

Racine EAA Chapter 838 Monthly Newsletter January 2016 Volume XXVIII Issue 1 http://eaa838.org/

Meetings Third Thursday's 7:00 pm Social at 6:30 pm

Welcome again to <u>your</u> EAA Chapter 838 monthly newsletter. I need your assistance with articles. Please email anything that you would like me to include in a future newsletter to me at <u>newsletter@eaa838.org</u>.

# **President's Corner**

Happy New Year from your new president. I would like to take this opportunity to thank Daryl for his two years as president. He moved us forward, and I hope that I can continue with that in mind.

For those that do not know me, let me tell you a little bit about myself. First of all, I am not a pilot. I have been involved with EAA Chapter 838 for over 20 some years, when my daughter Carolyn joined Aviation Explorer Post 218 when she graduated 8<sup>th</sup> grade. I have served on the Post 218 Exploring Committee, and as co-advisor. I am also a Co-Chairman of the Aviation Explorer Base in Oshkosh for AirVenture. Thousands of Explorers from across the USA and England have camped and volunteered at the Explorer Base the past 27 years. I also assisted Jerry Baker in our younger youth group, initially called Young Aviation Enthusiasts and now our Aviation Explorer Club.

I was elected to the Chapter 838 board over 8 years ago as one of your Directors. Except for this year, I have been chairman for the previous six Monopoly fundraisers, which raised over \$40,000 for the chapter. I was out of the country walking on a 7 week pilgrimage across Spain before this year's event, but Daryl and Kim Lueck took over for me this year. After the chapter board agreed to have a landscaper do some much needed work around our building last summer, the landscaper offered to level out the patio bricks for no extra cost. We purchased extra bricks to fill the hole where the box elder tree used to be. The tree was cut down because it was the cause of all the bugs inside our building. I thought that a good way to help pay for the bricks and to have additional income for the chapter, was to well additional personalized bricks for the patio. I hope that you will please consider buying a brick for your family or company to help EAA Chapter 838 in this fund raiser.

I hope that you will help our chapter move forward. I have a couple of ideas which we will work on this year.

- First, our Saturday chapter picnic in August recently has had very low attendance. So we will move the picnic to our normal third Thursday evening in August. We hope you come with your spouse or guest.
- Second, I want to determine whether we should move the night of our membership meetings. Is the Third Thursday the best, or perhaps the Third Wednesday, or perhaps another day of the week. I will be sending out a survey asking for your opinion of the best night.
- Do you have any ideas to help the chapter?
- Do you have any suggestions on getting more people to our monthly meetings?
- Do you have any suggestions on anything else?

Please contact me.

Ken Sack kensack@yahoo.com 262-488-3807

# **Next Meetings**

January 21 – Rob Madson will talk about Helicopter Flying – What fixed wing pilots should know about helicopters.

# **Note from Dave Finstad**

Thanks to everyone who have responded to my letter about renewing your membership. For those of you that have not responded, please do so ASAP to remain in good standings with your membership.

Most members have a December 31 expiration date on their chapter membership. Please renew now.

# **EAA Technical Counselors and Flight Advisors**

As part of Chapter 838 EAA annual registration, they ask if we have any Technical Counselors or Flight Advisor.

Ralph Skorupa is on the EAA data base as a Technical Counselor. Do you or do you know anyone else who meets the guidelines? Please let me know. The link to each guideline follows:

Technical Counselors: <a href="http://www.eaa.org/en/eaa/aviation-communities-and-interests/homebuilt-aircraft-and-homebuilt-aircraft-kits/eaa-homebuilt-airplane-programs-and-resources/eaa-technical-counselor-program/learn-more-about-eaa-technical-counselors-program</a>

Flight Advisor: <a href="http://www.eaa.org/en/eaa/aviation-communities-and-interests/pilot-resources/eaa-flight-advisors-program/learn-more-about-eaa-fligh

# **Christmas Party**

We had a great time at the annual Christmas party. If were not able to attend, you missed a great time. Here are a few pictures.





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# EAA Chapter 838 Eagle Overlook Terrace Paving the Way for Continued Excellence







#### Contact Ken Sack at 262-488-3807 Or email at kensack@yahoo.com

Racine's EAA Chapter 838 is known to be one of the finest EAA Chapters in the world. Its beautiful and well maintained facility has no EAA peers anywhere. For the past twenty five years, it also has an unrivaled reputation for developing outstanding aviation related educational programs including Young Eagles, Aviation Explorer Post 218, Aviation Explorer Club Post 5218, and Young Aviators.

Can you recall your first visit to Chapter 838? Did you--or someone you know-- experience the thrill of a Young Eagles first flight? Or attend a Chapter 838 monthly meeting and enjoy the experiences and perspectives of one of our outstanding guest speakers? Or, was it at one of our delicious pancake breakfasts? Perhaps it was a visit to our summer Young Aviator Program. Whatever the event or circumstances involved, we trust that you had a pleasant and memorable experience.

One of the special areas around Chapter 838 is the outdoor gathering and viewing terrace that overlooks the John H. Batten International Airport. This area is paved with personalized memorial bricks. It is dedicated to past and present individuals who have assisted and encouraged young people who share the dream and excitement of flight.

We would like to add your name to this elite group. Here's how. Individuals, loved ones, families, businesses, community groups and friends can have personalized bricks engraved and installed in our viewing terrace. For as little as \$100 a four inch by eight inch engraved brick can serve as a visible token of your support for EAA Chapter 838 and our youth oriented aviation programs. In addition, each brick sponsor will receive a "Certificate of Ownership" suitable for framing. For more details please refer to the attached instructions and ownership options.

# **Types and Cost of Bricks**

\$100

4 inch x 8 inch Brick – three lines with 14 characters per line.

EXAMPLE:

John L. and John M. Laurelle OR Smith

Smith Family EAA 123456

\$300

8 inch x 16 inch Family Memorial Master Brick – Six lines with 28 characters per line.

\$500

8 inch x 16 inch Corporate Logo Master Brick — Six lines with 28 characters per line. Your logo will be engraved and reproduced in black epoxy. Any size sample or mat can be used if it is sharp and in good condition.

#### Contact Ken Sack at 262-488-3807 Or email at <u>kensack@yahoo.com</u>

# **Order Form**

Purchaser's Name	
Address	
City State Zip	
Email Address	
Phone Numbers	
4 inch x 8 inch \$100 brick for two persons, families,	or one individual with EAA#.
Line 1	
Line 2	
Line 3	
8 inch x 16 inch \$300 brick (\$500 for corporat	ee Logo)
Line1	
Line 2	
Line 3	
Line 4	
Line 5	
Line 6	



# **Monopoly Night Fun and Games 2016**

Watch this space to hear about our Eighth Annual Monopoly Night, EAA Chapter 838's 2015 Fall Fundraiser



# **Chapter 838 Young Eagles for 2016**

Young Eagles 2015 was a huge success! Our intrepid pilots provided 166 separate flight experiences for Young Eagles, many of these first timers. We also had several youth return every month and become increasingly interested in learning more about aviation, with some even joining our Explorer Post. Our ground school was expertly taught by our Explorers, and they continues to tell Sean's jokes even in his absence.

We are taking a brief recess, but will be back and rested and ready to go in the spring.

Dates for 2016 are: March 12, April 9, May 14, June 11, July 9, August 13, September 10, October 8, and November 12.

Tracy Miller EAA #794015 Young Eagles Coordinator EAA Chapter 838



# **Aviation Explorer Club Post 5218**

This is part of our youth education, and is for co-ed middle school students.

I will be contacting youth who have taken Young Eagle rides the past two years, and see if they are interested in 2016. If we have enough interest, Jerry Baker and I will consider starting the program probably in April or May.

However, we need more adult assistance. If you can help organize/coordinate a meeting or two, please let me or Jerry know. You will not have to attend all meetings, just when we need support. <u>If we do not get additional assistance from chapter members, we will not start the program this year. Youth education is an important mission of EAA Chapter 838. We need your support.</u>



# **Aviation Explorer Post 218**

We need assistance with Explorer Post 218. Alex Clement, one of our co-advisors has accepted a new aviation job in Appleton, so he will not be as available as he has been. Nick Fisher is another co-advisor who has been accepted into an upcoming three month long FAA training program to be one of next ATC Controllers somewhere in the USA. We have two other individuals who have graduated from our Exploring program who are helping out Post 218 as adults. They are John Grueter, and Rebecca Przybylski. We need a few more adults who are willing to help out when needed. Please let me know if you would like to help.

In January, Aviation Explorer post 218 is replacing its normal Thursday evening meeting with a lock-in on Friday January 15th. They will meet at the chapter building at 7:00 PM on Friday, where they will hold their annual holiday pizza party. They welcome and invite all college students and past members to come share their experiences with the post. At 10:00 PM they will lock the gates to the airport; all registered Scouts, youth with permission forms, and adults over 21 who have completed BSA Youth Protection Training are welcome to join us for the lock-in. Saturday morning they will re-open the gate at 7:00 AM and have breakfast before departing. Parents and guardians are welcome to bring breakfast items after 7:00 AM.

#### **Letter from the NBAA through CABAA:**

From: "Sandy Frentz" < info@cabaa.com > Date: December 22, 2015 at 10:50:08 CST

**To:** <info@cabaa.com>

Subject: A letter from CABAA President Ed Forst and NBAA President Ed Bolen, Call to Action!!

**Reply-To:** < info@cabaa.com>

Dear NBAA and CABAA Members,

As we head into the final days of 2015, the general aviation community has once again been served with a fresh reminder of the very real threat to the industry from a proposal from the airline lobby that would create a privatized Air Traffic Control (ATC) system, funded through user fees, as part of legislation for the upcoming reauthorization of the Federal Aviation Administration (FAA).

Let me explain the situation, and the actions NBAA needs you to take in response.

Earlier this week, in Washington, DC, multiple CEOs from many of the nation's largest airlines gathered with their association president for a press teleconference to call for privatizing ATC and funding it with user fees. If anyone doubted the CEOs' intention, a resulting USA Today headline made it clear: "Airline executives urge privatization of air-traffic control."

The reason for the timing of the airlines' push for this proposal is simple: Congress has just concluded its work on a separate measure for highway funding, and it is likely that FAA reauthorization will be the next major transportation measure taken up by lawmakers.

With an eye toward this scenario, the airlines are readying for the coming battle over ATC privatization funded by user fees, and we must do likewise. The business aviation community must once again also band together in active opposition to such a proposal.

You can do that now, by using NBAA's Contact Congress resource.

Our continued mobilization on this issue is critical – in calling for ATC privatization, the big airlines want nothing less than a system they define and control for their own benefit. Under such a setup, Congress would be stripped of its long-standing authority over aviation-system governance, which safeguards the public's interest, including the companies and small communities that rely on general aviation.

That role would instead be relegated to a self-serving "board" or similar entity, equipped with sweeping authority to make decisions in the airlines' business interests – for example, determinations about where and when companies using business aviation can fly, how much it will cost to do so, which community airports will (or won't) be given priority, and what type of payment, including user fees, will be demanded of operators.

As NBAA members know, I have been raising concerns about this matter for some time, in testimony before Congressional lawmakers, and in policy forums hosted by such diverse interests as the U.S. Chamber of Commerce and the Air Traffic Controllers Association. NBAA members, local business aviation groups and others have likewise been weighing in, alerting Congress to this concern.

As the year draws to a close, we in business aviation have an important opportunity to alert Congress once again. Lawmakers will soon return to their states and Congressional districts for the holidays – by

using Contact Congress now, we can let them know that when they are at home, they will hear from constituents about this issue. By meeting with elected officials in the coming days and weeks, we can also make our voices heard. By discussing the issue at seasonal community events, we can prompt others to take action.

In short, by remaining mobilized on this issue, we can help shape our destiny on a matter of critical importance to business aviation.

Ed Bolen NBAA President & CEO

Don Hitch Chair, NBAA Local and Regional Group Committee (661) 474-0168



#### Thanks,

Sandy Frentz Chicago Area Business Aviation Association 37176 N. Cremona Avenue Lake Villa, IL 60046 ph: 847-459-2065

#### **FAA Safety Team | Safer Skies Through Education**

FAA Announces Small UAS Registration Rule Notice Number: NOTC6328

Press Release – For Immediate Release

December 14, 2015

Contact: Les Dorr or Alison Duquette

Phone: (202) 267-3883

Registration will be free for the first 30 days!

**WASHINGTON** – The U.S. Department of Transportation's Federal Aviation Administration (FAA) today announced a streamlined and user-friendly web-based aircraft registration process for owners of small unmanned aircraft (UAS) weighing more than 0.55 pounds (250 grams) and less than 55 pounds (approx. 25 kilograms) including payloads such as on-board cameras.

The Registration Task Force delivered recommendations to FAA Administrator Michael Huerta and Transportation Secretary Anthony Foxx on November 21. The rule incorporates many of the task force recommendations.

"Make no mistake: unmanned aircraft enthusiast are aviators, and with that title comes a great deal of responsibility," said U.S. Transportation Secretary Anthony Foxx. "Registration gives us an opportunity to work with these users to operate their unmanned aircraft safely. I'm excited to welcome these new aviators into the culture of safety and responsibility that defines American innovation."

Registration is a statutory requirement that applies to all aircraft. Under this rule, any owner of a small UAS who has previously operated an unmanned aircraft exclusively as a model aircraft prior to December 21, 2015, must register no later than February 19, 2016. Owners of any other UAS purchased for use as a model aircraft after December 21, 2015 must register before the first flight outdoors. Owners may use either the paper-based process or the new streamlined, web-based system. Owners using the new streamlined web-based system must be at least 13 years old to register.

Owners may register through a web-based system at: www.faa.gov/uas/registration

Registrants will need to provide their name, home address and e-mail address. Upon completion of the registration process, the web application will generate a Certificate of Aircraft Registration/Proof of Ownership that will include a unique identification number for the UAS owner, which must be marked on the aircraft.

Owners using the model aircraft for hobby or recreation will only have to register once and may use the same identification number for all of their model UAS. The registration is valid for three years.

The normal registration fee is \$5, but in an effort to encourage as many people as possible to register quickly, the FAA is waiving this fee for the first 30 days (from Dec. 21, 2015 to Jan 20, 2016).

"We expect hundreds of thousands of model unmanned aircraft will be purchased this holiday season," said FAA Administrator Huerta. "Registration gives us the opportunity to educate these new airspace users before they fly so they know the airspace rules and understand they are accountable to the public for flying responsibly."

The online registration system does not yet support registration of small UAS used for any purpose other than hobby or recreation – for example, using an unmanned aircraft in connection with a business. The FAA is developing enhancements that will allow such online registrations by spring of 2016.

The full rule can be viewed here: www.faa.gov/news/updates/media/20151213\_IFR.pdf

For questions regarding this notice, contact Ken Kelley, AFS-850 by email at Ken.R.Kelley@faa.gov or by telephone at (775) 858-7700 Ex 258.

This notice is being sent to you because you selected "General Information" in your preferences on FAASafety.gov. If you wish to adjust your selections, log into https://www.faasafety.gov/Users/pub/preferences.aspx where you can update your preferences.

# **Welcome New Chapter Members**

None since the last newsletters

# **Monthly Meetings**

Board Meetings: Second Wednesdays 7:00 pm

Chapter Meeting: Third Thursdays

Social 6:30 pm Meeting 7:00 pm

Shop Night Every Monday 7:00 pm

Explorer Post 218 Second Thursdays 7:00 pm and Fourth Thursdays 7:00 pm

Young Eagles Second Saturday 9:00 am (March - November)

# **Upcoming Meetings & Speakers**

January 21 – Rob Madson will talk about Helicopter Flying – What fixed wing pilots should know about helicopters.

#### PAST:

December 4 – Christmas Party – There was no regular meeting in December.

Nov 19 – Chapter member John Grueter talked about Kitfox building, transition training, and mountain flying. Oct 15 –A presentation on their experiences as B-17 flight crew serving with the Eighth Air Force in WWII.

July 16<sup>th</sup>- Milwaukee County Fire Dept talked about fire and rescue operations at General Mitchell Airport.

June 18<sup>th</sup>-Flight For Life pilot talked about aircraft and operations of Flight For Life.

May 21st-A presentation on his great uncle's B-24 Bomber (Ready, Willing & Able) crew in WWII.

Apr 16th - A presentation on Drones, their history and current issues with their increasing numbers in the sky.

Mar 19<sup>th</sup> - Wayne Peach told war stories about aircraft maintenance during AirVenture

#### **Officers**

President: Ken Sack	262-554-9714
Vice President: Scott Sherer.	414-427-2913
Secretary: Tracy Miller	847-420-5098
Treasurer: Oliver Kottke	262-939-5567
Foundation: Jerry Baker	262-939-0091
Past President: Daryl Lueck	. 414-333-4228

#### **Directors**

John Grueter	262-358-3648
Eddy Huffman	262-639-8301
Roy Stuart	262-884-0371
Nick Fisher	262-498-6266
Carl Bumpurs	262-497-6446
Jim Hantschel	262-637-3376

#### **Committee Chairpersons**

Programs: Rick Goebel 262-886-4171
Monday Shop: Jerry Bovitz 262-639-8583
Librarian: Eddy Huffman 262-639-8301
Membership: Dave Finstad 262-752-0086
Newsletter: Ken Sack 262-554-9714
Young Eagles: Tracy Miller 847-420-5098

Chapter Messaging (262) 634-7575 Location: 3333 N. Green Bay Rd. Racine, WI 53404

# **Special Performance in our Museum**

Choral Arts Society of Southeastern Wisconsin
Broadway and Jazz After Five Featuring Jack Grassel and Jill
Jensen
Saturday, May 7, 2016, 7 PM
EAA Chapter 838, 3333 N. Green Bay Rd, Racine, WI 53404



CAS will glide you up the swinging side of the street in the "Moonglow" with guest jazz artists Jack Grassel and Jill Jensen for "Some Enchanted Evening" on Saturday, May 7, 2016, 7 PM in EAA Chapter 838, 3333 N. Green Bay Rd., Racine, WI. Swoon and sway to a glittering collection of song jewels: precious standards from the "Great American Songbook," dazzling jazz rhythm tunes, cool bossa nova, lush torch songs and beloved Broadway show-stoppers. "Let's Face the Music and Dance" with Irving Berlin, Rogers & Hammerstein, Duke Ellington, Harold Arlen, Johnny Mercer, Antonio Carlos Jobim and the Gershwins. Multi-instrumentalist Grassel plays his invention, a triple-neck (guitar, bass, mandolin) to improvise 'sheets of sound' complementing Jensen's powerful and soulful vocals. While we "Say it with Music," you'll enjoy light snacks provided by the chorus to go with wine, beer and soft drinks from the cash bar courtesy of the EAA Chapter.

Mr. Grassel is a jazz artist known for his adventurous concerts, books, inventions, CDs, compositions, and extraordinary musical abilities which include perfect pitch. He is a multi-instrumentalist, instrument inventor, and jazz educator. Jill Jensen is well known for delighting audiences as a jazz singer, actress, voice talent, and television personality throughout Wisconsin, Illinois, and the Midwestern United States. <a href="https://www.jackandjilljazz.com">www.jackandjilljazz.com</a>

Chapter 838 is a part of the Experimental Aircraft Association (EAA), and is active in promoting aviation interests and education to the community at large. It is based at Batten Airport (RAC) in Racine, Wisconsin. Featured activities include monthly chapter meetings, an active Homebuilder's Night, youth education programs, and ground school classes. Chapter 838 maintains the Southeast Wisconsin Aviation Museum. <a href="https://www.eaa838.org">www.eaa838.org</a>.

The Choral Arts Society of Southeastern Wisconsin is in its 29<sup>th</sup> season under the direction of James Schatzman. Over 65 singers comprise this auditioned volunteer community chorus, whose repertoire has included a wide variety of major works. The organization provides exposure to and performance of diverse styles of choral music to benefit the singer and the community. Please visit <a href="https://www.choralartsonline.org">www.choralartsonline.org</a>.

Tickets: Adults \$15, Seniors \$12, Students \$5. Advance tickets available at Personal Touch Florists in Racine at 4060 N. Main St. or 5445 Spring St., online at <a href="www.choralartsonline.org">www.choralartsonline.org</a>, or at the door. Contact the CAS by E-mail admin@choralartsonline.org, or call 262-634-3250.

This concert is supported in part by a grant from The Racine Arts Council's ArtSeed Grants Program, funded by The Osborne and Scekic Family Foundation and the Wisconsin Arts Board with funds from the State of Wisconsin.

Julia Suchy, Administrator, Choral Arts Society of Southeastern Wisconsin 800 Center St., Rm. 122, Racine, WI 53403 262-634-3250 admin@choralartsonline.org



Jack Grossel and Jill Jensen

A few pictures from the Choral Arts Society performance in the EAA Chapter 838 Museum last year.



From eaa.org:

# BUY YOUR EAA AIRVENTURE OSHKOSH TICKETS

http://www.eaa.org/en/airventure/eaa-airventure-tickets

In addition to preferred pricing on admission for you, your family, and your guests, you'll also receive discounts on food, airplane rides, and selected merchandise.

AirVenture 2016 dates: Monday, July 25 - Sunday, July 31. You may purchase a daily ticket for any of the seven days, or a weekly pass, which includes all seven days.

Purchase your tickets online through June 15, 2016 and save \$5 on all weekly adult tickets and \$2 on all daily adult tickets.

# **Camp Scholler Improved Site Reservations Going Online**



Photo credit: Mike Steineke

**November 25, 2015** - The number of improved campsites at EAA AirVenture's Camp Scholler is increasing for 2016, and a new system will help people secure those campsites more quickly and easily. The system for campsites with electricity and water connections will now be available online when campsite

purchases begin in late June 2016. It will be possible to check the Camp Scholler website to see how many improved campsites are still available, where they are located, and the cost of securing them from that date through the final day of AirVenture.

"This system will be easier for EAA members securing these popular campsites, as they can check availability 24 hours a day," said Rick Larsen, EAA's vice president of communities and member benefits. "It will eliminate the delays sometimes encountered when trying to reserve via phone. It will also ease the burden on our Camper Registration staff, who are also welcoming arrivals to the AirVenture grounds at the same time." This feature will be added to the EAA website on June 24, 2016, the same day Camp Scholler opens for those wishing to acquire a campsite for AirVenture 2016 on July 25-31. As always, campsite charges begin on the day of purchase through the end of the event.

This online system is only for improved campsites. Regular camping is currently available to pre-purchase through the AirVenture advance ticket website, or in person on a first-come, first-served basis at Camp Scholler registration beginning on June 24.

# From eaa.org/airventure: Snowbirds Include AirVenture 2016 on Schedule Team's first appearance at Oshkosh since early 1980s

http://www.eaa.org/en/airventure/eaa-airventure-news-and-multimedia/eaa-airventure-news/2015-eaa-airventure-oshkosh/12-22-2015-snowbirds-include-airventure-2016-on-schedule?mkt\_tok=3RkMMJWWfF9wsRokuqrPZKXonjHpfsX66u4oWKGg38431UFwdcjKPmjr1YEBSsd0aPyQAgobGp5I5FEBS7DYT6V1t6UKWA%3D%3D



The Canadian Forces Snowbirds, one of the most popular military aerial demonstration teams in the world, announced EAA AirVenture Oshkosh 2016 as part of its schedule, which would be the first time the team would be back at Oshkosh in more than 30 years.

EAA AirVenture Oshkosh, the 64th annual Experimental Aircraft Association fly-in convention known as the World's Greatest Aviation Celebration, is July 25-31 at Wittman Regional Airport in Oshkosh, Wisconsin. The Snowbirds are currently scheduled to have a public practice over the grounds on Friday, July 29, with full performances as part of the daily afternoon air show on Saturday and Sunday, July 30-31. The Snowbirds, officially designated as 431 Air Demonstration Squadron, were created in 1971 and have a nearly 40-year connection to EAA, as they were the first military team to perform at Oshkosh when they flew over the EAA fly-in in the 1970s. They have not appeared at Oshkosh since 1983, as their primary schedule commitment each year is to Canadian air shows.

"It is truly thrilling to have the Snowbirds schedule an appearance at Oshkosh for the first time in more than 30 years, and we can now begin working through the logistics necessary to support the team," said Rick Larsen, EAA's vice president of communities and member services, who coordinates AirVenture features and attractions. "Longtime EAA members and Oshkosh attendees speak fondly of the elegant precision aerobatics that the Snowbirds brought to the EAA fly-in, and have often asked when they would return. We were very happy to discover that EAA AirVenture 2016's dates and the Snowbirds' schedule availability aligned and we could welcome them back to aviation's family reunion at Oshkosh."

The Snowbirds fly Canadair CT-114 Tudor jets in approximately 60 air shows each year. The nine aircraft used in the performances are piloted by experienced team members from the Royal Canadian Air Force. During the show, the pilots fly at speeds ranging from 110 to 465 mph (180 to 750 km/h) and in formation with distances as close as 4 feet of wing overlap. Comprised of exciting loops, rolls, and solo passes as well as graceful nine-jet formations, the Snowbirds' show includes more than 50 different formations and maneuvers over each 35-minute performance.