me at the U.S. Nationals has been seeing these young men and women flying and mixing with some of the greatest aerobatic pilots in the world who have so often extended a helping hand.

I am also delighted with the job that Evan Peers is doing with this magazine. Evan is not only a world-class photographer but also a fountain of ideas on what can be done. His fresh viewpoint has been welcome and will reap benefits in the future. I believe I can speak for the entire leadership team in assuring the members that we all want a better, expanded magazine, and Evan is helping make that happen along with the many contributors to these pages.

On the airplane front, there are exciting developments. Extra continues to refine its beautiful airplanes and introduced an electric model last year as a test bed. The GameBird has been certified and will reach customers soon. American Champion continues to turn out beautiful models of the Decathlon. Not to be forgotten, thanks to the good work of EAA over many decades, the amateur-built aircraft movement continues to thrive and grow, and this can be the source of future aerobatic designs as we have seen in the past. The freedom we have to innovate and build in this country is unmatched anywhere in the world.

The foundations for future growth and improved membership services are in place. We have the programs, and we have financial success and stability to invest in you. It will be up to future officers and directors to manage and direct those resources to ensure our future success, and I urge those of you who would like to take a leadership role to participate in our elections. Working on the board of directors is challenging and interesting, and paying it forward is very rewarding.

So on that note, my best wishes to the officers, directors, and volunteers who will carry on the work. I hope to see you at AirVenture or the U.S. Nationals in 2018.

IAC

Please send your comments, questions, or suggestions to president@iac.org. Mike can be reached at mike@mheuer.com.

New IAC Chapter 133 in Chesapeake, Virginia

Congratulations and welcome to the newest IAC chapter: IAC Chapter 133, the Sky Surfers, in Chesapeake, Virginia, with a base out of Epix Aviation at Chesapeake Regional Airport (KCPK). The leadership team is composed of Gregory A. Loughran, IAC 439936, operations manager and chief instructor; Lou Radwanick, IAC 439774, an aerobatic instructor and past IAC regional judge; and Renee Brilhante, IAC 436022, an assistant lead aerobatic instructor. Renee is also the aerospace education officer and assistant deputy commander for cadets in the Hampton Roads Civil Air Patrol squadron.

During the first year they intend to spend their time in outreach to the local community, which is heavily populated with civilian and military pilots, including a number who are beginning aerobatic training and want to become IAC members. After building up chapter membership, the chapter hopes to sponsor at least one aerobatic competition annually.

Mark Fullerton Named U.S. Advanced Aerobatic Team Manager

Mark Fullerton of Calhoun, Georgia, has been selected by the U.S. Advanced Aerobatic Team pilots to serve as their team manager as they prepare for and participate in the 13th FAI World Advanced Aerobatic Championships (WAAC). The competition will be held at Strejnic Airfield (LRPW) in Ploiesti, Romania, on August 15-25, 2018.

Mark brings a wide variety of skills and experience to the task. As an accomplished Advanced-category pilot, he has flown in 33 contests in the last 10 years. First entering the Sportsman category in 2008 in a Citabria, Mark moved up to Intermediate and then Advanced in recent years while flying a Laser 230 and finally a Panzl S-330. His eventual goal is to move up to Unlimited, also in the Panzl.

Mark is an experienced world competitor, having flown as a team pilot at the WAAC in 2014 in Slovakia and in 2016 in Poland. This year, he also qualified as an alternate pilot for the team during the U.S. National Aerobatic Championships in Oshkosh, Wisconsin. His full-time job is in the textile industry, which requires international travel on a monthly basis. He is skilled in international

shipping as well, which is crucial as the team will be shipping their aircraft to Europe in containers.

Mark is a past president of IAC Chapter 3 in the Atlanta area and the current president of EAA Chapter 709 in Rome, Georgia.

Doug Sowder Appointed U.S. Judge for World Advanced Aerobatic Championships

Former IAC President Doug Sowder, IAC 14590, of Spokane, Washington, has been appointed to serve as a judge for the FAI World Advanced Aerobatic Championships to be held in Romania in August 2018.

In addition to being an accomplished regional and national judge, Doug is one of the IAC's most active competition pilots. He has flown in the Advanced category in 50 contests since 2006. In recent years, his aircraft has been an Extra 300L.

Doug was also a U.S. team pilot at the 2004 and 2010 FAI World Advanced Aerobatic Championships in Sweden and Poland, flying a Pitts S-2B and Extra 300L, respectively. He has served in other contest positions as well, including the wind-measuring official at the 2013 FAI World Aerobatic Championships in Denison, Texas. He is truly a man of many talents and skills.

He will join eight other FAI international judges on the line who will be supervised by chief judge John Gaillard of South Africa. The United States will be sending a full team of eight pilots to Romania.



EVAN PEERS



Nominations Sought for IAC Board of Directors

Own your destiny with action. Help lead the IAC into the future by nominating a colleague or yourself for a position on the IAC board of directors. Officers and directors consider a wide range of information and data affecting the sport of aerobatics and set the direction for the organization for years to come.

The International Aerobatic Club is accepting nominations to serve on its volunteer board of directors. The IAC has an open election process with nominations for candidates accepted directly from the membership. There are five positions open to be elected: president, secretary, and three board members. Elected candidates serve a two-year term beginning at the IAC's annual general meeting in Oshkosh in July.

We hope to receive a record number of nominations with a view to having a diverse, talented, and dedicated pool of candidates to draw from to lead the IAC's activities and policies.

The deadline for nominations is April 14, 2018. Visit www.IAC.org for complete nomination procedures and forms.

Tech Committee Volunteers Needed

The Tech Committee is in need of volunteers with software coding expertise. Tech Committee members are responsible for the contest registration software, the contest scoring software, the contest results database, the analysis of contest results, and the IAC website. If you have ideas for software services that do not presently exist, and are willing to put in the effort to turn those ideas into reality, we would love to have you get involved.

The immediate need is for someone to transition into the role of managing and maintaining the IAC Contest Database, or IACCDB. The IACCDB is written in Ruby on Rails, and the source is hosted on GitHub. The original author of the IACCDB, Douglas Lovell, will work with the new person to help him or her get up to speed.

If coding in the name of aerobatics interests you, please get in touch with the Tech Committee chairman, Tom Myers, at tom.myers@stanfordalumni.org. For more details on the tech committee, please see the article in the January 2018 issue of *Sport Aerobatics*. **IAC**



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

- ☒ Full time undergrad currently enrolled in college courses?
- ☒ Private Pilot?

That's it!



Ask us how to join the IAC Collegiate Program
at **920-426-4800**

Collegiate Program

by Jordan Ashley, IAC 483846



With the 2017 competition season officially in the books and things slowing down with the temperature here in Indiana dipping to well below zero, the Collegiate Program Committee and I would like to congratulate and thank everyone who participated in the program this season. I believe that this has been one of the most successful and prolific seasons yet.

It was most definitely the best season thus far in my tenure as chairman. I would not be able to perform my duties without the following people who make this program possible. Dagmar Kress of Dagmar Aerobatics sponsors the program, is a member of the Collegiate Program Committee, and is also the coach of the Metro State University of Denver team; Mike Lents is a member of the committee as well as the coach of the University of North

Dakota team; Mark Matticola is coach of the U.S. Air Force Academy team; and Charlie Atterbury is our third and newest member of the committee. As chairman of the program, I want to personally say thank you to these individuals. Without their countless hours of dedication, this program would not be possible. The program also wouldn't be where it is today if it were not for the work of Lynn Bowes, who was chairman of the program before I took over in 2015.

The Collegiate Program this year, with the approval of a revised Policy and Procedures Section 225, took a turn and made the move from being just an awards

program to a program that is focused on following our motto, "Using aerobatics to create better, safer pilots for the future." It's my hope that the skills developed during participants' time in the program will carry over into their chosen career field once they leave the collegiate environment. It is therefore my intent that the trophies

and awards for the 2017 season, as well as those received at local contests, be physical representations of a competitor's skills and accomplishments, not simply another plaque to hang on a wall. The current competitors and those who are up and coming are the future of our sport. I feel it is important that those who are more experienced find a young person, or persons, who is interested in aviation or aerobatics and give him or her a ride or lesson — maybe a few rides or lessons if you

are so inclined. I also feel it's important that we reach out and use the contacts we have made with those at the university level during our careers to expand this program. This is one of our primary goals and it cannot be accomplished without more universities supporting the benefits of aerobatics with students. If this is of interest to you, please feel free to reach out; I would love to work with you to develop a program that works for you. I received my first aerobatic ride following the completion of my private certificate more than a decade ago. That one 20-minute ride sparked the love of aerobatics that I still have today.



UND and MSU Denver collegiate teams face off in 2016 at the Midwest Aerobatic Championships in Seward, Nebraska.



MITCH BOWERS/IMAGEWEX.US

A Team Is Born!

by Dagmar Kress, IAC 17721

MBA in the USA Turned Pilot

I came to the United States from my home in Ulm, Germany, in 1985. I started out with the goal of getting an MBA to work in the business world but ended up with a more than 25-year flying career. I learned to fly while studying business administration at the University of New Mexico in Albuquerque. Flying was a dream that I carried in my heart since I was a child sitting by the window in an airliner looking out over the wing at the sky above and the land underneath me — fully engrossed in the miracle of flight. The conditions were not right back then, and I never realized my dream in Germany. After receiving my MBA, I decided to pursue my passion of flying and become a professional

pilot. I obtained all my flight instructor certificates, instructed, and finished off by getting an airline transport pilot certificate at the American Flyers Academy. I founded my own flight school in Fort Lauderdale, Florida, and called it Flugvergnuegen, which means pleasure of flying. With a team of flight instructors, we catered to an international

clientele, teaching all flying disciplines but specializing in aerobatic and unusual attitude recovery training in Pitts, Extra, and Decathlon aircraft. Flugvergnuegen also advertised fun rides in the Fort Lauderdale beach hotels and took countless tourists for an experience of a lifetime. Along the

Here and in the lead photo
Dagmar Kress is
photographed
with her Pitts.





The 2017 Metropolitan State University of Denver Aerobatic Team. Left to right: Scott Sowell, Natalya Shemigon, Brooks Dickerson, Bobby Loesch, Sam Robinson, Nick Slabakov (coach), Dagmar Kress (coach), Jared Hulse, Alon Geffen, Julia Apfelbaum-Kirchenbauer, and Vibeke Gaard. Not present are Jenna Coffman and Chris Phillips, having joined the team later on in the season.

way I was an active member of the German Unlimited Aerobatic Team and competed at the Unlimited World Aerobatic Championships in 1994, 1996, and 2013.

Denver

Fast-forward to 2015 when I was offered a faculty position at Metropolitan State University of Denver (MSU Denver). I currently teach aviation-related classes in the aviation and aerospace science department. Many students took the controls

during exploratory flights with me in the Pitts, rolling, looping, and spinning the airplane. Pretty soon my schedule was filled with MSU Denver students seeking aerobatic flight instruction, which concluded in a spin sign-off and flight through a competition sequence. The desire to compete was born! Starting a collegiate aerobatic competition team at MSU Denver was a natural progression of events.

A Team Is Born!

Our first competition season was

in 2016, and the team was composed of six founding members: Spencer Downs, Vibeke Gaard, Jared Hulse, Brandon Ramberg, Shelby Schulz, and Mike Towle. Shelby, a well-known face at contests where she volunteered tirelessly through the summer, finally competed at the last competition of the season after obtaining her pilot certificate the week prior! She showed up for her private pilot checkride with a complete aerobatics course and spin sign-off under her belt. All members except for Jared and Vibeke



JONATHAN APFELBAUM

graduated that year, which put us back to nearly ground zero in terms of team experience.

Word spread, and in our second season the team doubled to 12 members: Vibeke, Jared, Julia Apfelbaum-Kirchenbauer, Jenna Coffman, Brooks Dickerson, Alon Geffen, Bobby Loesch, Jessie Miller, Chris Phillips, Sam Robinson, Natalya Shemigon, and Scott Sowell. Not everybody participated in the required three competitions. Scott and Jessie are still working on their certificates, but they provided indispensable support as volunteers on the ground. Scott took over data entry, having been trained

by the great Bob Buckley himself. Julia had life outside of aerobatics interfere, but she spent countless hours supporting the team with her organizational, fundraising, and photographic talents. Jenna took over Julia's chief photographer position after Julia started her sabbatical. Our hallway board at the university is filled with their colorful displays.

We Win!

2017 was an outstanding year! We won the IAC Collegiate Program, a great success for our second year. Our team's size and success depended on resources of airplanes and

instructors. I found that instructor capacity maxes out at about five students, considering training and safety piloting requirements at the contest. Doubling the team in 2017 was made possible by Nick Slabakov coming on board. He made his Extreme Decathlon available at a discount and donated his instructing time for free! In addition, Betty Stewart, 1980 and 1982 World Aerobic Champion, generously volunteers her time critiquing flights from the ground.

Brooks, who was trained by Greg Koontz, joined the 2017 team with his own Extreme Decathlon and

received the highest overall scores in the Primary category. He also won the South Central Regional Series. Sam and Jared won the National Collegiate Program Individual gold and silver medals respectively, which required competing in the Sportsman category.

Any competition flight team depends on some sort of sponsoring to be successful, and college students are habitually short on cash. MSU Denver began to pitch in, and our local Rocky Mountain IAC Chapter 12 members, under the leadership of Duncan Koerbel, and other friends of the team also contributed resources to help ease the burden of training, competition expenses, and organizing the team. Dave Watson unselfishly contributed his Pitts and safety pilot services at the Borrego Akrofest in California. It takes a village!

Winning should never be the primary focus of collegiate competition. Instead, safety, airmanship, teamwork, bonding and friendships, and the humble privilege of participation are the hallmarks of our two years. Every team would like to win; only one will. Our fellow competitors at the University of North Dakota and the U.S. Air Force Academy have outstanding teams and dedicated first class coaches. Flying in the same air as they do is an honor by itself, and we are looking forward to seeing them again next season. In the years to come I hope the golden trophy will go around equally to keep all teams motivated to pursue the sport.

Building for the Long Run

Winning the championship this year was a privilege not to be taken for granted! It helped us gain credibility and legitimacy at MSU Denver. Aviation and Aerospace Science Department Chairman Dr. Jeffrey Forrest, Associate Chair Kevin Kuhlman, Dr. TJ De Cino, and College of Professional Studies Interim Dean Dr. Jennifer Capps are excited over our “out-of-the-box” maneuvers. Our new university president Dr. Janine Davidson, is a former Air Force pilot so that helps, too! We have begun to

**Winning should
never be the
primary focus of
collegiate competition.
Instead, safety,
airmanship, teamwork,
bonding and
friendships, and the
humble privilege of
participation are
the hallmarks of
our two years.**

get more traction in the local area. We were invited to help exhibit and recruit at United Airlines’ career day at its Denver hub and at various science, technology, engineering, and math (STEM) events.

We hope the efforts of our MSU Denver aerobatic pilots and coaches will open doors to reach more supportive mindsets at the university’s governing bodies and potential sponsors. Only then will the team be sustainable in the future! Speaking of the future, in the fall 2018 semester, the MSU Denver aviation department will offer an aerobatics class for credit. Most of our 2017 team members will continue competing in 2018, which will start us off at a higher experience level than the year before.

My Personal Fulfillment

Through all the years of competing in aerobatics I have never won first place at an individual contest. I got pretty close many times and collected plenty of second place trophies. In 1996, before the World Aerobatic Championships in Oklahoma City, Eric Haagenson showed up in his flaming red Sukhoi. Eric took first, and I took second. The same thing happened before the 2013 WAC in Denison, Texas, and at every

other competition I went to. I also kept competing against my coach and good friend Sergei Boriak — guess what? It felt like playing chess against grandmaster Garry Kasparov. Today, I do not remember many of those flights, maneuvers I performed well or badly, or even some of the locations. I do, however, remember and treasure all the friends I gained over the years. Those friends are the true award in the end!

Being a coach of the MSU Denver Aerobatics Team is very fulfilling to me, and I am grateful to be able to work in my field of dreams. When “the kids” won the 2017 Collegiate Program I felt like I was winning, too. I love to share whatever knowledge and experience I have with the team members, and also the students in my classes. My own two children have left home, and neither one has any desire to fly. Instead of suffering from empty-nest syndrome, I have chosen to adopt a new flock.

I am very excited for and proud of all my children, old and new. My own children, Helen and Stephen, went on to pursue their own dreams in the biomedical field and in music. My aerobatic children are exploring their new horizons, too. Mike works with the Sierra Nevada Dream Chaser project and just received news that he will become an A-10 pilot. Jared teaches in Extras at Sky Combat Ace out of Las Vegas, drilling vertical holes up in the sky. Alon got hired by SkyWest Airlines and flies high and fast above the clouds. Spencer is working on finishing his commercial pilot certificate while holding a job in the aviation industry.

Vibeke received an invitation from aerobatic mates in her home country, Norway, to compete at the Norwegian Nationals. Chris jumped on as additional team coach, instructing in Nick’s Decathlon, closely followed by Bobby, Brandon, and Sam, who are near completion of their CFIs. Natalya, who was born in the Ukraine, strives to fill the big shoes of her late Russian hero namesake, World War II combat pilot Natalya Meklin.

Lots of exciting things are happening — 2018, here we come!

IAC

THE WINNER TWO YEARS RUNNING. AND HAULING. AND TOWING.

Last year, Super Duty.® This year, F-150. Ford F-Series is proud to score back-to-back Golden Calipers.



**FORD F-SERIES.
2017 & 2018 MOTOR TREND
TRUCK OF THE YEAR.®**



A Freshman Aerobat

by Sam Robinson, IAC 439217

Halfway through my first semester of freshman year I was enrolled as a biology major at the University of Northern Colorado. I only lasted one semester before I made the life-altering decision to become a pilot. This turning point in my life enabled me to pursue my passion. I moved back to Denver to attend the Metropolitan State University of Denver, and I changed my major to aviation. As a Colorado native, the one-hour move was not very big, but the decision was. I was lucky enough to realize that I would be able to pursue something that I have wanted to do since I was young. I remember going to air shows as a kid and listening to my father's stories about his time flying. So, when I discovered that being a pilot wasn't some far off fantasy, I jumped at the opportunity and started working on my private pilot certificate. However, I still wasn't sure where in the world of aviation I wanted to go.

In early 2017 I met someone who changed my life and helped me answer the question about where I wanted to head with my piloting career. That individual is my coach, Dagmar Kress. I had been looking for something competitive in flying, something to take me to the next level of being a pilot, and Dagmar introduced me to the world of competition aerobatics. I wasn't sure what to expect of my first flight with her, but soon after I took the controls of her Pitts S-2C, I was hooked. I was hanging upside down in the Pitts with adrenaline racing through me, and I remember thinking that this would be the focus of my career. It took days for the smile to leave my face,



**I was hanging upside
down in the Pitts with
adrenaline racing
through me, and I
remember thinking
that this would be the
focus of my career.**

and I couldn't wait to fly again.

As 2017 progressed, I practiced as much as possible and attended a few competitions flying in the Primary category. Every time I flew I learned something new. I remember talking with Dagmar about the importance of precision and the details that go into flying. It amazed me how much there was to think about in a flight that only had six maneuvers. I quickly learned that flying a sequence was one thing and flying it well was another. So, I put my thoughts toward the details. I figured that if I could do all the little things right, then as a whole it would be good. However, that is much easier said than done. Dagmar constantly tells us, "Your brain will leave your head and hide under your butt when you enter the box." I learned that was true the hard way.

About seven months into the aerobatic training process, Dagmar called me and asked if I would move up to fly the

Sportsman category as a safety net for the team. I immediately said yes and started to memorize the new sequence. I soon realized that our next competition was only a few weeks away and that I had to learn a whole new sequence on short notice. What I did next was something that my coach advised me against. I proposed to fly a Free sequence in addition to the Sportsman category. Dagmar said that it would be a lot to practice and be too much work in such a short amount of time. I was stubborn and insisted on another new sequence, increasing from the previous six maneuvers to more than 20. I had a couple of practice flights before the competition and wasn't exactly adequately prepared, but I was still excited. Sure enough, during my first flight in Sportsman I realized I completely skipped one of the maneuvers near the end. I was in the middle of a vertical upline, and my thought process completely disappeared. My brain had vanished from my head and was probably hiding under my butt. I had no idea what

to do. I was a lock-in for last place after that, but hey, live and learn, right?

A week or so later, I flew to California to compete with a whole new crowd with a renewed determination to improve. I met Dave Watson, who was amazing and was kind enough to be a safety pilot for me. He also allowed me to fly his Pitts S-2B. He welcomed my teammate Vibeke Gaard and me to his "Evil Empire" of pilots, all of whom were kind and helpful and made my time in California extremely memorable. I flew much better in that competition and didn't forget any details or maneuvers. The trip itself was an amazing experience with many great pilots from whom I learned a great deal and can now call friends.

Soon after that I headed to the last contest of my first competition year, which was held in Tucson, Arizona. It's called the Tequila Cup. California was a huge step for me, and I wanted to carry some momentum to end the season. After a year of practice, I finally finished in first place. Again, I met incredible

people and pilots, and it was a weekend that I will never forget.

After arriving back home, Dagmar called to inform me that I had also finished first as an individual in the collegiate series. My first year of aerobatics had ended on a good note, and that was when I realized a couple of things. First, I realized that I was blessed with an amazing coach and amazing teammates who helped me throughout the year to get where I am now. Second, I realized that everybody who coached me along the way — including Dagmar, Nick Slabakov, Betty Stewart, and Dave — were not only teaching me aerobatics, but also instructing me to become a better pilot. That instruction is something I am extremely grateful for. This past year has made such an impression on me, and it has given me so much that I will always carry with me. In the future, I have dreams and hopes of eventually giving others aerobatic instruction and bringing more people into the sport.

IAC

Butler Builds Custom Parachutes

Pampering the aviation community for 37 years

You don't have to sacrifice space and comfort to wear a parachute.

When you order a Butler Parachute, we will design a rig to fit both you and your aircraft seat.

Butler Parachutes will **maximize your chances of survival**. We offer a wide range of canopies equipped with our patented slider technology that enables the canopy to withstand much higher weight and speed loads than any other canopy on the market.



Toll Free: 888-235-3280

e-mail: sales@butlerparachutes.com

www.butlerparachutes.com



Getting the Band Back Together

Reviewing the past in preparation for 2018

by Michael Lents, IAC 434331

MCFI-A — University of North Dakota — U.S. Advanced Aerobatic Team

As the North endures another blast of cold air, a change is felt. Aerobatics season is almost upon us. At the University of North Dakota it never *really* stopped except for a few weeks when the temperatures never went above 0°F. It was a good time to complete some avionics work on the Super Decathlons and reflect on seasons past and the season ahead.

At the conclusion of the 2017 U.S. National Aerobatic Championships in Oshkosh, Wisconsin, the camaraderie and excitement of the UND Aerobatic Team was infectious. Plans for sequences and categories quickly developed while advice on how to maintain proficiency in the off-season came next, all before the van and aircraft ever returned to North Dakota.

Those who return for the 2018 season will make the move to the Sportsman category and will mentor new students learning the box and finding their way in Primary. Our Super Decathlons are working birds with a very large anticipated demand this spring aside from competition ambitions. The team is already developing strategies for practice between the required training flights demanded of both bird and student. Demand for the skills and attitudes imparted and grown in the crucible of “the box” is a good problem to have.

As coach, I’m pleased. There’s a classroom full of students waiting to learn aerobatics and fly this March, with a waitlist long enough for two

more sections. We’ll do our best to meet the demand. History, tradition, performance, and some entertaining YouTube videos help students realize the possibilities that exist. In the team, there’s a band of aviators and aviatrixes ready to guide them to the next level. The takeaway: There is demand for true air discipline and full aircraft control, and new pilots are excited and eager to learn when presented with these opportunities.

UND Aerospace offered aerobatics well before my time and Super Decathlons have been used for the past few decades. Prior to that, there were a few years during which CAP 10s were used, but the maintenance intervals and parts availability proved impractical for UND’s operations. We currently operate two ACA Super Decathlons. They have perfect performance for making students work hard for the maneuvers.

The UND Aerobatic Team began in 2002, one year after the Collegiate Program was initiated by the IAC. Tony Sauerbrey and Joe Vacek led the first student competitors from UND. This cleared the first hurdles that invariably arise concerning risk management and the public relations issues that aerobatic flight presents to the less informed.

Ryan Carlson, one of the first students, took over as head coach in 2006. In 2008, I started assisting as a safety pilot for students, offering a few pointers when I could. My first contest was in Kankakee, Illinois, hosted by

IAC Chapter 1. I sat in the back seat for the UND competitors and just observed — through 12 contest flights. I enjoyed every minute. It also helped start the joke that I was the only idiot trying to build ATP minimums at a contest. I’ve since earned my ATP and started sharing the load with some excellent pilots and coaches. We now joke that Jonathan Sepulveda should be listed as standard equipment on our Super Decathlon.

The next year, Ryan needed recurrent training to judge, so a few of us joined him. Since I better understood what was supposed to happen in the box, I competed in my first contest, also at Kankakee, in 2009. Jim Klick and Giles Henderson talked me out of the back seat and encouraged me. They said since I was there, I might as well fly, too. Besides, I had to put what I learned at judges school to good use. How else would I effectively pass on the appropriate lessons? I placed right behind Giles in Sportsman. It was beautiful watching him fly the Cub.

From then on, I took over more duties as Ryan progressed in his career. Officially, I became head coach in 2011. With Greg Gilmer, Neil Acomb, and Jonathan Sepulveda, we devised ways of setting up ground observers and practice days, which started out awkwardly. We would find a field in the middle of nowhere, spot our friends on the ground, fly some maneuvers, and return to the airport to try it again. So



After practice in Spencer, Iowa for the 2009 Doug Yost Challenge. Left to Right: Greg Gilmer, Jim Gardner, Tyler Graybill, Jordan Weis, Nathan Bush, Michael Lents, Thomas Reichart.

JONATHAN SEPULVEDA

much time was lost. Eventually, we found a home-away-from-home at a local nontowered airport that had the right combinations of airspace and resources. Hutson Field in Grafton, North Dakota, managed by the ever-welcoming and always-smiling Andy Tibert, has a few noisy weekends where we thrash some sky. The biggest complaint we received was from the locals who wanted to know our schedule so they could come watch. It's there that the team begins to build.

The payoff occurs at the first contest. Returning students reunite with the aerobatic family they met last season while ushering new competitors into the fold. A contest can be described in detail, but nothing prepares a pilot for the excitement of the first wag into the box, or the anticipation waiting for scores to be posted. Between these moments — when a fresh water bottle is exchanged for a parachute and the winds in the box, when an umbrella is held to shade a teammate and rival, when dashing to the pumps anticipating a quick refuel while pilots swap — there is the team. John Morrissey once told the team, “You’re about as close to a fighter squadron as you can get without signing the paperwork.”

Over the years, the camaraderie, esprit de corps, and professionalism have all been essential. By helping each other improve, each pilot grows individually. This year, returning



BRENDA RISKEY/UND

2013 UND Aerobatic Team Coaches: Jonathan Sepulveda, Michael Lents, and Greg Gilmer.

pilots AJ Volberding and Mitch Oswald assisted Jonathan and me with safety pilot duties and mentored new competitors during practice and at contests. Liz Birch, Jarrett Croy, Jacob Githens, Dustin Lenz, and Elise Wheelock participated in their first contest season. Alex Hunt, Alex Tally, and James Jacobson returned to compete and provide mentorship. Alex Tally and Jacob built enough experience through the season to be safety pilots as well. It has been an honor to watch them grow professionally and get ready to tackle the next challenges.

Many of these students will be returning for the 2018 season. Liz and Elise are already formulating Free sequences. Jacob and Jarrett are studying how hard one could push off

the top of the “goldfish” before hitting the buffet. I’m not sure that’s necessary, but given the forecast high as I’m writing is -2°F, I enjoy the enthusiasm. Alex Tally is strategizing fundraisers while Alex Hunt and James are willing the weather to cooperate. 2018 is going to be fun.

Our goal is to grow collegiate participation in the sport and ultimately improve industry safety by promoting the safe exploration of the full flight envelope. This year, the Traveling Team Trophy for the Eagle Collegiate National Championship Team will pass to Metropolitan State University of Denver led by Dagmar Kress. Thank you for supporting the Collegiate Program and mentoring your fine students! We’ll be working hard to earn it back.

IAC



Three Aerobatic Ladies in Oshkosh

University of North Dakota collegiate teammates Elise Wheelock, Elizabeth Birch, and their Super Decathlon competing at the 2017 U.S. Nationals. Photo by Evan Peers.



Focus on the Food

Follow the four P's for flying fitness

by Cyndi Allard

Flying aerobatics is a strenuous workout, both physically and mentally, and a lot of training and pre-competition work goes into each contest weekend. Proper care and careful preflight inspection is crucial on every detail for the aircraft you will be flying. Unfortunately, competition events do not always make it easy to take such great care of the most important component — the pilot.

Maintaining one's physical health and mental state is crucial for success. Staying in shape helps with mental quickness and reaction time, and lets

you *comfortably* fit in the snug cockpits of aerobatic aircraft. Most importantly, it will help prevent you from losing consciousness during flight! And yes, that should be reason enough.

One of the biggest underlying factors, yet one of the most often overlooked, is the food
y o u

eat. On nonflying days, it is important to maintain a diet of mostly fish, chicken, lean free-range meat, fruits, vegetables, and a little whole grain. Keep it simple, and keep it tasty with healthy spices. One thing I have been experimenting with lately is different vinegar and oil combinations. This is a simple, healthy, and effective way to change up the flavor of most dishes. Save your indulgences for those special times with family and friends. Have your treats, sparingly, but don't bring them into the house. Try to keep it inconvenient for you to have your "must haves" that make life worth living. Mine is anything chocolate!





To eat healthy you need to eat at home more because home is where you can take charge of the four P's: plan, prepare, prep, and pack. It is no different on game days than it is throughout the year. I tell my clients their day is only as good as the night before. What I mean by this is did you do the four P's, and did you get adequate sleep?

So, let's look at a typical contest trip. When it comes to your plane and your performance, you rely on the preparation you have done ahead of time. The day before, you go through your checklist and of course you plan for every eventuality. Maybe they won't have the grade of oil that you like to use so you take enough with you, you put fresh batteries in everything that needs them, and you fix that faulty headset that acted up last time. Then you turn to your routine. You "chair fly" everything, making sure that your reactions are instinctive; you make sure that you absolutely *know* the links between the various maneuvers that you will

perform. They are now second nature — instinctive.

Just as you plan for your flight, you need to plan for your nourishment. Your body is the most important instrument that needs to keep working at its highest capacity. So, you plan. Get up early enough to prepare a substantial breakfast. This is when you want to pound carbs, especially if it will be several hours before you must perform. A great breakfast might be oatmeal, pancakes, and eggs or waffles, maple syrup, fruit, and a handful of nuts. It should include lots of carbs and always include a protein to slow down the absorption of the carbs and help to maintain your blood sugar balance.

Next plan what you will be eating while you are at the airport. We all know that airport cafe food can be notoriously fatty, fried, and of poor quality — not what you want to put into your body while getting ready to perform in an extreme sport. High fat foods take a long time to digest and

can make you feel lethargic and cognitively very slow. What you are looking for is mental alertness, a quick burst of energy, strength, and, above all, consciousness while performing high g's.

Plan on bringing easily digestible foods, which means low in fat. This is probably the most important stage of the four P's. Two things to remember: Do not go hungry and do stay hydrated. Plan to drink adequate water, about 8-12 cups, before and after your time slot. A sports drink with electrolytes can be *added* to this, but do not replace good, clean water with sports drinks. Hydration is so important to keeping you mentally alert and enabling your muscles to react quickly. Good meal options might be a salad with vinaigrette or chicken with vegetables that you can eat cold, assuming a microwave is not available. These are two great go-to meals. Other things you might want to try are protein powder that can be mixed with water and shaken in a shaker bottle, protein bars that have a low glycemic index and few added chemicals (Kind bars, Luna



bars), celery with low-fat soft cheese (Laughing Cow), peanut butter and apple slices, hard-boiled eggs, bananas, oranges, yogurt, low-fat cheese sticks, hummus and baked pita chips, granola bars, trail mix, nuts, or tuna packets and whole wheat pocket bread. Eating small, nutritious meals and snacks throughout the day can keep your energy level high and avoid glycemic crashes. This will allow for consistent mental alertness and focus.

Also remember to plan to go extra time. What if you must fly twice that day? What if you are stuck on the judges line until sundown? What if you don't and are tempted to pull into the nearest fast food place on the way home and stuff yourself with something fat, fried, and juicy to make yourself feel better? Plan to have more than enough food. That way, if you do stay all day, you have enough. If not, then munch on it on the way home. Either way you come out a winner!

Prepare by making your list and getting the food from the grocery store and making sure you have the equipment needed. I recommend a good meal prep bag that you can easily find on Amazon. Prices range from around \$30-\$100. Many fit professional pilot clients carry something similar to this along with their flight bag, but make sure that the one you get comes with containers for the food and some sort of ice block or remember to buy these separately. Don't forget silverware and a jar opener if needed.

Prep work comes in by making the

Prepare by making
your list and getting
the food from the
grocery store and
making sure you
have the
equipment needed.

list, going to your grocery store, and then preparing the food — boiling and peeling the eggs, chopping the vegetables (even making a stir-fry with chicken if you feel particularly creative), preparing the salad, etc.

Packing should be the simplest step if you have adequately done the previous steps. Keep dry food away from wet food and remember to take as much water as you can.

If for some reason you find yourself not having done the four P's and you are at a competition, don't despair. If cafe food is your only option, it's not the end of the world. Try to avoid greasy burgers, fries, and soda. If available, search out healthier choices. See if you can find anything close to soup, salads, baked potatoes, grilled chicken

sandwiches, chili, and yogurt with fruit and granola. Remember, french fries or any of the choices that are high in trans fats wreak havoc on your health and are difficult and slow to digest. This can make you feel sluggish and lethargic.

Having to take the time to think ahead and plan, prepare, prep, and pack can seem annoying when all you want to do is to stay focused on your flight. But can you imagine if you did not bother to prepare your aircraft and do routine preflight planning? You wouldn't think of it. My hope is that you put as much time and effort into the most important instrument you have — your body.

I stand in awe as I watch your routines. You have the precision and the flight skills down to a fine art. Please think about that last bit that can make a wonderful routine into a truly remarkable one, look after that special component, and take your flying to another new level — stay fit to fly!

Author's note: This list is not intended to be comprehensive and may not be right for individuals on special diets. If you are on a special diet, please check with your doctor or dietitian for specific recommendations. These are meant as suggestions only.

IAC

Cyndi Allard is founder of Fit2fly, a health coaching organization, which specializes in helping pilots achieve and maintain a healthy lifestyle. She is a certified personal trainer and health coach. She can be reached at cyndi@Fit2Fly.org.



THE ROAD TO VICTORY... IS CLEARLY MARKED!

With your help, we'll be on that road.

The United States Advanced Aerobatic Team will be challenging the world's best pilots at the 13th FAI World Advanced Aerobatic Championships in Ploiești, Romania, August 15-25, 2018. Sending our team and their aircraft to Romania involves considerable expense. Unlike many foreign governments who subsidize their teams, the United States government provides no financial assistance. Our pilots must pay for their training, ship their own aircraft, and get themselves and their support team to Romania. Your contribution will support them in their quest for gold.

DONATE TODAY!

Help support the US team in their quest for gold!

Visit www.iac.org and click donate.



THE TEAM NEEDS YOU!

Visit www.iac.org for more information about the team and "LIKE" us on Facebook at facebook.com/usaadvancedaerobaticteam

DONATE \$2,500.00

to sponsor a team member's entry fee at WAAC 2018

DONATE \$1,000.00

to move an aircraft 500 miles closer to Ploiești, Romania

DONATE \$500.00

to sponsor a team member's airfare to Ploiești, Romania

DONATE \$100.00

to help with a team member's fuel for one day of practice at Training Camp

DONATE \$50.00


to help with the cost of one day of coaching at Training Camp

The US Advanced Aerobatic Team is selected and administered by the International Aerobatic Club, Inc. IAC is a non-profit, IRS 501(c)3 corporation to which donations may be tax-deductible under the provisions of the Internal Revenue Code.

Photos: A.J. Wilder and Evan Peers.

Maximizing Aerobatic Flight Fitness

by Rick Volker, IAC 23297



Aerobatic pilots unanimously agree on the importance of practicing flight maneuvers to build better stick and rudder skills and to improve the tolerance of increased g-loading. But physical fitness is rarely part of this discussion. Suggestions of how pilots can improve aerobatic physical fitness while on the ground often lead to eyes glazing over. At the national and world championship level of aerobatic competition, pilots possess varying levels of physical fitness. Onlookers can observe a broad spectrum from prime boot camp specimens to doughnut connoisseurs. If pilots can compete at this level without any correlation with physical fitness, why do we need to concern ourselves with earthly ways of improving g-tolerance? Quite simply, modifying our physical condition with an appropriately designed fitness program helps us to better withstand the demands of aerobatic flight, lower our risk of G-LOC, and become more alert and precise pilots in the process.

Aerobatic flying fitness responds to training frequency. Due to the body's own automatic physiologic adaptations, a pilot will see huge

improvements in g-tolerance by increasing aerobatic flight frequency. World-class pilots often train two or three times a day to maximize these adaptations. With a job, a family, financial constraints, and other competing interests, we cannot all fly with enough frequency to maximize our g-tolerance.

Aerobic and anaerobic (strength based) fitness programs also affect g-tolerance and are easier to fit into busy schedules. Resources are available to enable the pilot to develop an individual plan to optimize aerobatic flight fitness.

A pilot's first consideration should be to maintain a healthy body weight and good aerobic and muscular fitness to help the body sustain adequate cerebral blood pressure, stabilize posture during extremes, and permit one to strain with less effort during high g-forces. Think of the body as a column of blood with the heart at the center functioning as a pump that is designed to work effectively at 1g of gravity.

Increased g-forces cause blood to pool in the legs, decrease the blood return to the heart, and challenge the heart's ability to maintain adequate



aerobic practices that cause the resting heart rate to decline to below 55 beats per minute (bpm). Marathon runners and long distance bicyclists commonly have resting heart rates as low as 40 bpm and low blood pressure to match. Many get hypotensive (lightheaded) after standing up too quickly from a supine position, a sign that it will be more difficult to maintain cerebral blood pressure during high g-load.

blood pressure to the brain.

The body possesses several different systems that help regulate blood pressure. G-LOC results when a pilot defeats these systems. An overweight pilot burdens the system with extra tissue to regulate.

Excess mass places additional demands on muscles during extreme g-forces, which distort posture and cause early fatigue. Aerobatic pilots should be aware that excess caffeine or alcohol, overheating, and dehydration decrease g-tolerance by 0.5g to 1g. Large blood sugar variations decrease g-tolerance. Aerobatic pilots benefit from eating prior to aerobatic flight, as an empty stomach allows sagging of the heart during positive g, thereby increasing the heart-to-brain distance to further decrease g-tolerance.

Aerobic Fitness

We all benefit from aerobic fitness.

It lessens fatigue, stabilizes blood sugar, spares muscle mass, and keeps body fat levels in check. Aerobic fitness improves cardiac health, lowers cholesterol, helps prevent many diseases, optimizes brain health, and keeps us flying later in life. Aerobic fitness is not, however, directly correlated with increased g-tolerance. Ideal aerobic fitness requires an additional caloric expenditure of 2,000 to 3,500 kcal (150-300 minutes) per week through aerobic exercise spread over three to five days of activity. This can be steady-paced for longer duration or can incorporate higher intensity intervals in much shorter sessions. Exceeding these time and calorie recommendations work against the aerobatic pilot, as heart rate and blood pressure may decline to lower than desired levels. Several air forces suggest that their pilots restrict participation in extreme

Anaerobic Fitness

Effective strength training (anaerobic exercise) has been proven to provide pilots with the equivalent benefit of wearing a G-suit. In fact, several countries' fighter pilots are required to lift weights. Building a better strength-to-weight ratio is the aim. Strength training improves the ability to contract muscles more strongly during positive g with less effort and fatigue, and can improve g-tolerance by 1g.

It is a myth that strength training will result in the need for a new

INSPECT | REPAIR | RESTORE

Preserving the traditional methods of maintaining ragwing, experimental and certificated aircraft.

We provide support for all modern fabric covering systems.

www.MikesAeroClassics.com
510.520.5654
Livermore, CA 94551

mt-propeller

The Winner's Propeller!

Super Decathlon

Photo: Jim Kocemnik

Patty Wagstaff

Available for almost every aerobatic and experimental aircraft.

Pitts Model 12

MT-Propeller USA, Inc., Florida
 Phone: (386) 736-7762
 Fax: (386) 736-7696
 e-mail: info@mt-propellerusa.com

MT-Propeller Headquarters Germany
 Phone: +49-9429-94090
 Fax: +49-9429-8432
 e-mail: sales@mt-propeller.com

www.mt-propeller.com

wardrobe. Changes in overall body mass or body weight can only be supported by changes in diet or calories burned. Bulky muscles are the result of a runaway appetite, not heavy weights.

Develop Core Strength First

Strengthening the core muscles directly affects the efficacy of g-straining and has shown the highest correlation with improved g-tolerance. As with any exercise, opposing muscles must be kept in balance. Strength training of the abdominals should be done with equal effort expended on the muscles of the lower back to create a solid base of support for the actions of other muscle groups of the body.

Improving leg muscle strength has the next highest correlation with increasing g-tolerance. Strong leg muscles increase venous blood return to the heart and decrease blood pooling to improve blood pressure regulation. Upper body exercises have shown much lower correlation with g-tolerance, but they are important to stabilize the torso and provide better fine motor control of the arms under g-load.

Strength Versus Size

Strength-training principles fall into one of two camps: strength or size. The size, or bodybuilding, camp uses comparatively lighter weights with enough repetitions per set to achieve total muscle exhaustion to induce hypertrophy (increased muscle size) as the prime goal. Rest is limited between sets to accentuate the exhaustion/hypertrophy response. Many isolated exercises are added to change muscle shapes and symmetry, with little regard for strength. A bodybuilding workout results in muscles too exhausted to be in top form for another strenuous activity done later in the same day. Strength is increased, but is secondary to the goal of building muscle size.

The strength camp focuses primarily on building a better strength to weight ratio. Increased muscle size is merely a necessary evil. Strength-based athletes such as weightlifters,

wrestlers, running sprinters, cycling sprinters, and, yes, aerobatic pilots want to get the most strength with the least associated gain of mass. Strength trainers use higher weight loads and a faster speed of movement than bodybuilders do to increase central nervous system synchronization and increase recruitment of fast-twitch muscle fibers. This results in larger increases in strength than in muscle size. Strength workouts are not done to exhaustion and as a result can be structured to leave enough energy for other physically challenging activities in the same day.

Free Weights Are King

Strength training with free weights is superior to any other option, both in the amount of strength that can be gained and in the time in which one can gain results. Free weights train natural movements and avoid individual muscle isolation. Large compound movements such as the barbell squat and dead lift integrate more muscles to provide the best strength results. In contrast, machines isolate muscles to build strength that the neuromuscular pathways cannot efficiently coordinate into real-world movements.

If injury or motivation precludes the use of free weights, limited strength increases can be accomplished with callisthenic exercises. Core exercises, body weight squats, pushups, pullups, and TRX workouts are all options for increasing the power-to-weight ratio to better control the body with less effort and fatigue during high-g flight.

Adapt Your Program to You

As with any new pursuit, go to recognized industry experts and absorb their knowledge and experience to guarantee the best results.

Thankfully, the latest and greatest information is readily available. As a start, the following books provide an introduction to strength training. Pick one and embark on a path to maximizing g-tolerance and minimizing risk. The health benefits will affect everything else in your life.

- *Starting Strength* by Mark

Rippetoe is universally respected at the top of the strength-training world. *Starting Strength* teaches perfect exercise form to prevent injury. It simplifies the strength workout to what has proven to work the best.

- *Practical Programming for Strength Training* by Mark Rippetoe is a part two to *Starting Strength* and helps the reader devise a training plan varying workout volume and intensity throughout the year for maximum results.

- *The Barbell Prescription: Strength Training for Life After 40* by Jonathon M. Sullivan and Andy Baker incorporates the information found in *Starting Strength* and *Practical Programming*, and focuses on the demands and limitations of those who are over 40 years of age. It is the best all-in-one book choice if you are a pilot over 40.

- *Periodization Training for Sports* by Tudor Bompas offers simple and concise planning to lay out a personalized workout schedule throughout the year. If you already know the correct form for the exercises, this book will help you modify your present strength training for best results. It also shows the reader how to structure strength training to excel in many different sports. It is life changing for high school athletes through Olympic athletes.

- *Science and Practice of Strength Training* by Vladimir Zatsiorsky and William Kraemer is essentially a bible of theory and proof for the skeptics.

IAC

Rick Volker is a practicing dentist and former Unlimited category competitor, now in his 14th year of flying air shows in a Sukhoi (+12g/-10g), a Harvard, or one of several Battle of Britain fighters. With a history of competitive bodybuilding, swimming, speed skating, and bicycle racing, Rick is experienced in maximizing the benefits of strength training and sport. He now competes at the world championship level in bicycle track sprint events, using strength training as the foundation.

It doesn't matter what you see, you just have to see it for yourself.

EXPERIENCE OSHKOSH

World's Greatest Aviation Celebration®

EAA AIRVENTURE
OSHKOSH
2018

JULY 23-29

BUY NOW & SAVE!
EAA.org/Experience

The Road to Romania

What happens after Nationals?



by Aaron McCartan, IAC 433420
2018 U.S. Advanced Aerobatic Team Captain

Another U.S. National Aerobatic Championships has come and gone — this one in a new venue. Every year at the competition, we crown national champions in each category, which gives us four names of pilots at the top of their game and leaderboards of many more who are hungry for success. Deep down, each competitor has a goal in mind, be it a championship title, podium finish, or to simply fly in the championships for experience. The other product of the competition is a new aerobatic team to represent the United States.

The U.S. Advanced Aerobatic Team represents the top 10 pilots of the Advanced category. But what happens once we've had our picture taken, been introduced at the banquet, and parted ways? The short answer can be summarized as "a great deal of work." While most competitors head home and start the annual maintenance or await the next year's Known sequence, the team has to focus and immediately start planning. A lot needs to happen in the 11 months from team announcement to participation in the world championships.

This year's team has a nice balance of returning members and new faces. The

talent represented by these outstanding aviators crosses a very wide range of skills, some of which are far beyond aviation yet are beneficial to the cause. The team consists of eight members and two alternate pilots, all of whom will be asked to train and contribute to the initiative going forward.

Initially, Team 2018 held some conference calls to get somewhat acquainted and start discussion of aircraft sharing and logistics. These conference calls commenced in October, less than a month after the conclusion of the national championships. One of the first and most crucial logistical issues was to appoint a team manager. The purpose of a team manager is to run the business of the team so the members can focus on flying. The returning 2017 Unlimited team made abundantly clear the importance of a quality manager and the value that manager Alice Johnson delivered.

The Advanced team explored several options and ultimately decided to hire from the alternate roster. The team manager proposed for approval by the IAC board was Mark Fullerton, one of the alternate pilots and a returning member of the U.S. Advanced Team.

Mark brings experience from team participation in the past and a lengthy list of resources related to international shipping and freight. Through Mark's connections, the team has been able to locate very economical transport to move airplanes to Europe. Mark runs the team in the same manner he runs his personal business affairs — direct and effective. Communication is clear, and any decision-making considers all arguments before finalizing a decision.

Another important selection for the team was the coaching program to develop skills that will lead to a solid standing at the world championship event. This decision is complicated, as each member of the team has followed varying programs to this point and now must standardize on a singular training system. Many of the team members have a long-standing relationship with Nikolay Timofeev, of Ocala, Florida. Nik has a great deal of world-level experience and accomplishments beyond my comprehension. Nik is an effective leader and coach with a very strong drive to succeed. He is very passionate about winning and demands the most from his students. Nik has established a training system that the

team intends to standardize through the remainder of its preparatory months. This training leads to improvements every month and challenges the pilots to deliver under pressure.

The current plan for the team is to run monthly training camps with Nik — the first two were completed in January and February. Nik has made himself available for technical training three weekends of the month. In those camps, the focus will be on maintaining angles, refining snaps/spins, and all the individual components of maneuvers with a slight bent on presentation. When the team gathers as a whole, the camps shift focus to Nik's CIVA++ format in which sequences are required and the challenge level is high. The idea behind the CIVA++ format is to subject the team pilots to challenging Unknown sequences in front of actual judges in a mini-contest format. This is the confluence of psychology and skill; Nikolay is starting to develop contest-like pressure with the more difficult sequences to condition pilots for the world-level environment.

For those who have not followed the CIVA format, which operates at world championship events for powered aerobatics, we have one Free Known program where five compulsory figures are offered and a sequence is designed to fly those, plus five other unique figures of the pilot's choice. The next three sequences are Free Unknowns — each nation submits a figure and those must be assembled into a sequence and flown as one complete flight. This is a departure from the IAC structure and requires a little more improvisation and quick thinking. Nik has done a wonderful job developing a training program to stress the CIVA format!

Over the next few months, there will be updates on team progress, the training program, and the team's journey to the top of the world, including some small biographies to share about each of the pilots, which show the diverse paths that mutually landed all of us together. With the help of Evan Peers, editor of *Sport Aerobatics*, the team hopes to promote its efforts and inspire up-and-coming

competitors to pursue excellence.

Many decisions have been made, and there are still many to go. The team is motivated, organized, and commencing a long journey to represent the United States of America. As one can imagine, this level of commitment of both time and money does require help. As a testament to IAC membership, many fellow IACers have already offered or committed support. With support from all of you, the U.S. Advanced Aerobatic Team can, and will, go for the gold! Go, team USA! **IAC**

Aaron McCartan is the captain of the 2018 U.S. Advanced Aerobatic Team and resides in northwest Iowa. He flies a Panzl S-330 monoplane but remembers his two prior Pitts Specials fondly. Aaron has been a pilot since 1998 and took his first aerobatic lesson two weeks after obtaining his certificate. He joined IAC and competed for the first time in 2007.



Vibeke Gaard and Dagmar Kress
IAC 438348 and 17721
IAC Chapter 12
Colorado

**ROLL
WITH US!**

JOIN today
www.iac.org/join





BRILLIANCE AND BUFFOONERY

BETH E. STANTON, IAC 436050

Screwed on Straight

So, how's your head?

We're all grown ups here (chronologically, anyway). Keeping in fine form physically at aerobatic contests is a simple and boring formula that we already know: stay hydrated, stay fed, protect yourself from the sun, regulate adult beverage intake, and get a good night's sleep. Just because it's simple doesn't mean we'll do it, but there you have it.

The mental mindset we show up with is far more nuanced and interesting indeed. We have diverse personalities, but we also have many things in common. Even the most mild-mannered one among us has a competitive streak a mile long. We like to win, but we also like to have fun. We enjoy the challenge, excitement, shenanigans, and camaraderie of a contest. Because, really, who else would hang around with us for three entire days?

An individual's mindset can determine the quality of their experience at a contest; it affects not only their performance but also how much enjoyment and fun they'll have. We are here because it's fun, right? What follows are certain demeanors observable in the wild at aerobatic contests. Some are conducive to a positive experience, others, not so much.

Psych-Out

After a boneheaded maneuver, we can be super hard on ourselves. A study by the *Harvard Business Review* suggests that people who are self-compassionate are more likely to reach their goals. Excessive self-criticism has been shown to be detrimental. Cutting yourself some slack is not the same as taking yourself off the hook; you can still accept responsibility for the errors you made while looking at your mistakes with some mercy.

Another way to psych-out is dwelling on the potential mistakes you may make and/or have made in the past. This downward-spiral thinking can become a self-fulfilling prophecy. Stop it. Visualize a positive outcome. It works for Olympic athletes; it can work for you.

Fragile Ego

There is a not-so-fine line between healthy self-confidence and the "Look at me, I'm so amazing!" mindset. Have you ever gotten itchy if you haven't been able to casually drop the words "aerobatic pilot" into a conversation within 10 minutes of meeting someone new? Defining one's self-image by *what you do* and not *who you are* is a slippery slope. Seeking external validation in an attempt to fill a maw of neediness is painful. Happiness is an inside job — clinkies, trophies, and likes on social media, while all wonderful, won't fill that void.

Dear hearts, you are worthy and you are loved. Not because you are a badass aerobatic pilot. Just, because.

Humble and Gracious

You don't know who you are because you're all too busy being humble and gracious, but we do. Thanks for being you.

Happy-Go-Lucky

With smiling faces and springy steps, the happy-go-lucky are just so darned happy to be here flying at this contest. Equally excited about seeing cool planes and their friends, their good-natured buzz is infectious. This is the best part of the IAC and contests. Shiny happy people holding hands. Well, figuratively holding hands anyway. The strong point here is the healthy perspective: that we are so lucky to be here, now, doing this extraordinary thing.

Super Helpers

Super helpers make the IAC go round and are happy to do an astonishing amount of work, mostly unsung, behind the scenes. Super helpers include, but are not limited to, chapter officers, contest directors, volunteers, coaches, and safety pilots. The monumental work involved with running the circus of an aerobatic competition boggles the imagination. It's particularly impressive when done cheerfully and seemingly effortlessly. This pitch-in mentality is priceless, and the IAC could not operate without it. We are fortunate to have generous souls who step up to the plate and make our sport possible.

Gay Means Happy

It's kind of like there's a similarity between the Kinsey scale — designed to measure if a person is gay, straight, or in between — and the mental mindset of aerobatic pilots. Statistically, the majority span points along a spectrum with outliers at either end. Depending on the day and mood, we can all slide back and forth along the spectrum. There are lessons we can learn from each other so it works out just fine either way. If you can't be a good example, you can always serve as a horrible warning. Luke Skywalker and Frodo Baggins managed to take the high road in the end — you can, too. Here's to having a healthy (physically and mentally) and happy 2018 season. Live long and prosper, my Precious.

Author's note: I have no idea how the Harvard Business Review, human sexuality studies, Star Wars, and Lord of the Rings got woven into this article. That certainly wasn't the plan when I started.

IAC

AERO

- APR 05 Snowbird Classic • Chapter 89 • X35: Marion County Airport, Dunnellon, FL
APR 13 Hammerhead Roundup • Chapter 36 • L08: Borrego Valley Airport, Borrego Springs, CA
APR 27 Carolina Boogie • Chapter 19 • W03: Wilson Industrial Air Center Airport, Wilson, NC
APR 27 Early Bird 2018 • Chapter 25 • 26R: Jackson County Airport, Edna, TX
MAY 03 Sebring 77 • Chapter 23 • SEF: Sebring Regional Airport, Sebring, FL
MAY 04 Duel in the Desert • Chapter 49 • KAPV: Apple Valley Airport, Apple Valley, CA
MAY 19 2018 Wildwood Acroblast • Chapter 58 • KWWD: Cape May County Airport, Wildwood, NJ
JUN 01 Ben Lowell Aerial Confrontation & 2018 IAC West Open Championship
Chapter 12 • KFMM: Fort Morgan Municipal Airport, Fort Morgan, CO
JUN 01 Coalinga Western Showdown • Chapter 38 • C80: New Coalinga Municipal Airport, Coalinga, CA

- JUN 08 Bear Creek Bash 2018 • Chapter 3 • KRMG: Richard B. Russell Regional Airport, Rome, GA
JUN 09 Giles Henderson Memorial Challenge • Chapter 61 • SLO: Salem-Leckrone Airport, Salem, IL
JUN 15 Ohio Aerobatic Open • Chapter 34 • KEDJ: Bellefontaine Regional Airport, Bellefontaine, OH
JUN 22 Apple Cup • Chapter 67 • KEPH: Ephrata Municipal Airport, Ephrata, WA
JUN 22 Lone Star Aerobatic Championships • Chapter 24 • KGYI: North Texas Regional Airport, Sherman, TX
JUL 13 Green Mountain Aerobatics Contest • Chapter 35 • KVSF: Hartness State Airport, Springfield, VT
JUL 13 High Planes Hotpoxia Fest • Chapter 12 • KSTK: Sterling Municipal Airport, Sterling, CO
JUL 13 The Corvallis Corkscrew • Chapter 77 • KCVO: Corvallis Municipal Airport, Corvallis, OR
JUL 14 Michigan Aerobatic Open • Chapter 88 • 3CM: James Clements Municipal Airport, Bay City, MI
JUL 14 Super D Tango • Chapter 24 • XA68: Akroville Airport, Slidell, TX
AUG 17 Kathy Jaffe Challenge • Chapter 52 • KVAY: South Jersey Regional Airport, Mount Holly, NJ
SEP 01 Viva Santa Maria! • Chapter 26 • KSMX: Santa Maria Public Airport, Santa Maria, CA
SEP 07 Apple Turnover • Chapter 67 • KEPH: Ephrata Municipal Airport, Ephrata, WA
SEP 08 ACE's High Aerobatic Contest • Chapter 119 • KEWK: Newton City/County Airport, Newton, KS
SEP 08 East Coast Aerobatic Contest • Chapter 11 • KHWY: Warrenton-Fauquier Airport, Warrenton, VA
SEP 22 U.S. National Aerobatic Championships • KOSH: Wittman Regional Airport, Oshkosh, WI
OCT 06 The Clyde Cable Rocky Mountain Aerobatic Contest • Chapter 5 • KLAA: Lamar Municipal Airport, Lamar, CO
OCT 19 Akrofest • Chapter 36 • L08: Borrego Valley Airport, Borrego Springs, CA
NOV 01 Sebring 78 • Chapter 23 • SEF: Sebring Regional Airport, Sebring, FL

2018

AEROBATIC CONTEST CALENDAR

Roll with us. Join the International Aerobatic Club through your local chapter, or at www.IAC.org

For the most up-to-date contest listing, visit www.IAC.org/contests

2018 US Advanced Aerobatic Team pilot A.J. Wilder

Poster design and photo by Evan Peers. © Airspace Media & International Aerobatic Club, Inc.



MEET A MEMBER

by GARY DeBAUN, IAC 4145

Jenna Coffman

IAC # 439926

Nickname Sgt. Hot Start

Occupation Front desk at Aspen Flying Club

Chapter affiliation IAC Chapter 12

Age 18



GD: Jenna, you come from a family with very little or no aviation background. How did you discover flying and aerobatics?

JC: I first realized I loved flying during some of the traveling I got to do growing up. I always loved the time in the air and around planes, so I thought, hey, why not do this forever? A good friend of mine I met at my flight school was actually the first one to introduce me to aerobatics. He raved about how fun it was so I had to give it a shot. I was hooked after my first flight.

GD: I know you are majoring in aviation and aerospace sciences at Metropolitan State University of Denver. What are your long-term goals?

JC: Ultimately, I would love to instruct for a while and play a part in the aviation careers of others. My instructors have been some of the most influential people in my life, and I want to be able to play that role for others. I'd also love to spend some time flying up in Alaska, or perhaps become a designated pilot examiner.

GD: When and where was your first contest? How did it go?

JC: I flew out to Newton, Kansas, for my first competition back in September. I had planned to just go as ground crew but went up for my first aerobatic ride and decided to compete the next day. I came in far last, but it was one of the greatest weekends ever. I learned so much, and starting out so low only left room for improvement!

GD: You are brand new to the IAC. What are your impressions of our organization? Do you see anything you would like changed?

JC: So far I love it. The community of people that you encounter at competitions is so incredible. It's amazing

to see some incredibly talented pilots take all of us under their wings, encouraging us, giving us advice, and sympathizing with us when things don't go so well. I've met some really genuine people, and I can't wait to continue expanding the circle of those I've met through aerobatics. So far I don't have many areas for change. I've loved nearly every second of my association with IAC!

GD: If you could have any aerobatic airplane, what would it be?

JC: Oh, gosh. I've not flown aerobatics in anything but the Extreme Decathlon, so that's near and dear to my heart. I think a black and red one would be super cool.

GD: Whom in our sport do you look up to for inspiration?

JC: I'm really pretty new to the aerobatic world, but both of my coaches have been super pivotal in my growth. Dagmar Kress is one of the sweetest, most generous, and talented women I've ever met, and having her as a resource for whenever we have questions or need help is invaluable. And Nick Slabakov has quite literally been behind me since day one. He safety-piloted for me in my first two competitions and has practiced with me so much. He's really good at calming me down before a sequence, getting me to breathe and take it one figure at a time, which I really appreciate. Without the two of them I'm not sure I would make it very far in this sport.

GD: What is your favorite figure to fly so far?

JC: I really like spins. They can certainly be disorienting, and have messed me up a time or two when I get them wrong, but I like that they can be challenging. As I've continued working on getting them just right, I've grown fairly attached to them. I like that something that can seem scary to the straight and level world of flying is something I can learn to deal with with relative ease.

You Can't Scare Us!

We Can Teach ANYONE to Land a Pitts!

- 44 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 Aviation, LLC**

602-738-2045 - buddairbum@cox.net - Phoenix, AZ 85028

Visit us at www.airbum.com

GD: How was your Tequila Cup experience?

JC: The Tequila Cup was such a blast. It was my last competition of the season, so I felt like I had a little bit of experience under my belt to work off of, and I'm pretty sure it was the biggest competition I went to. It was really cool to venture further out of my comfort zone and meet more people from all over. I really enjoyed that. I ended up messing up one of my flights pretty badly and came in last in the competition, but I was talking with Robbie, one of the women I met down there, and she was talking with me about how important it is to fly because you love it and to fly for you, rather than for any other reason or person. It came at a pretty important time for me, and that advice has really stuck with me. I also got to work with a pretty great judging team at the Tequila Cup, and I learned a lot from them, too.

GD: What's your position in the Civil Air Patrol? How does it relate to your aerobatic flying, if at all?

JC: I'm currently cadet commander of my CAP squadron, which can be quite the adventure. I wouldn't say it directly relates to flying aerobatics, other than that I have a lot to learn still in both worlds. I think the main connection I could pull is the help I can get from others — those who have more experience and are willing to share with me are extremely important to both areas.

GD: Do you have any interests outside of flying?

JC: I really like taking pictures. If my camera weren't so heavy, I would take it with me everywhere, and on all our trips I'm often left behind because I stopped to catch a picture of sunspots through a doorway or something of the sort. I also like to go swing dancing any chance I get — it's my usual celebration after checkrides and such. **IAC**

We've got your guides!



**ON SALE
NOW
\$5.00**



IAC Technical Tips Manual Volume 1

Published in 1981, 140 pages. Articles from *Sport Aerobatics* 1971 to 1979. Contains many articles about older airplanes..

IAC Technical Tips Manual Volume IV

Published about 1990, 192 pages. Articles from *Sport Aerobatics* 1987, 88.

www.IAC.org/store



SMOKE SYSTEMS & OIL
419-360-7414
WWW.SMOKE-SYSTEM-HELPER.COM

**YOU COULD
HAVE
AN
AD IN
SPORT
AEROBATICS**



Contact Sue Anderson
at 920-426-6127 or
sanderson@eaa.org



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
Cell 410-353-2622 E-mail wbfinafin@cs.com

**SPORT AEROBATICS,
WARBIRDS OF AMERICA and
VINTAGE AIRPLANE**

Classified Word Ads: \$5.50 per 10 words,
100 words maximum. Classified ads may
be submitted online at https://secure.eaa.org/advertising/classified_ad.html

*It's Easy to Advertise with
EAA's Classifieds!*

★ **AcroBelt** ★
5-Point Ratchet Seatbelt System
Customized To Fit Your Aircraft
Details at:
www.SilverParachutes.com
plus
• Largest Dealer for Softie Parachutes
• Great Deals on New & Used Parachutes
• S.M.A.K. PAK™ Parachute Survival Kits
• Bailout Safety Seminars Worldwide
Silver Parachute Sales & Service
Phone: 209-532-7070
Email: Allen@SilverParachutes.com

**IN THE
LOOP**



To subscribe:
www.EAA.org/newsletters

For the latest in IAC Merchandise shop

www.iac.org/store
Or call 800-564-6322

ADVERTISER	PAGE	WEBSITE	PHONE
Butler Parachutes	13	www.butlerparachutes.com	888-235-3280
EAA AirVenture	25	www.EAA.org/Experience	
EAA/Falcon Insurance	BC	www.EAA.org/Insurance	866-647-4322
Ford Motor Company	IFC & 11	www.Ford.com	800-392-3673
Harvey & Rihn Aviation Inc.	5	www.HarveyRihn.com	281-471-1675
IAC Collegiate Apparel	5	www.iac.org/legacy/collegiate-program-rules	
IAC Roll With Us	27	www.iac.org/join	
IAC Tech Tips Manuals	31	www.iac.org/store	
IAC Advanced Team	21	www.iac.org/advanced-aerobatic-team-2018	
Mike's AeroClassics Inc.	23	www.MikesAeroClassics.com	510-520-5654
MT-Propeller	23	www.mt-propeller.com	386-736-7762
Para-Phernalia	IBC	www.SoftieParachutes.com	360-435-7220
Plus 5 Aviation, LLC	31	www.Airbum.com	602-971-3991

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



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



© 2016 Experimental Aircraft Association, Inc.

A WHOLE NEW WAY TO ROLL

The EAA and International Aerobatic Club Aircraft Insurance Plan has all the special coverage options IAC Members require for recreational aerobatics, aerobatic competition and practice, airshow performances, and aerobatic flight schools. Visit **EAA.org/Insurance** today for the right coverage at the best price for you.



Aircraft | Personal Non-Owned | Powered Parachute & WSC Trike | Accidental Death & Dismemberment | Flight Instructor | Hangar | Airport

 **Insurance Solutions**

Administered by Falcon Insurance Agency, Inc.

EAA.org/Insurance | 866.647.4322

When you insure with the EAA Aircraft Insurance Plan you are helping IAC promote and enhance the safety and enjoyment of aerobatics.