

# **MIDWEST FLYER**

**MAGAZINE**

DECEMBER 2009/JANUARY 2010



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**ON THE COVER:** This 1936 Lockheed 12A Electra Junior was one of two Electras used in the filming of the new motion picture "Amelia," starring Hilary Swank and Richard Gere. Complete story and review beginning on page 30.

*Photo by Michelle Shepherd*

## COLUMNS

<b>AOPA GREAT LAKES REGIONAL REPORT</b> - <i>by Bill Blake</i>	
We All Benefit From Air Tours .....	10
<b>AVIATION LAW</b> - <i>by Greg Reigel</i>	
FAA Publishes Final Rule Updating FAR Parts 61, 91 & 141 .....	17
<b>DIALOGUE</b> - <i>by Dave Weiman</i>	
Television Station Slams Use of Corporate Aircraft by Utility Company, Despite Fact That Station Owners Are Pilots .....	5
<b>GUEST EDITORIAL</b> - <i>by Craig Fuller</i>	
Live Well, Be Well, Fly Well .....	10
<b>HIGH ON HEALTH</b> - <i>by Dr. John Beasley</i>	
Help Your Doc Get It Right! .....	16
<b>INSTRUMENT FLIGHT</b> - <i>by Richard Morey</i>	
The Scan... Knowing What To Glance At & When .....	12
<b>MINNESOTA AERONAUTICS BULLETIN</b> - <i>by Christopher Roy</i>	
You Are The Key To Safe Aviation .....	44
<b>WISCONSIN AERONAUTICS REPORT</b> - <i>by Jeffery Taylor</i>	
Think Twice Before Flying In Ice .....	41

## FEATURES

ASTM Compliance For Special Light Sport Aircraft: Major Repairs & Alterations - <i>by Carol Carpenter</i> .....	18
Top Industry Leaders Speak As "One Voice" At AOPA Summit - <i>by Dave Weiman</i> ....	22
Amelia's Real Leading Lady...	
Joe Shepherd's Lockheed 12A Electra Junior - <i>by Steve Schapiro</i> .....	38
Love Was In The Air At AOPA Summit - <i>by Steve Schapiro</i> .....	40
Terrorism & War Risk Insurance - Do You Really Need It? - <i>by Jeff Rasmussen</i> .....	42
Safety & Awareness Go Hand In Hand - <i>by Dan McDowell</i> .....	44
Never Fly With Inoperative Equipment - <i>by Bob Martens</i> .....	45
From The Hudson To Toulouse, From Right Seat To Left...	
Flying The World's Largest Commercial Airliner - The Airbus A380 - <i>by Jeff Skiles</i> .....	52
From GA To The Airlines & Back... Jeff Skiles Buys A Waco! - <i>by Dave Weiman</i> .....	56

## HEADLINES

AOPA, NBAA Announce Memorandum of Understanding To Promote Use of Light Business Aircraft .....	29
Motion Picture "Amelia" Excites Audiences About Flight While Telling Story of An American Adventurer .....	30
Air Show Performer To Finance Aviation Films .....	39
MATA Hosts "Total" Aviation Business Conference .....	46
Northern Exposure Aviation Expo In The Twin Cities .....	50
Minnesota Business Aviation Association (MBAA) Proposes Increasing Fuel Tax On Turbine Aircraft & Reducing Aircraft Registration Fees .....	51
EAA Names U.S. Airways Flight 1549 Pilots Skiles & Sullenberger To Lead EAA Young Eagles Program .....	55



## SECTIONS

Awards & Recognition .....	28
Book Review .....	49
Calendar .....	59
Classifieds .....	60
Education .....	55
Fly-Ins & Air Shows .....	62
Grassroots Aviation .....	56
Minnesota Aeronautics Bulletin .....	44
Minnesota Aviation Industry News ..	46
Motion Picture Review .....	30
People In The News .....	58
Sport Pilot - Light Sport Aircraft .....	18
WATA Difference .....	42
Wisconsin Aeronautics Report .....	41



# Television Station Slams Use of Corporate Aircraft by Utility Company, Despite Fact That Station Owners Are Pilots

by Dave Weiman

Last month we reported on the *USA Today* story that slammed federal support of general aviation airports. The article was intended to outrage the public over taxpayer dollars being spent on general aviation airports, when air carrier airports are supposedly more deserving.



In our assessment of the article we noted that there are two approaches to journalism: 1) to seek out the truth about something, and report it in an objective manner, or 2) to seek out information from people who will support preconceived notions of the reporter, and report the news in a biased manner. We believe that the *USA Today* reporter chose the latter approach for his front-page story entitled "Little-Used Airports Cost Taxpayers Big Money." We also believe that the article was financially motivated to lend support to the airline industry at the expense of general aviation.

General aviation is also under attack by the media and politicians who criticize the use of corporate aircraft during these challenging economic times. The criticism started when the CEOs of the big automakers chose to fly their


corporate jets to Washington, D.C. to ask Congress for bailout money. While we feel their flights were an effective and efficient use of corporate aircraft, the CEOs were not thinking of how these trips could have been perceived. Just think of the "mileage" the CEOs could have gotten if they drove one of their production cars to Washington instead, especially one of their new hybrids. Instead, they flew their jets and surrendered to public opinion when they were criticized for doing so, rather than stand up and defend business aviation. As a result, the entire business aviation community has suffered, and so has our country.






This incident is well known throughout the aviation community. *So why on earth would any pilot support another attack on corporate aviation?* Read on.

The ABC affiliate television station in Minneapolis, KSTP, recently aired a story criticizing the use of corporate aircraft by the local utility company, Xcel Energy, because of recent rate increases. Rather than pick some other department to scrutinize, KSTP decided to pick on the flight department, possibly because corporate aircraft have been under attack, lately, and are on people's minds.


KSTP tracked Xcel's flights to see where their jets were going, had cameras positioned at St. Paul Downtown

**CONTINUED ON PAGE 8**



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## Index To Advertisers

Academy College .....	5 & 47
Aero Fabricators, Inc. ....	39
Aero Insurance, Inc. ....	30 & 43
Aero Paradise.....	53
Aircraft Owners & Pilots Association (AOPA).....	23
Aircraft Propeller Service, Inc. ....	33
AircraftInsurance.com.....	60
airpac.com .....	36
ARMA Research, Inc. ....	60
ASI Jet Center .....	13
Aspen Avionics .....	64
Avfuel Corporation.....	37, 47 & 61
B2W/Win Air .....	47
Basler Turbo Conversions, LLC.....	43
Beaver Aviation, Inc. ....	32 & 43
Best Oil Company.....	35
Bolduc Aviation Specialized Serv.....	9, 43 & 47
Bolton & Menk, Inc. ....	22
Brackett Aircraft Co., Inc.....	26, 38 & 43
Brenco IA Training .....	60
Cessna Aircraft Co.....	15, 43, 55 & 61
Chicago Piper .....	64
Cirrus Aircraft.....	61
Columbia .....	61
Dawley Aviation Corp. ....	43
Des Moines Flying Service, Inc. ....	64
Diamond Aircraft .....	13 & 20
E-Z Heat, Inc. ....	27 & 60
Eagle Air .....	53
Eagle Fuel Cells .....	58
Eagle River Union Airport.....	58
ExxonMobil Aviation .....	17
Field of Dreams .....	53
Flight Design USA .....	18
Flying Farmers.....	60
Fond du Lac Skyport .....	43
Garmin.....	13 & 61
Gran-Aire, Inc. ....	43, 55 & 60
HondaJet Midwest .....	3
Iowa County Airport (Mineral Point, Wis.) .....	58
Johnson Aviation Insurance.....	25 & 43
Lakeshore Aviation .....	37
LSA North .....	18
Maxwell Aircraft Service .....	51
Mead & Hunt, Inc. ....	9
Metropolitan Airports Commission.....	21
MIA Hunters.....	19
Mid-Continent Aircraft Corp. (Cessna C-Star).....	60
Mid-Continent Insurance .....	60
Midwest Aircraft Appraisal .....	60
Midwest Flyer Magazine.....	7, 43, 47, 59 & 64
Mininiska Lodge.....	7
Minnesota Aviation Trades Ass'n.....	46-51
Minn. DOT Office of Aeronautics .....	44-45
Minnesota Petroleum Services.....	36
Minnesota State University-Mankato.....	11
MN Aviation Maintenance Technician Conf. .	2
Morey Airplane Company .....	60
NationAir Aviation Insurance .....	7, 43 & 47
National Air Transportation Ass'n.....	43
Newton Home Oil Co., Inc. ....	49
NewView Technologies, Inc. ....	20 & 43
North Star Aviation.....	11 & 47
OMNNI Associates .....	57
Orr, Minn. Regional Airport (Hangar Sites).....	60
Pat O'Malley's "Jet Room" Restaurant .....	16
Phillips 66 .....	29, 35, 49 & 55
Piper Aircraft, Inc. ....	61 & 64
Racine Commercial Airport.....	43
Rapco Fleet Support, Inc.....	43
Red Wing Aeroplane Company .....	24
Regent Aviation, Inc.....	47
Reigel & Associates, Ltd. (Aero Legal) 31 & 47	
Rochelle, Illinois Municipal Airport .....	57
Schweiss Bi-Fold Doors .....	51
Short Elliott Hendrickson, Inc. ....	14
Skycom Avionics, Inc. ....	64
Socata (EADS) .....	61
S. St. Paul Municipal Airport (Fleming Field)...	29
Southern Wisconsin Regional Airport .....	60
Tanis Aircraft Products, Inc. ....	60
Thunderbird Aviation.....	5, 15 & 47
Trimcraft Aviation .....	43 & 47
Ulteig .....	12
USAIG .....	47
Viking Family Restaurant & Lounge .....	34
Wadena Municipal Airport.....	60
West Bend Air, Inc. ....	43
Western Petroleum Company.....	17
Wings Financial .....	47
Winona State University .....	16
WipCaire by Wipaire, Inc. ....	63
Wisconsin Aviation, Inc. ....	43 & 61
Wisconsin Aviation Trades Ass'n .....	42-43
Wisconsin DOT Bureau of Aeronautics ..	41-42
Wright Aero, Inc. ....	47

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**Dear Fellow Pilots:**

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## **CORPORATE AIRCRAFT FROM PAGE 5**

Airport to count the number of passengers on each flight, and did their arithmetic to compare the cost of flying employees between their offices in Denver and the Twin Cities by corporate jets versus flying on the airlines.

In a story entitled ***“Your Rates Go Up As Xcel Jets Soar,”*** KSTP reporter, Bob McNaney, was critical of flights carrying only a few passengers or crew without apparently understanding the purposes of those flights. The flights could have been for maintenance, or Xcel may have needed the planes positioned in the Twin Cities for other flights.

KSTP could have also reported on the number of airline tickets the company buys each year to put things into better perspective. Most corporations large enough to have their own flight departments are also the airlines' best customers. In addition, KSTP could have also sought information from the National Business Aviation Association (NBAA) on the use of corporate aircraft, but the station did not investigate any further.

According to the story aired on November 19, 2009, Xcel's rates in Minnesota have gone up five times within a year and the current public service commission has approved the increases. In November alone, KSTP reported that Xcel asked the Minnesota Public Utilities Commission to raise gas rates by \$16.2 million, while they supposedly budgeted \$5.8 million for its corporate flight department.

If the reporter wanted to look at the budget, then why didn't he look at Xcel's total budget and how much money is allocated to each expenditure? Again, why single out the corporate flight department?

Seeing that the energy costs of 120,000 households in Minnesota are subsidized with federal tax dollars, KSTP asked a Congressional representative his views on Xcel's use of corporate jets and he commented that it seems there is a complete lack of

corporate responsibility.

The KSTP reporter then went to the streets to ask an Xcel Energy customer what she thought of company executives flying around in less-than-full corporate jets, while her energy costs rise. Of course she wasn't happy about this.

The reporter asked loaded questions to deliberately outrage the public. Had he instead asked people what they thought of Xcel Energy using corporate aircraft in its day-to-day business activities to make sure the energy needs of the community are met for the lowest possible cost, they would have responded favorably.

Regardless of whether or not Xcel Energy's rate increases are justified, we take argument with KSTP, its owners, and its reporter for asking loaded questions, and not presenting all of the facts.

It is bad enough when the news media criticizes general aviation, but when the news outlet is owned by a **pilot** that knows better, as is the case with KSTP, that is truly disturbing.

The Chairman of Hubbard Broadcasting, Inc., the company that owns KSTP, is Stanley S. Hubbard, and both he and his son are pilots and own general aviation aircraft. We contacted Hubbard about the story, which he defends:

**HUBBARD:** *“We are big believers in corporate aviation. We are involved commercially in selling products for corporate aviation, and we understand fully the importance of corporate aviation. But when you have a situation where the executives of Xcel refuse to justify the use of aircraft and refuse to talk, then you have to wonder why.”*

*“Our news department is independent from our sales and other departments. If they find a reasonable story that is above board and honest, we do not interfere.”*

*“Dave, I don't know how you can expect to present an objective story when the subjects of the story refuse to comment. I personally spoke to people very close to the management of Xcel,*

*and asked them to come on the air and just stand up and say, ‘yes, we have airplanes and here is where we use them.’ They refused to do that, which would lead one to believe that they may be hiding something.”*

KSTP traveled to Washington, D.C. to speak face-to-face with Xcel CEO Richard Kelley. He declined to appear on camera, but said he would be surprised if the planes flew with only a few people on board.

In a search for a more complete answer, KSTP sought out Xcel executive Judy Poferl to ask her why planes fly near empty so often. Poferl said, *“I think we are responsible in how we use corporate aircraft. I think it's a good use of our aircraft, and it improves our efficiency.”*

We asked Ed Bolen, President of the National Business Aviation Association (NBAA) about the importance of businesses responding to criticism about their use of corporate aircraft:

*“No response is interpreted by news organizations as no good response. Companies have to explain their use of the airplane. We are trying to help through ‘No Plane, No Gain’ by giving companies the tools they need to successfully respond. Clearly, we still have a ways to go.”*

Here is a link to the KSTP Television segment, ***“Your Money,”*** that ran on the 10 o'clock news on November 19, 2009:<http://kstp.com/news/stories/S1265644.shtml?cat=1>

Anyone wishing to forward tactful and well thought out comment to Mr. Hubbard may do so in care of Ms. Joyce Mahoney at [jmahoney@hbi.com](mailto:jmahoney@hbi.com).

If KSTP chooses to continue scrutinizing Xcel Energy's use of corporate aircraft as its way of objecting to rate increases, we ask that its reporters refrain from unethical journalistic tactics, seek the input of NBAA, gather more information such as the volume of travel the company does on the airlines, and tell the whole story, not just enough to prove their point. □

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# Live Well, Be Well, Fly Well

*by Craig Fuller, President  
Aircraft Owners & Pilots Association*

I hope you made it to AOPA's Aviation Summit a few weeks back – it was a great event! If you did, you're sure to have noticed something new – the Health Pavilion – where we provided screenings, discussed important health-related issues, and answered your medical certification questions right on the exhibit hall floor.



Craig Fuller

We introduced the Health Pavilion because we recognize the importance of “flying well.” Good health has always been important to aviators and AOPA has always offered tools like a list of FAA-accepted medications, assistance with medical certification questions, and TurboMedical®, AOPA's interactive medical application planning tool.

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You'll also have the option to securely store your medical records electronically, giving you access to your health and prescription

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Finally, we'll send you a bi-monthly newsletter focusing on wellness issues that matter to pilots, including changes to FAA medical certification policies and procedures that may affect your flying.

You can learn more about the program online at [www.AOPA.org](http://www.AOPA.org) or by calling AOPA at 800/USA-AOPA. I believe in flying well, and I believe this program offers an exceptional value to help you do just that. □



*by Bill Blake*

*AOPA Great Lakes Regional Representative*

## We All Benefit From Air Tours

One of the most worthwhile and fun things I have done as a pilot in recent years was to participate in the 80<sup>th</sup> Annual

Michigan Air Tour, September 11-13, 2009, on behalf of AOPA. My wife, Nancy, and I accepted an invitation from Air Tour Director Phil Seizinger to join the group, which started at Oakland County International Airport (PTK), Waterford, Michigan, and made stops at seven (7) airports over the three (3) days.

The purpose of the tour was to demonstrate to the communities visited the economic importance of their airports. At each stop, the president



Bill Blake

of the Michigan Aviation Association (sponsor of the tour for the last 30 years) made a presentation to local officials, community members, and media about the economic impact of the airport based on data furnished by the state of Michigan. Twenty-eight (28) airplanes flew the tour this year, including a Chinese Yak and some experimental aircraft. Seven (7) aircraft came down from Canada. Canadians have been participating in the tour the last few years, and have liked it so much, that they started a similar tour in Canada two years ago. Some of the Michigan pilots flew up for that event held last June.

I urge Michigan pilots to join the tour next year, and airport managers



and fixed based operators to help promote the event, even if your airport is not included on the tour. Every time a general aviation airplane moves and a pitch is made about the benefits of a general aviation airport, we all benefit. I also urge pilot groups, airports, and fixed based operators in other states to develop their own state air tour.

After the air tour, I attended the Michigan Association of Airport Executives (MAAE) annual conference held this year in Gaylord, Michigan. Airport managers were concerned about how the downturn in the economy was hurting their airports and the possible funding of future airport improvements. The association said that it supports increasing and changing the state aviation fuel tax from 3 cents a gallon to a percentage tax. AOPA opposes a change to a percentage tax, and believes aviation should receive the benefit of at least a portion of the state sales tax on aviation products before any consideration is given to a fuel tax increase.

I attended the Illinois Public Airports Association (IPAA) annual conference in Galena, Illinois, the last week in September. Illinois is also in financial difficulties, although the state did recently pass a capital improvement funding bill that included money for airports. Airport managers expressed similar concerns about the reduction of airport operations and aviation fuel sales. However, one airport in the Chicago area reported increased fuel sales for the month and hoped that signaled the beginning of a turnaround.

The Aviation Association of Indiana (AAI) held its annual airports conference in Plymouth, Indiana, October 13-16, 2009, which I also attended. The state aviation director for Indiana had the unpleasant task of announcing that the legislature had not provided adequate funding to allow the state to provide all of its 2 ½% matching share for federal airport improvement grants. For airport sponsors (i.e. municipalities

and counties which own public-use airports), that means in addition to the 2 ½% the sponsor normally provides for such grants, the sponsor will have to make up the shortfall of the state's share in order to receive any federal grant money. I suspect that will be very difficult for some of the small general aviation airports. This unfortunate situation adds fuel to the idea being considered by the AAI strategic planning committee to advocate moving the state aviation office out of the Indiana Department of Transportation to some entity that will work harder to achieve adequate state resources for aviation.

At all three (3) of the above state airport conferences, representatives from the FAA Great Lakes Region spoke about concerns over the federal reauthorization of the FAA and its programs. Congress has not been able to agree on a long-term reauthorization. The agency has been

operating under a string of continuing resolutions, which fund the agency on a pro rata basis of the last annual authorization, making it difficult to plan and execute projects. Hopefully, by the time you read this, Congress will have reached an agreement.

You can play an important role in the future of general aviation. Keep informed and let your state, local, and federal elected officials know your views.

For more information on these and other issues facing general aviation, please go to: [www.aopa.org](http://www.aopa.org). □

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# The Scan

## Knowing What To Glance At & When

by Richard Morey, CFII

All instrument pilots have heard over and over again that the key to being a good instrument pilot is “the scan.” This seems simple enough, but simple does not mean easy. Developing a good scan technique takes work, and knowing what to scan and when to scan is essential. The following tips should help you develop or refine your scanning techniques:

First, let’s define what we mean by “the scan.”

In instrument flight, you are substituting the view outside the window for gauges on the panel. Instead of looking outside for guidance, you are forced to interpret the instruments to manage your flight. Assuming steam gauges rather than a glass cockpit, you need to interpret more than one gauge to maintain situational awareness. This process is called “the scan.”



Rich Morey

### Glance, Do Not Stare!

This is good advice in many social settings, but is absolutely mandatory in instrument flight. Staring at an instrument, or “fixation” as the FAA calls it, stops the scan. This means we are not glancing at what we should be. The FAA calls this “omission.” Without the scan, you no longer have situational awareness. Without situational awareness, you are behind the aircraft...reacting, rather than guiding. Let your eyes linger on an instrument only long enough to interpret the instrument, then move on.

### H A L Is Your Pal

This little mnemonic helps you keep your eyes moving and your scan going. H A L stands for Heading, Altitude, Looking for. Using this helps you keep ahead of the aircraft, and minimizes fixation.

“Heading” means, not only scanning for the correct heading, but tracking the navigation aid selected. Full panel: glance at the directional gyro and course deviation indicator. Partial panel: glance at the compass, the turn coordinator, and course deviation indicator.

An “Altitude” scan includes the altimeter, but can include the vertical speed indicator as well.

“Looking for” keeps your mind in the game and ahead of the airplane. In a turn, we are “looking for” a heading. En route or on approach, we may be “looking for” VOR passage, a vector from center, an intersection, a distance or perhaps interception of a radial, bearing or localizer. With every frequency change, “look for” the engine instruments as well.

### Don’t Bite Off More Than You Can Chew

Another bit of good social advice. In flight, we should break down large tasks into small segments and scan in between. For example, instead of dialing in the entire new frequency while fixating on the radio display, tune one digit at a time and then scan in between. Another nice radio technique is to simply count the clicks while continuing your scan, then glance at the radio to confirm that you counted correctly and have the right frequency dialed in.

Assume we have to change frequencies from Madison (Wisconsin – MSN) tower, 119.3, to Middleton Municipal Airport, Morey Field’s (C29) CTAF of 123.0. On my old KX170B, I simply grabbed the large tuning knob and counted four clicks clockwise. This advanced the frequency from 119 to 123. Then I would grab the little knob and count 12 clicks counter clockwise to go from .30 to .00. On the big knob, one click was one full MHz...the little knob was one click equals .25 MHz. Once you figure out your radio, you should have no problem changing frequencies with only a few glances for confirmation. This skill is guaranteed to wow your safety pilot, instructor or even examiner.

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## Know Your Airplane

If you cannot close your eyes and put your hands on the engine controls, trim controls, radio tuning knobs and electrical switches, flaps, etc., you do not know your airplane. Taking your eyes off the instruments to locate and reach for a control breaks down the scan. Invest some time sitting in your aircraft on the ground with the engine off and practice until you get it right. This skill will lighten your workload both IFR and VFR and keep your eyes where they belong, on the instruments when IFR, or looking outside the aircraft on a good VFR day.

## Trim, Trim, Trim!

A good instrument pilot is a lazy pilot. Set the aircraft up with power and trim so it does what you want it to without control input. If you have to hold control pressure to get the desired result, then you do not

have the aircraft trimmed properly. If you can let go of the controls and the aircraft continues as it was, you are properly trimmed. In cruise, an airplane that is not trimmed to hold an altitude will require constant correction. You may believe that you can hold altitude simply by keeping some pressure on the controls, but as soon as you are distracted, you will forget to hold the pressure allowing the aircraft to do what it is trimmed to do. More on trimming later, but remember, if you have to hold control pressures, you are working too hard. Be lazy, or if you would rather think of it as flying smart, that's okay, just remember to trim.

## Dynamic Flight & Static Flight

Instrument students often think of the scan as one all-encompassing technique that is appropriate for all phases of flight. The reality is one size does not fit all when it comes to

scanning the instrument panel.

All flights can be broken down into two phases; dynamic flight and static flight. "Dynamic" phase of flight means we are in transition. We are starting or stopping a turn, a climb, a descent, or a configuration or speed change. Anytime we are in the dynamic phase, the artificial horizon should be the primary focus of your scan. "Static" phase of flight means we are in a steady state, be it straight and level, a constant airspeed climb, constant rate turn, or a constant rate descent. In static phases of flight, the artificial horizon plays a lesser roll. The primary instruments in static flight depend on the task.

## The Climb

Once established, a constant airspeed climb is a static phase of flight. In climb cruise, the emphasis should be on scanning the airspeed indicator and the directional gyro. A

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reduction in airspeed will tell you that your aircraft's nose is higher than it had been, just as an increase in airspeed tells you your aircraft's nose has dropped. The airspeed indicator is your pitch instrument in a climb and as such deserves more of your attention than the artificial horizon. The directional gyro will tell you if you are drifting off course. This is often a result of insufficient right rudder, although inadvertent pressure on the control yolk (ailerons) can be the culprit as well. To avoid these problems make sure you keep the turn coordinator (both ball and wings) in your scan. Trim for the airspeed you desire and you will find that holding the assigned heading is easier as well. By not having to hold back pressure, you minimize the likelihood of deflecting the ailerons by mistake. Between the turn coordinator, directional gyro and airspeed indicator, you can easily hold heading and constant airspeed in a climb. The artificial horizon and vertical speed indicator are less useful in this phase of flight.

### Transition From Climb To Level Flight

Leveling off is a dynamic phase, and as such the artificial horizon should be primary in your scan. To level off, lead your assigned altitude by 10% of your climb rate. (Scan the vertical speed indicator for rate of climb, scan altimeter for lead altitude, and scan the directional gyro to hold heading). When you reach your altitude minus your 10% rate of climb

lead, your eyes go to the artificial horizon and you apply forward pressure to the controls bringing the dot of the "aircraft" to the horizon line. Hold the dot on the horizon line with forward pressure on the controls keeping your wings level. As your nose drops, you will need a touch of left rudder to stay on course. As your airspeed increases, you will need more forward pressure to hold your assigned altitude. Trim off this pressure then begin to throttle back to your desired power setting, all the while keeping your eyes on the artificial horizon. Once you have trimmed off the forward pressure, glance at your vertical speed to verify level flight, glance at your directional gyro to verify you are still on your desired heading, glance at your engine gauges to verify you are at the correct power setting, and glance at your airspeed indicator as well. You will need to continue trimming the elevator until the aircraft has stabilized at the airspeed associated with the selected power setting and level flight. With the trim about right and the power set, fine tune the trim using the vertical speed indicator as primary. You should not be holding control pressure at this time. If the vertical speed indicator shows a climb, your eyes go to the artificial horizon and you adjust your pitch down a bit. Hold this attitude on the artificial horizon for a few seconds to allow the lag in the vertical speed indicator to settle out, then scan the vertical speed indicator. If the vertical speed indicator shows level flight, trim off any pressure you are holding, release the controls and see if the vertical speed indicator remains at zero. HAL scan, and repeat as necessary.

**DO NOT CHASE THE VERTICAL SPEED WITH TRIM!** You will not catch it! Instead use control pressure to establish and hold level flight, THEN trim the control pressure off. Remember, hold the attitude you desire, then trim off the pressure.

### Rudder Trim

If your aircraft has rudder trim, you need to manage that as well. It is useful to set the rudder trim for take off, then trim for cruise after leveling off. The ball is primary here. Hold pressure on the rudder pedal to center the ball, then trim off the pressure.

### Level Flight

Level cruise flight is or at least should be a static phase of flight. Emphasize the directional gyro and altimeter, with vertical speed indicator, turn coordinator (ball especially) as secondary with artificial horizon and airspeed indicator as least important.

### Turns

The turn consists of roll in (dynamic), the constant rate portion (static), and roll out (dynamic). To start a turn,



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your eyes should go to the artificial horizon. You establish a bank angle with RUDDER and aileron. I emphasize rudder, as many pilots seem to forget this aspect of flight. Establish the bank angle appropriate to the rate of turn you desire. With a small heading change, a half standard rate turn will minimize the tendency to overshoot the heading. Once the bank angle is established, your eyes go to the turn coordinator to verify a coordinated standard or half standard rate turn. You are now in a static phase. Continue your HAL scan with emphasis on the directional gyro and turn coordinator with altimeter and vertical speed as secondary instruments. When you are 5 or 10 degrees from your desired heading (5 for half standard, 10 for standard rate of turn), your eyes go to the artificial horizon. You are about to enter a dynamic phase of flight. Again, using

RUDDER and aileron, you roll your wings level and hold them there for a heartbeat or two to reestablish straight and level flight. Perform your HAL scan with emphasis on directional gyro and altimeter. Do not fixate on the directional gyro during the roll out! This is a common error among students. Ignore your inner ear and establish straight and level with reference to the artificial horizon. Just making the directional gyro stop for a bit, or believing your inner ear will not guarantee that you have stopped the turn.

### Vertigo

All instrument pilots will experience vertigo or spatial disorientation. This is normal and should be expected. One day you will roll out of a turn and your inner ear will tell you that you have rolled into

a turn in the opposite direction. Or perhaps you will mistake the slight acceleration you feel when pushing the nose forward to hold altitude in an updraft as a pitch up. Pushing the nose down further will increase the acceleration, making you feel as if the aircraft's nose is even higher. The only way to overcome vertigo is to believe your eyes and interpret the instruments. In other words, scan. If your inner ear says you are in a turn, but your eyes interpret the directional gyro, the artificial horizon and the turn coordinator as indicating straight and level, what do you believe? The eyes have it!

*EDITOR'S NOTE:* Richard Morey is an 11,000-hour active flight instructor and the third generation owner of Morey Airplane Company in Middleton, Wisconsin (C29). Email [cfiirich@tds.net](mailto:cfiirich@tds.net), or call 608-836-1711.



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## Help your doc get it right!

by John W. Beasley, MD

*Professor Emeritus and Clinical Professor, Department of Family Medicine  
University of Wisconsin - Madison*

A couple of days ago I was trying to get a medication order done just right in the computer – Click here... Click there... Click.... and the patient kept talking to me. “By the way, my elbow is...” I looked at his elbow and back at the computer. Click here... Click there... Oops... I almost started my 78-year-old man on birth control pills. It’s a bit like being on final approach and having a passenger who wants to chat.



Dr. John W. Beasley

Sometimes there is just too much to cope with at one time. In the cockpit, I have what the instruments tell me, what’s on the Jepp chart, the notes I made, sound of the airplane, and more. Dang, ATC just amended my clearance!

There are many times when we are in a state of information overload – just too much stuff coming at us. And, some of the things that make it harder to handle this overload are interruptions. Interruptions cause what is known as a “break in task” and, as you can imagine, performance suffers. I reply to ATC and now my heading is off 20 degrees.

It’s not too different in my office. Unless the issue is a really simple one (the equivalent of a nice VFR flight at cruising altitude), I’m trying to integrate information about the patient’s problems from the chart (paper or computer), what the patient is telling me, what the non-verbals are (how he or she looks), what the nurse just told me, what I remember and more as I work to figure out what’s going on and what to do about it all.

In aviation, the FAA has mandated a rule that there is no extraneous conversation (the “sterile cockpit”) under 10,000 feet (where the workload is higher) for the airlines. This is recognizing that there is only so much we can handle at one time.

From my perspective, we need some version of that rule in medical care as well.

So how can you help your “doc” avoid errors? First, be aware that being a doc with a patient, unless the problem is trivial, is a bit like being on the ILS final approach. He or she is trying to figure out what’s going on (location, speed, heading, altitude) and working to achieve what we call, in both professions, “situational awareness.” Where are we and where are we going? While the doc needs to give you time to explain what’s bothering you, at the same time you need to give him or her time to think, compose questions, examine you, read consultant notes, make decisions or write prescriptions. I cannot both listen to your heart and have you talk at the same time. And I cannot make decisions about your heart when you’re trying to talk about your elbow. And I may screw up your prescription if you keep talking while I’m entering it.

It really helps to come in with a list of the things – all of them – that you want to discuss so that, if there is not enough time to address all of them, you and your doc can pick out the most important ones. The average appointment time is between 10 and 20 minutes and if you have four problems, that’s about 2 to 5 minutes per problem. Not a lot of time to reach diagnoses and suggest treatments, let alone do all the computer work that’s required. Time is limiting and while I’m willing to spend more time with patients than is on the schedule, I’m very sensitive to the fact that patients have appointments too, and it is both of our jobs to try to keep on time. Most docs do their best to stay on schedule, but often we fail. Believe me, I’m tired of starting off every visit saying, “Gosh, I’m sorry I’m running late!” It’s one of the most stressful parts of my work.

If you are taking medicines, please bring them with you; the actual stuff in the bottle. Yeah, I know it is supposed to be in the computer, but you don’t want me to rely on that. I know how things can get entered wrong, changes may not be recorded and errors can be perpetuated by computer systems. Trust me, I’ve been there.

Please – pretty please! – avoid what we docs call the “hand on the doorknob” problem. A while back I had finished up a 15-minute visit with a very complex – and wonderful – elderly patient and as I had my hand on the doorknob (literally!), her husband says: “You know, she’s hallucinating in the mornings.” Talk about a show stopper! Now I’m running 45 minutes behind schedule. It’s a little

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# FAA Publishes Final Rule Updating FAR Parts 61, 91 And 141

by Greg Reigel  
Attorney At Law



Greg Reigel

**O**n August 21, 2009, the FAA published a Final Rule in the Federal Register that revises the training, qualification, certification, and operating requirements for pilots, flight instructors, ground instructors, and pilot schools. According to the Final Rule, “[t]hese changes are needed to clarify, update, and correct our existing regulations...to ensure a better understanding of these rules that relate to aircraft operations in the National Airspace System.”

The Final Rule contains a significant number of changes to FARs 61, 91 and 141 in a variety of areas. Fortunately, the Final Rule does not include changes to instrument currency requirements that the FAA proposed in its original notice of proposed rulemaking (“NPRM”). (The NPRM proposed requiring pilots to perform precision and nonprecision approaches; fly a missed approach; hold at a “radio station,” intersection, or waypoint; and conduct a one-hour cross-country flight, all in addition to the current instrument currency requirements.)

Pertinent changes include changing the duration of student pilot certificates to match the duration of a third-class medical certificate, changing the definition of “cross country” from “at least 50 nautical miles” to “more than 50 nautical miles,” adding training and currency requirements for the use of night vision goggles and allowing for issuance of flight instructor certificates and ratings to military instructor pilots and examiners who can show

having been designated as a U.S. military instructor pilot or examiner, to name a few.

The Final Rule went into effect October 20, 2009. If you would like further information regarding the Final Rule, you may contact John D. Lynch, Certification and General Aviation Operations Branch, AFS-810, General Aviation and Commercial Division, Flight Standards Service, Federal Aviation Administration, 800 Independence Avenue, SW, Washington, DC 20591; telephone (202) 267-3844; e-mail to [john.d.lynch@faa.gov](mailto:john.d.lynch@faa.gov). For legal interpretative questions about this final rule, contact: Michael Chase, AGC-240, Office of Chief Counsel, Regulations Division, Federal Aviation Administration, 800 Independence Avenue, SW, Washington, DC 20591; telephone (202) 267-3110; e-mail to [michael.chase@faa.gov](mailto:michael.chase@faa.gov).

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## HIGH ON HEALTH CONTINUED

like getting a whole new approach thrown at you just as you are coming up on the marker. This is a great way to make errors in either aviation or medicine. So please be sure we know about the important or puzzling stuff at the beginning of the visit.

In the research part of my life, I’m doing some work with the UW Department of Industrial Engineering working on patient safety issues. We are exploring these problems of information overload and what helps or hinders us as we deal with it. There’s a lot that the practice of medicine and aviation have in common. We need to work together to keep both safe!

In aviation, we say: “Don’t worry... You will eventually see the ground.”

In medicine, we say: “Don’t worry... All bleeding stops eventually.” □

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**(Allegro):** SLSA with Rotax engines might require maintenance to be done by technicians with Rotax-authorized training. Check the maintenance manuals for specifics.



**(Gobosh):** Special Light Sport Aircraft might look a lot like FAA type-certificated production airplanes, but they are subject to a new and very different set of regulations and standards for major repairs and alterations.



**(Cheetah):** Since many SLSA are imported and distributed by U.S. companies, it is important to know who the "manufacturer" is for purposes of authorizing major repairs and alterations.

## ASTM Compliance For Special Light Sport Aircraft: Major Repairs & Alterations

**A few minutes spent now learning and understanding this new world, could save owners and maintenance personnel huge headaches in the future.**

*by Carol Carpenter*

When I was asked by *Midwest Flyer Magazine* Associate Editor, Ed Leineweber, to write this article, the requested topic was "*Compliance Issues and Special Light Sport Aircraft (SLSA)*." However, all of the current compliance issues are each a topic in themselves. If I summarized all the compliance issues by topic, there would not be enough space to offer useful information to the reader. Instead, I will focus on one area: "*major repairs and alterations.*"

There have been multiple questions from mechanics and SLSA owners about proper documentation and authorization for major repairs and alterations in the field. If you are confused, you are not alone. The Light Sport Rule is relatively new and was a large, sweeping change in the regulations. There is a lot to learn and understand. Additionally, SLSA aircraft must comply with ASTM

International Consensus Standards, as well as Federal Aviation Regulations. (Note: ASTM used to stand for American Society for Testing & Materials, but today the organization is just referred to as ASTM International.)

### What Are Consensus Standards?

Consensus Standards are industry-developed standards that apply to aircraft design, production, and airworthiness. They are accepted by the FAA for the purpose of certificating light sport aircraft. The continued airworthiness of SLSA is governed by these standards, which are copyright protected and can only be purchased from ASTM International (<http://www.astm.org/>). All regulatory bodies and manufacturers must purchase their own copy of the standards, read, and interpret them. The aircraft must be maintained to these industry-developed standards, meet FAR Part 43 requirements, and comply with manufacturers' safety directives and FAA Airworthiness Directives applicable to Type Certificated (TC) products installed on the aircraft.

### SLSA Maintenance Manuals

ASTM standards require that all SLSA have maintenance manuals. The maintenance manual must lay out what level of maintenance technician certification is required to do a particular task, and provide detailed instruction to complete the task. If a task is not in the manual, you cannot complete it without special manufacturer authorization. There is a huge difference in the quality and completeness of manuals provided by the SLSA manufacturers. But the manufacturer's maintenance manuals must be your source of what you can and cannot do. If it is not in the manual, you cannot do it without a Letter of Authorization, as explained next.

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## Documentation Required For SLSA Major Repair or Alteration?

For an SLSA, the aircraft manufacturer must approve any modification – including installation of new avionics. The manufacturer also determines what is a major repair or major alteration. In order to discuss a major repair and alteration on SLSA, we should start by looking at the ASTM standards and a few regulations in place for this specific category.

The definition of a major repair or alteration for SLSA was required to be included in the ASTM standards by the FAA and is documented in the preamble of the final rule. ASTM defined the terms in ASTM F2483 as follows:

*3.1.10 major repair, alteration, or maintenance – any repair, alteration, or maintenance for which instructions to complete the task excluded from the maintenance manual(s) supplied to*

*the consumer are considered major.*

*3.1.11 manufacturer – any entity engaged in the production of an LSA or component used on an LSA.*

*3.1.12 minor repair, alteration, or maintenance – any repair, alteration, or maintenance for which instructions provided for in the maintenance manual(s) supplied to the consumer of the product are considered minor.*

*9.2 The manufacturer or other entity that performs the evaluation of an alteration or repair shall provide a written affidavit that the aircraft being altered will still meet the requirements of the applicable ASTM design and performance specification subsequent to the alteration.*

*9.3 The manufacturer or other entity that performs the evaluation shall provide written instructions and diagrams on how, who, and the level of certification needed to perform the alteration or repair.*

*9.3.1 The instructions must include*

*ground and flight testing that complies with the original ASTM production acceptance testing standard, as appropriate, to verify the alteration was performed correctly and the aircraft is in a condition for safe operation.*

*9.4 The manufacturer or other entity that performs the evaluation shall provide information to the owner of the aircraft for the documentation of the alteration in the aircraft's records.*

AC 65-32

306. a. Maintenance and Alterations.

Any maintenance or alteration that is performed on an SLSA must be accomplished using data supplied by the manufacturer and performed by a repairman (light-sport aircraft) with a maintenance rating, a mechanic with an airframe and powerplant rating, or a repair station appropriately certificated for that class of SLSA in accordance with part 43.



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So, what documentation is required to be in the aircraft records for any major change or alteration? The manufacturer is required to provide:

1. Directions to accomplish the task;
2. Detailed instructions and diagrams as needed to perform the task;
3. A method to test/inspect to verify the task was accomplished properly; and
4. An affidavit stating that the modification, repair or alteration will not change the aircraft flight characteristics.

It is not uncommon for manufacturers in the SLSA industry to send incomplete letters of authorization; many offer authorization by phone. When this happens, the maintenance technician must ask for these authorizations in writing and resubmit any authorization that is incomplete.

### Who Is The Manufacturer?

Many SLSA are manufactured in other countries and have U.S. distributors. So the common question is: *Can a distributor authorize a change?* The regulations are clear (Reference 91.327 (a) (5), (6) and (7)) that the manufacturer, inspected by procedures developed by the manufacturer, and recorded in the specific aircraft records, must authorize any modification after the date of manufacture. The FAA considers the manufacturer as the entity that attests to compliance with the ASTM standards on the FAA form 8130-15. Further, the ASTM Quality Assurance Standard F 2279 requires that the person signing compliance with the ASTM standards, be specifically identified in the manufacturer's Quality Assurance Manual, and that the approval be accomplished in accordance with a documented system/procedure that assures that the aircraft continues to comply with all the applicable ASTM standards.

### Who Can Perform A Major Repair Or Alteration?

ASTM F2483 9.3 states that the manufacturer must identify in writing the instructions for the modification, who is authorized to perform the modification, and the level of technician certification that person must have. The person performing the repairs must also have had training or experience in performing that task previously.

*9.3 The manufacturer or other entity that performs the evaluation shall provide written instructions and diagrams on how, who, and the level of certification needed to perform the alteration or repair.*

FAA Advisory Circular 65-32: *Major repairs and major alterations may only be accomplished on SLSA by a repairman (light-sport aircraft) with*

*a maintenance rating, a certificated mechanic with A&P ratings, or a certificated repair station. The manufacturer must provide the technical data for such a repair or alteration and identify the training required, if any, to perform that repair or alteration.*

*. . . Before making any major repair as per the consensus standard, a repairman (light-sport aircraft) with a maintenance rating, a mechanic with an airframe and powerplant rating, or appropriately certificated repair station, must receive training to perform the repair. This training should be from either the manufacturer or from an industry-accepted training provider.*

The ASTM consensus standard specifies that the manufacturer of the aircraft shall determine what is a major repair and major alteration. The same consensus standard requires the manufacturer to determine what additional training is required for the Light Sport Repairman with a Maintenance Rating (LSRM) to be qualified to perform those tasks. The LSRM should contact the manufacturer to determine if the major repair or major alteration is authorized, and determine if additional training is needed.

### Can An A&P Perform Major Repairs On SLSA?

It is up to each manufacturer to dictate who can – and who cannot – do work on your SLSA. If the authorization for a major repair or alteration allows an airframe and powerplant mechanic (A&P) to complete a major repair, the mechanic must remember that when working on SLSA, the aircraft's consensus standard, maintenance manual, and instructions for continued airworthiness must be used instead of TC data. Furthermore, on special light sport aircraft, both Part 43 and



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the general privileges and limitations of FAR section 65.81, still apply. To satisfy the requirements of § 65.81, the mechanic must be able to prove to an FAA inspector that he or she performed that work at an earlier date, was trained to do the work, or was supervised by another mechanic or repairman performing that task.

The Rotax 912 is by far the most popular engine used in most SLSA. The real problem is that an A&P mechanic is required to have Rotax factory training to perform any work on Rotax engines. These mechanics are not allowed to service or maintain an engine on an SLSA, unless appropriately trained to do so. As of this writing, there are still relatively few mechanics approved to work on the Rotax 912 in the U.S.

In order to add new equipment (or to modify anything) on an SLSA, the maintenance technician or owner of the SLSA must make a specific request to the manufacturer. It is completely up to the manufacturer to allow anyone to install the equipment (or make the modification). There

is no FAA involvement. If the manufacturer allows an owner to install avionics under the supervision of a mechanic, it is important to note that this must be an A&P since a LSRM cannot supervise.

If your SLSA has a type certificated engine or Technical Standards Order (TSO) product installed, major repairs and major alterations on these FAA-approved products will require compliance with the recording requirements to document such changes contained in Part 43.

The bottom line is that the term “major repair” means any task, which is excluded from the manufacturer’s maintenance manual. If the task is not in the manual, you must request written authorization from the manufacturer. For an SLSA, the aircraft manufacturer in writing must approve any modification, including installation of new avionics or any propeller changes, and the documentation must be included in the logbook records.

For more information or to inquire

about the Light Sport Repairman Training course, contact Rainbow Aviation Services or visit [www.rainbowaviation.com](http://www.rainbowaviation.com).

*EDITOR’S NOTE:* Carol Carpenter is a Sport Pilot Instructor, Private Pilot, FAA FAAS Team Representative, and a freelance aviation columnist. She is also an instructor for the Light Sport Repairman Courses and co-owner of Rainbow Aviation Service in Corning, California, where she and her husband have a full-service FBO. The Carpenters have co-authored two books: *Sport Pilot Airplane: A Complete Guide & A Professional Approach To Ultralights*.

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F2339-06(2009) **F2483-05 Standard Practice for Maintenance and the Development of Maintenance Manuals for Light Sport Aircraft/** ASTM International, West Conshohocken, PA, 2009, [www.astm.org](http://www.astm.org).

F 2279 **Standard Practice for Quality Assurance in the Manufacture of Fixed-Wing Light Sport Aircraft LSA /** ASTM International, West Conshohocken, PA, 2009, [www.astm.org](http://www.astm.org).

**AC65-32 – Certification of Repairman (Light-Sport Aircraft)** <http://rgl.faa.gov/>, click Advisory Circular and search AC65-32

**LSA Repairman Certificate: eligibility, privileges and limits** 14 CFR section 65.107

**Order 8130.2F - Airworthiness Certification of Aircraft and Related Products**, <http://rgl.faa.gov/>



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# Top Industry Leaders Speak As "One Voice" At AOPA Summit

Story & Photos by Dave Weiman

TAMPA, FLA. – It was like old friends sitting around the fireplace chatting after AOPA President & CEO Craig Fuller introduced a panel of industry leaders in the Tampa Convention Center, Thursday, November 5, 2009. This was AOPA's inaugural Aviation Summit, Fuller's first conference at the helm of the world's largest aviation organization following the retirement of Phil Boyer, and AOPA's 70<sup>th</sup> anniversary.

A summit, or meeting of the minds, was natural in the progression of events of the last few years. The first get-together of aviation leaders came several years ago at EAA AirVenture in Oshkosh, Wisconsin, when general aviation first came under attack with the initial proposals for "user fees." Earlier this year, general aviation came under attack again when President Obama accused the CEOs of the big automakers of wasting money flying corporate jets to Washington to request bailout money. News coverage of the jets arriving at Reagan National Airport started the controversy, and rather than defend their use of the aircraft, the CEOs pledged to sell off their corporate fleets in order to gain public support. Aviation leaders have since come to a consensus that an attack on one segment of the aviation community, is an attack on every general aviation pilot, business and organization.



(L/R) EAA President Tom Poberezny on "AOPA LIVE" with AOPA President Craig Fuller.

Led by Fuller, the panel consisted of Tom Poberezny, President, Experimental Aircraft Association (EAA); Ed Bolen, President, National Business Aviation Association (NBAA); Peter Bunce, President, General Aviation Manufacturers Association (GAMA); Jim Coyne, President, National Air Transportation Association (NATA); Peggy Chabrian, President, Women In Aviation, International (WIA); and Paula Derks, President, Aircraft Electronics Association (AEA). The theme for the discussion was *"One Voice."*

Fuller asked each industry leader their perspective on common issues, and what their organization is doing to address them. All were in agreement that while general aviation faces many challenges, it will survive and prosper

by speaking as one group before Congress.

Comments included: *"Once the public realizes that GA means jobs, we will be better off.... No plane, no gain! Business aviation is a sign of a well-managed company."* (Ed Bolen, NBAA)

(With elections around the corner) *"this is a tremendous time for us to use a sledgehammer to find out where Congressmen stand, or we can punish (them)."* (Jim Coyne, NATA)

*"We are going to need Congressional help in the years ahead."* (Peter Bunce, GAMA)

AOPA is becoming known in the halls of Congress as those "Harrison Ford people," a label Fuller does not mind a bit. Actor/pilot Harrison Ford is the spokesperson for AOPA's "GA Serves America" campaign.

AOPA and NBAA will each host "Light Business Aircraft Conferences" in 2010 in order to involve more members. The NBAA Convention will be held in Atlanta, Georgia, and the AOPA Aviation Summit will be held in Long Beach, Calif. Members from each organization will be invited to attend the event of the other organization. Details to be announced later.

A panel led by AOPA Pilot Editor Tom Haines followed Fuller's initial presentation, which discussed **"GA of the Future."** Manufacturer representatives included Jack Pelton of Cessna; Alan Klapmeier, cofounder of Cirrus Design; Corvin Huber of Remos; and Rhett Ross of Teledyne.

Comments included: *"We are turning the corner in manufacturing and sales in regards to the economy. Fuel is an issue,"* however. (Jack Pelton, Cessna)

*"We need to listen to what people's needs are. Aviation is competing with a lot of other lifestyle options. LSAs (Light Sport Aircraft) have been built steadily since 2007. I think we have a*

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manage your health with the help of a robust assessment tool.

You'll also have the option to securely store your medical records electronically, giving you access to your health and prescription information anywhere in the world.

The AOPA Medical Services Program also comes with a free prescription discount card you can use to save 15 to 60 percent on medications for your whole family. It can even be used to reduce costs for parents on Medicare or adult children who may not have prescription benefits.

And we'll send you a bi-monthly newsletter focusing on wellness issues that matter to pilots, including changes to FAA medical certification policies and procedures that may affect your flying.

You can learn more about the program and how it can help you online at [www.aopa.org](http://www.aopa.org) or by calling AOPA at 800/USA-AOPA.



Craig L. Fuller  
AOPA President and CEO



For more information on the Aircraft Owners and Pilots Association and the issues that affect your flying go to [www.aopa.org](http://www.aopa.org) today.

*very bright future! We have to prove that GA does something for people.*" (Corvin Huber, Remos)

*"Until manufacturing turns around, there's a very, very lean market out there. We have to quit couching the justification for GA. GA is transportation, it is saving lives, it is a business tool."* (Rhett Ross, Teledyne)

*"Nothing can replace GA aircraft, so I feel our future is bright."* (Tom Haines, AOPA Pilot)

*"Economics is a measure of people's activities. (With so many other choices for consumers to spend their money on), we need to make aviation a better choice! We have to make sure that people remember their first flight as a pleasant experience."* (Alan Klapmeier, Cofounder, Cirrus Design)

Rhett Ross of Teledyne addressed the "fuel availability" issue, and said that low-lead 94 has potential, and that only minor engine modifications will be required. *"Our concerns are with the existing aircraft fleet,"* said Ross.

Alan Klapmeier: *"100LL is going to go away, no question about that."*

Fuller was on top of his game speaking without notes, and demonstrating his knowledge of the



(L/R) Rhett Ross (Teledyne) not in photo, Corvin Huber (Remos), Alan Klapmeier (Cirrus), and Jack Pelton (Cessna) discuss "GA of the Future" with Tom Haines (AOPA Pilot).



(L/R) FAA Chief Operating Officer Henry Krakowski and FAA Administrator Randy Babbitt with AOPA President Craig Fuller on "AOPA LIVE."

issues, whether he was moderating a panel of industry leaders in the main ballroom, interviewing them one by one at the "AOPA LIVE" stage in the exhibit hall, or during question and answer sessions with members.

"AOPA LIVE" was a live televised

internet broadcast to AOPA members throughout the world. Members were encouraged to email any questions and comments, and they did.

In addition to interviews with the presidents of each aviation organization, Fuller interviewed FAA Administrator Randy Babbitt and FAA Chief Operating Officer Henry Krakowski.

We all know what the FAA Administrator does. He's on the front lines with members of Congress, aviation organizations, and makes the big decisions, which affect us all. But how many of us know what the FAA Chief Operating Officer (COO) does?

As COO, Krakowski is responsible for all aspects of the U.S. air traffic control system — its operation and maintenance, financial performance, research and acquisition of new systems and equipment, and planning for the air traffic control system of the future. Air traffic control includes 38,000 of FAA's total workforce of some 48,000 employees.

Like Babbitt, Krakowski comes to the FAA with an airline background, but unlike the past couple of administrators, Babbitt and Krakowski are actually "pilots," and understand what makes an airplane fly.

Krakowski is a Boeing 737 captain, and spent 30 years with United Air Lines in a variety of senior management positions. His last position there was as Vice President of Flight Operations where he was responsible for flight operations, flight training and standards, technology, and labor relations.

Previously as United's Vice President of Corporate Safety, Security and Quality Assurance, Krakowski was responsible for managing all aspects of corporate and flight safety, security, and regulatory compliance. This included environmental and occupational safety and all counter-terrorism and corporate security programs, as well as United's corporate emergency response programs and internal evaluation programs. On 9/11, he was



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Director of Flight Operations Control at United.

Krakovski is also an experienced aircraft dispatcher and certified as an airframe and powerplant technician.

Before joining United, Krakowski worked for Midway Airlines and Air Illinois Airlines. For five years, he flew as an aerobatic pilot on the air show circuit with the "Lima Lima" aerobatic team.

Krakovski holds a bachelor's degree in Aircraft Maintenance Engineering from St. Louis University's Parks College, and a master's degree in Business & Management from National-Louis University.

Like Babbitt, Krakowski has held numerous positions with the Air Line Pilots Association.

Topics covered by Babbitt and Krakowski included improved relationships with air traffic controllers, and the need for Congress to pass a reauthorization bill with a higher public-funds contribution and a stable funding mechanism from the aviation community.

Fuller also interviewed world aerobatic competitor and air show performer, **Patty Wagstaff**, about her career, and on the topic of women in aviation. Wagstaff said: *"We have to do a better job as an industry in welcoming potential flight students to the airport."*

Fuller also asked Wagstaff about her work in Kenya, providing recurrency and aerobatic training to Kenya Wildlife Service pilots. *"For the most part, the pilots were not getting any recurrency training before this program started,"* said Wagstaff.

Larry Williams (BRS Aerospace) was recently elected Chairman of the Lindbergh Foundation, which is headquartered in Minneapolis, Minnesota. In a press conference during the AOPA Aviation Summit, Williams noted that Wagstaff's training has reduced the accident rate by 80%, and that the more flights there are by wardens, the less poaching there is.



Aerobatic champion and air show performer, Patty Wagstaff, with AOPA President Craig Fuller on "AOPA LIVE."

Dr. Rich Sugden donated a new 180 hp "Husky A1C" aircraft through the Lindbergh Foundation, to help start replacing the Kenya Wildlife

Service's aging fleet of seven aircraft and two helicopters. Every aircraft in the fleet has been damaged an average of three times ([www.lindberghfoundation.org](http://www.lindberghfoundation.org)).

Other guest speakers at AOPA LIVE included former AOPA Government Affairs staff member, Lance Nuckolls, who is now the Aviation Safety Inspector of Flight Operations with the FAA in Washington, D.C. Prior to joining AOPA, Nuckolls worked for Avemco Insurance out of the Rockford, Illinois office in the 1980s.

Nuckolls discussed the use of "flight simulators" to improve training and reduce costs. *"An individual pilot can log solo time to maintain instrument currency if he/she has not let his/her rating lapse,"* said Nuckolls.

On Friday morning, November 6, at the general session, **Bill Trimble, Chairman of the AOPA Board of Trustees**, spoke of the transition from Phil Boyer to Craig Fuller. He said

An advertisement for Johnson Aviation Insurance. The top half features a red and yellow biplane flying against a bright blue sky with scattered white clouds. The text "WE SHARE YOUR PASSION." is written in large, bold, red capital letters on the left side. Below this, the Johnson Aviation Insurance logo is shown, consisting of a stylized biplane icon and the text "JOHNSON AVIATION INSURANCE". At the bottom, a block of text reads: "Started by the founder of the EAA's Young Eagles' program, Sam Johnson, we understand the aviation industry and its unique insurance needs. To find out how our passion for aviation equals your best protection call 1.800.477.IFLY or visit [johnsonins.com/aviation](http://johnsonins.com/aviation)."



that when Boyer decided to retire, the board needed someone with a lot of Washington experience, yet they wanted to find someone who flies single-engine airplanes. "Every board member flies a single-engine airplane, and we wanted a president who did as well," said Trimble.

Trimble discussed with members a letter AOPA sent to all 100 members of the U.S. Senate, and that AOPA wanted to cut off issues at the pass. "We serve our own interests, not corporate interests, and that's what distinguishes us from other groups," concluded Trimble.

The topic of discussion during the morning general session was entitled "Trends in Aviation: Defining NextGen." Fuller interviewed Margaret Jenny, President of the Radio Technical Commission for Aeronautics (RTCA), to learn more about how the modernization of the air traffic control system will impact GA flying. RTCA is an advisory group to the FAA, and welcomes input from

pilots and aviation organizations.

Fuller: "Why should pilots in remote areas pay for NextGen?"

Jenny: "We should all be involved. NextGen will provide more GPS approaches to GA airports, and provide more low-level guidance."

Fuller: "Why something new that will cost more money, when the present system is working just fine."

Jenny: "The focus is on large airports and metro GA airports. NextGen will require more training, and an investment in equipment. But we need the technology we already have before we can create more. Cost versus benefit is being looked at. We need a plan up front to close the business case. The price for equipment will drop with more units manufactured."

Jenny says that the implementation of NextGen won't happen overnight, but it is coming. She expects that the first tier of airports that will use the system will be in a metropolitan area, but not in New York where the problems are the greatest. The first tier will likely be a smaller metro area.

Another panel on Friday led by AOPA Pilot Editor Tom Haines discussed "Flying the Future Now," and described "synthetic vision," and the equipment needs of general aviation in order to comply with NextGen traffic avoidance system requirements. Included on the panel were Bill Stone of Garmin; Tim Taylor of Free Flight Systems, and David Vos of Rockwell Collins.

It was noted that in 2000, the Space Shuttle mapped the world and this information is now available to private industry.

The discussion then moved to equipment needs and requirements of the NextGen air traffic control system.

The FAA's Surveillance and Broadcast Services program office was formed in 2005. The program office will change the nation's air traffic control system from one that relies on radar technology to a system that uses precise location data from the global satellite network.

Enabling this evolution is a proven technology called Automatic Dependent Surveillance-Broadcast (ADS-B). ADS-B is a crucial component of the nation's Next-Generation Air Transportation System, and its implementation over the next 20 years will turn the NextGen vision into reality. After years of research and development, and use by general aviation pilots in Alaska and air transport carriers in the Ohio River Valley, the FAA determined in 2005 that ADS-B is ready to be made operational throughout the national airspace system.

With ADS-B, both pilots and controllers will see radar-like displays with highly accurate traffic data from satellites – displays that update in real time and don't degrade with distance or terrain. The system will also give pilots access to weather services, terrain maps and flight information services. The improved situational awareness will mean that pilots will be able to fly at safe distances from one another with less assistance from air traffic controllers.

The gains in safety, capacity, and efficiency as a result of moving to a satellite-based system will enable the FAA to meet the tremendous growth in air traffic predicted in coming decades. Because ADS-B is a flexible and expandable platform, it can change and grow with the evolving aviation system.

The first manufacturer to comment on the panel gave members the impression that aircraft owners would be required to buy new avionics costing tens of thousands of dollars. The second manufacturer that commented clarified to members that they could get by for much less by sacrificing the capability of receiving traffic information in their aircraft, and that they would only be required to transmit traffic information to air traffic control. I could sense a sigh of relief from fellow pilots who are more concerned about ensuring that 100LL will be available in the future, than meeting the needs of NextGen.

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In order to receive information, the aircraft would be required to have a WAAS (Wide Area Augmentation System) receiver, which many aircraft today already have. An automatic broadcast system transponder will be mandatory by 2020 to transmit information to air traffic control.

Product announcements were many. Garmin debuted its new Aera line of touch-screen portable GPS navigators; Avidyne introduced its new DFC90 digital attitude-based autopilot; and PSEngineering demonstrated its new PMA6000B audio-control system. I was especially intrigued with digital engine cylinder temperature instruments; the tried and proven selection of auto pilots by S-Tec (now Cobham Avionics); travel information from the Bahamas, Mexico, and destinations here in the United States; and the many sunglasses and pilot flight bag and luggage manufacturers represented.

The excitement and enthusiasm surrounding the opening day of the AOPA Aviation Summit were capped off by the unveiling of the association's **2010 AOPA Sweepstakes Aircraft** in the exhibit hall of the Tampa Convention Center: a brand-new Remos GX light sport aircraft (LSA).

The theme of next year's sweepstakes is "Fun to Fly," and the Remos, N210FN, is sure to live up to that promise. The two-seat airplane sports a snappy paint scheme, a three-blade propeller, and a 100-hp Rotax engine.

The Fun to Fly Sweepstakes also marks the first time that AOPA's giveaway will run from Nov. 3, 2009 to Sept. 30, 2010. If your membership is current as of Sept. 30, 2010, you are automatically entered in the sweepstakes. The name of the winner will be announced at AOPA Aviation Summit 2010 in Long Beach, Calif.

Tampa's Peter O. Knight Airport featured 100 display aircraft, and played host to the hundreds of aircraft that flew in for the Summit. AOPA named the airport display "Airportfest" to keep the trade show



(TOP) A 1936 Lockheed 12A Electra Junior, owned by Joseph Shepherd of Fayetteville, Georgia.

(BOTTOM L/R) AOPA President Craig Fuller with author Susan Butler (*East to the Dawn*), Joe Shepherd (pilot), and Jay McClure (copilot).

appeal of the Summit alive and well. A shuttle from the convention center ran every 30 minutes.

Included among the Airportfest display aircraft was the full line of Piper, Diamond, Cessna, Beechcraft, and Cirrus aircraft, a nice variety of Light Sport Aircraft, and a Cessna 206 on Wipline floats. The aircraft,

which received a lot of attention, was the 1936 Lockheed 12A Electra Junior, owned by Joseph Shepherd of Fayetteville, Georgia.

Shepherd and his copilot, Jay McClure of Atlanta, Ga., who flew scenes in the motion picture "*Amelia*," joined author Susan Butler as special guests at the Friday luncheon. Butler wrote "*East to the Dawn*," one of two books used to write the screenplay for the movie starring Hilary Swank and Richard Gere. (See movie review, and feature on Joe Shepherd and his Lockheed Electra, elsewhere in this issue.)

The AOPA Aviation Summit had plenty of interesting seminars, such as the popular "Pinch Hitter" course for non-pilots, and everyone's favorite speaker, Rod Machado (flight instructor, author, aviation humorist, and *AOPA Pilot* columnist). Since we host the "*Midwest Flyer Canadian Fishing Fly-Out*" each year, I was especially interested in a seminar entitled "Ditching & Water Survival" in which Doug Ritter of the Equipped To Survive Foundation discussed how to survive a water landing without floats, as well as other survival tips and equipment ([www.equipped.org](http://www.equipped.org)).

Included among the survival gear Ritter recommends is the new GPS-

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based 406 MHz Personal Locator Beacon (PLB). For less than \$300.00, pilots can have the reassurance that only GPS technology can provide. Aircraft 406 Emergency Locator Transmitters (ELTs) are also now on the market, and the controversy as to whether or not they will be required in Canada, continues.

## Awards & Recognition

AOPA welcomed celebrity involvement this year, including a recorded video message from pilot/actor Harrison Ford, accepting the 2009 *"Let's Go Flying"* award for his involvement as the national spokesperson for "GA Serving America;" and a concert by John Oates, which was open to the Tampa community. Other celebrities included actor/author/producer Montel Williams, who promoted healthy lifestyles; and Michael Torchia, founder and president of Operation Fitness. Williams and Torchia teamed up with FAA Air Surgeon, Dr. Frederick Tilton, to focus on the importance of staying fit as pilots. AOPA also launched a new health benefit program for AOPA members at the AOPA Health Pavilion – Fly Well!

The J.B. "Doc" Hartranft Award went to two members of the House of Representatives, Rep. Allen Boyd (D-Fla.) and Rep. Vernon Ehlers (R-Mich.), for founding the "General Aviation Caucus." The caucus was formed to educate lawmakers about the importance of general aviation to the United States. The award is presented annually to the federal, state, or local government official who has made the most significant contribution to general aviation during the year. J.B. "Doc" Hartranft was AOPA's first employee when the organization was incorporated on May 15, 1939, taking the title executive director and moving the offices from Philadelphia to Chicago, right next to the Ziff-Davis publishing house. From there, Hartranft launched a whirlwind of activity to benefit private flyers.



(L/R) AOPA President Craig Fuller and Walter Fricke of Veterans Airlift Command.



Hal Shevers of Sporty's Pilot Shop is recognized for his 50 years of AOPA membership. He was presented his 50-year membership pin and an AOPA Presidential Citation from Craig Fuller for partnering with AOPA.



Rep. Vernon Ehlers (R-Mich.) pictured here received the J.B. "Doc" Hartranft Award for co-founding the General Aviation Caucus with Rep. Allen Boyd (D-Fla.).

The Laurence P. Sharples Perpetual Award went to Walter Fricke, the chairman, president and founder of the Veterans Airlift Command (VAC). Using a nationwide network of volunteer pilots, VAC provides free transportation for medical and other compassionate reasons to wounded warriors and their families. The Sharples Award is given annually to the private citizen who has demonstrated the greatest selfless commitment to general aviation, and is named in memory of one of AOPA's five founders.

Do you remember Jessica Cox from EAA AirVenture-Oshkosh, the young woman who was born without arms and fulfilled her dream of learning to fly? Well, she was at the AOPA Aviation Summit, and an inspiration to all.

What we do with our arms and hands, Jessica accomplishes with her legs and feet. The aircraft that works best for her is the Ercoupe, because the ailerons and rudder are interconnected (Oct/Nov 2009, [www.midwestflyer.com](http://www.midwestflyer.com)). Jessica's full-time job is motivational speaking, so if you are a member of a pilot, civic or business group, and are looking for an outstanding speaker, contact her through her website at [www.rightfooted.com](http://www.rightfooted.com).

The president of the National Air Transportation Association (NATA), Jim Coyne, did an excellent job speaking and moderating AOPA LIVE during the political rally at the main stage in the exhibit hall. Coyne and Fuller knew each other when Coyne was a member of Congress.

Like EAA AirVenture-Oshkosh, the AOPA Aviation Summit is an opportunity to reunite with old friends, and meet new ones. From our Midwest states, I met a lot of people from Minnesota, Michigan, Illinois, Wisconsin, Iowa and Indiana. One pilot I met from Minneapolis drives a Ready Mix Cement truck and rents aircraft at Thunderbird Aviation at Flying Cloud Airport in Eden Prairie, Minn. A lawyer from Chicago I met



took the same instrument course I took some 20 years ago at Morey Airplane Company in Middleton, Wis. We met other pilots and their families from elsewhere in the country.

Among some of the businesses from the Midwest, which displayed at the AOPA Aviation Summit, were Wipaire, Inc., South St. Paul, Minn.; Rapco, Inc., Hartland, Wis.; Cirrus Design, Duluth, Minn.; NationAir Insurance, Inc., St. Louis, Mo.; University of North Dakota, Grand Forks, N.D.; Sporty's Pilot Shop, Batavia, Ohio; American Champion Aircraft, Rochester, Wis.; BRS Aerospace, St. Paul, Minn.; Cincinnati Avionics, Cincinnati, Ohio; Mid-Continent Instruments, Wichita, Kan.; Cessna Aircraft, Wichita, Kan.; Waco Classic Aircraft, Battle Creek, Mich.; Travers Aviation Insurance, St. Louis, Mo.; and Frasca

### **AOPA, NBAA Announce Memorandum of Understanding To Promote Use of Light Business Aircraft**

FREDERICK, MD. – The Aircraft Owners and Pilots Association (AOPA) and the National Business Aviation Association (NBAA) announced on October 21, 2009, an accord that will draw on the strengths of both organizations to support owners and pilots who use their aircraft as effective business tools. As a result of the memorandum of understanding, beginning in 2010, AOPA and NBAA will each host "Light Business Aircraft Conferences" as part of their annual conventions.

"Combined, AOPA and NBAA have more than 130 years of experience supporting our members," said Karen Gebhart, AOPA's executive vice president of communications. "With more than 415,000 members, AOPA brings strength of numbers, and offers tremendous safety education and one-on-one support through the AOPA Air Safety Foundation and our Pilot Information Center. And NBAA has more than six decades of specialized expertise to help owners/pilots make the most of their aircraft as business assets."

"NBAA and AOPA have a long history of working together," added NBAA President and CEO Ed Bolen. "This new collaborative effort to address the needs of a vital sector of the industry – the small businesses which use aviation – will enhance the value of each organization to our members and can help businesses that do not yet take advantage of business aviation understand why it would be in their interest to do so."

Because the AOPA Aviation Summit and NBAA's Annual Meeting and Convention are often on opposite sides of the country, the jointly hosted Light Business Aircraft Conferences will be able to reach more pilots each year.

For 2010, the NBAA Annual Meeting & Convention will be held October 19-21 in Atlanta, Georgia, and the AOPA Aviation Summit will be held November 11-13 in Long Beach, Calif. Members from each organization will be

International, Urbana, Illinois.

Being in Florida, the "Sun 'n Fun Fly-In" had a booth, encouraging everyone to come back to Florida, April 13-18, 2010 ([www.sun-n-fun.org](http://www.sun-n-fun.org)).

AOPA Aviation Summit 2009 is over, but you can relive it online at [www.aopa.org](http://www.aopa.org) through online video and news archives.

If you have never attended an AOPA annual convention, plan now to attend AOPA Aviation Summit 2010, November 11-13 in Long Beach, Calif. ([www.aopa.org](http://www.aopa.org)). You can register online, and check on available housing and local attractions.

Craig Fuller summed it up the best: "Your decision to attend the AOPA Aviation Summit is a great demonstration of your commitment to the future of general aviation." □

invited to attend the event of the other organization.

With more than 415,000 members, AOPA is the world's largest civil aviation association. Seventy percent of all U.S. pilots are members of AOPA ([www.aopa.org](http://www.aopa.org)).

Founded in 1947 and based in Washington, DC, the National Business Aviation Association (NBAA) is the leading organization for companies that rely on general aviation aircraft to help make their businesses more efficient, productive and successful. NBAA represents more than 8,000 companies ([www.nbaa.org](http://www.nbaa.org)). □



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# Motion Picture “Amelia” Excites Audiences About Flight While Telling Story of An American Adventurer



Hilary Swank as Amelia Earhart in Mira Nair's AMELIA

Photo by Ken Woroner

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The new motion picture, “Amelia” (PG, 1 hr. 51 min.), about pioneer aviatrix, Amelia Earhart, was released October 23, and based on box office sales to date, it appeals more to pilots than to the general public. *Amelia* is definitely a “pilot’s film,” featuring a variety of vintage aircraft, and involving a lot of notables from the aviation community doing the flying.

The film is based on two books (“East To The Dawn” by Susan Butler, and “The Sound of Wings” by Mary S. Lovell). Great effort was made to keep to historical facts,

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Michael Terry

Joe Shepherd's 1936 Lockheed 12A Electra Junior, one of two Electras used in the filming of "Amelia."

while still allowing enough editorial freedom to be dramatic to heighten the excitement, although one wouldn't think that Earhart's life needed any more excitement.

Certainly in the 1930s as aviation took hold, there was a lot of interest in the aeronautical feats of Charles Lindbergh, becoming the first man to cross the Atlantic solo on May 21, 1927, and in Amelia Earhart, for becoming the first woman to do likewise on May 21, 1932. Earhart's participation in air races, and her attempt to fly around the world, only increased this interest.

The film brought out how Earhart lived to fly, and did what she had to do to support her aeronautical adventures. She was a highly motivated person, and was always looking for the next challenge. Earhart also had a strong desire to advance women in aviation careers.

Watching Earhart's navigator, Fred Noonan, try to navigate in bad weather using the stars as they tried to cross the central Pacific Ocean on

that fatal flight, shows a striking contrast with today's navigation using GPS technology, glass cockpits, and auto pilots, not to mention increased aircraft capabilities. Their chances of locating tiny Howland Island, where they were planning to land and refuel, would have

been drastically improved had their Lockheed Electra been equipped with modern avionics.

Another striking contrast in the film was how the times were right in the 1930s for Earhart to gain notoriety through aviation, more so than is possible today, with man reaching for the stars, and having landed on the moon.

After becoming the first woman to fly across the Atlantic, Amelia Earhart (played by two-time Academy Award® winner, Hilary Swank) was

thrust into a new role as America's sweetheart – the legendary “*goddess of flight*” – known for her bold, larger-than-life charisma. Yet, even with her global fame solidified, her belief in flirting with danger and standing up as her own, outspoken woman never changed. She was an inspiration to people everywhere, from First Lady Eleanor Roosevelt (Cherry Jones) to the men closest to her heart: her husband and promoter, publishing magnate, George P. Putnam (Golden Globe® winner Richard Gere), and her long-time friend and lover, pilot Gene Vidal (Ewan McGregor). In the summer of 1937, Amelia Earhart set off on her most daunting mission yet: a solo flight around the world that she and Putnam both anxiously foresaw as destined, whatever the outcome, to become one of the most talked-about journeys in history.

The film is directed by Mira Nair, and written by Academy Award®



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winner Ron Bass, and Anna Hamilton Phelan.

*"Amelia" is a love story and an action-adventure. "I wanted the film to be a living, pulsating portrait of this woman who dared to dream of things that no one had ever done before," said Nair. "Amelia lived life as fully as possible and didn't put a lid on her emotions or her ambitions. She left behind a legend that I hope will continue to fuel a passion in people to accept no limits."*

The most vivid and adventuresome period in Earhart's life – from her sudden exposure to global fame in 1928 to her shocking disappearance mid-flight less than 10 years later – comes alive on the screen thanks largely to the dogged passion of Avalon Pictures CEO Ted Waitt. An aviation and exploration aficionado in his own right, Waitt had long been fascinated by Amelia Earhart's story.

*"Ever since I was a little kid, I was fascinated with Amelia's disappearance. As I began reading about her, I became even more fascinated with her life than her disappearance," explains Waitt. "Hers is an incredible story of courage and she was a real pioneer for women, as well as aviation."*

He continues: *"Everyone today knows about Amelia's disappearance, but very few people understand her life. I thought her tale could be an inspiration, as well as very entertaining. She still ranks as one of the 10 most famous Americans of all time, and people are naturally*

*interested in her – yet not many know her real story."*

Avalon purchased two seminal biographies of Earhart: Susan Butler's *"East To The Dawn,"* which explores little-known aspects of Earhart's life, including her friendship with First Lady Eleanor Roosevelt, and became the first book to document a secret affair with aviator and businessman, Gene Vidal; and Mary Lovell's *"The Sound of Wings,"* which focuses on Amelia's intricate relationship with her publicist husband and the intense promotional machinery that surrounded her. (Waitt especially praised Susan Butler's book for being well researched and well written.)

Waitt also brought in Elgen M. Long, co-author with Marie K. Long of *"Amelia Earhart: Mystery Solved,"* as a consultant. Long is an expert on the flight logs that reveal, moment by moment, what happened on Amelia's final flight from New Guinea en route to Howland Island – as what Long calls *"multiple failures of navigation and communication"* that put Earhart's plane in insurmountable peril.

Using these heavily-researched sources as the backbone of their story, two award-winning writers – Academy Award® nominee Anna Hamilton Phelan (*Gorillas In The Mist*) and Academy Award® winner Ron Bass (*Rain Man*) – forged a screenplay that hinges on authentic, documented history, yet which *goes beyond the facts* to add drama to the film. After an intensive examination of her life and times, Phelan and Bass emerged with

a portrait of an Amelia so in love with what she saw and felt in the sky that it influenced her every move on earth.

Compressing 10 years into a couple of hours, Phelan and Bass reveal the many faces of Amelia Earhart – businesswoman, daredevil, fashion icon, promoter of women's rights, wife, lover, die-hard individualist – but most of all as a woman whose palpable humanity is just as moving as her record-setting feats.

What especially struck Mira Nair in reading the screenplay was the idea that Amelia was, in many ways, America's first true modern celebrity. She was not merely famous, but so internationally idolized that her very name and image became a moneymaking machine. This fame granted her influence that she never imagined and, ultimately, she learned to use it to advance both women's rights and the age of aviation.

### The Cast

We are impressed with actress Hilary Swank for taking flying lessons prior to doing the film, and for her interest in those of us who have earned the title "pilot." (The producers would not let her solo until the film was completed.)

Swank was most accommodating to the owner of the 1936 Lockheed 12A Electra Junior used in the film, Joe Shepherd, and his wife, Michelle, on and off the set. She showed her appreciation by autographing the inside of the door of the aircraft and posing for pictures. Swank also supports the efforts of the Ninety-Nines, the women's pilot organization in which Earhart served as its first president.

Having garnered two Academy Awards® for transformative roles in *"Boys Don't Cry,"* and *"Million Dollar Baby"* (directed by another pilot, Clint Eastwood), Swank is no stranger at going to great depths for her roles. But she also possessed something more than just the technical skills and physical attributes to play Earhart; she really acts from within the

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personality she portrays. Swank also stunned the director with her interest in flying, and daring deeds.

Yet, Swank also knew the role was a risk. *"There's not a lot of liberty you can take with a character like Amelia, because she is such an icon and we have seen so many images of her that they are almost burned into our psyches,"* she admits. *"I think the challenge for me was to just fully commit to what I believed she was like."*

Part of that commitment meant taking to the skies, so Swank would have an eye-opening, personal insight into what drew Earhart towards the heavens. *"I realized that she loved flying because she loved feeling free of the constraints she felt on the ground. I think she also loved being able to see the world – and you have to understand, in those days very few people had that chance – and experiencing new cultures. Most of all, she was driven by the promise of always trying something new. That's why she was always going after a new record or heading to a new place, and that's something I could relate to."*

Swank soon discovered how much Earhart has meant to today's thousands of women pilots. *"Almost every female pilot I met said Amelia was an inspiration to her,"* Swank offers. *"Amelia would have loved that and she would have really loved to see that women are now flying commercial planes across the Atlantic."*

Swank was also moved by the central romance of Earhart – the relationship between Earhart and her husband, the public relations vanguard, George P. Putnam, played by Richard Gere, who kept Amelia's flights financed via a constant spate of public appearances, advertisements and sponsorships.

Once Earhart and Putnam did marry, biographers believe that Earhart carried on an affair with aviator Gene Vidal, played by Ewan McGregor, with whom she would found Northeastern Airlines. Vidal also founded two other airlines, taught Aeronautics at West Point, and served as the Director of the United States Bureau of Air Commerce from 1933-1937. Swank says it was easy to understand the attraction between them. *"With Gene, she had this shared passion, they both loved to fly and both wanted to advance the business of aviation in America, and they saw the world in a similar way because of that,"* she explains.

Rounding out the main cast is another man who figured prominently in Earhart's story: the talented aerial navigator, Fred Noonan (Christopher Eccleston), who would disappear with Earhart over the central Pacific Ocean. Having made his reputation navigating the pioneering "Manila Clipper" transatlantic route for Pan American Airlines, Noonan had impeccable credentials, yet was also known as a heavy drinker.

### **Amelia's Plane: The Electra**

One of the main characters in *Amelia* was of course her famed, twin-engine, silver-and-orange Lockheed L-10E Electra, in which she would ultimately disappear. An



Amelia Earhart

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innovative design by Hall Hibbard, the plane was first flown in 1934 and soon became one of the fledgling airline industry's state-of-the-art, long-distance vehicles, as well as coveted by Earhart.

Since only a handful of Electra planes still exist in the world, the film's producers launched a global search for one that was ready for some serious action. The producers found one of two planes used in the film in the South of France, and had it flown across the African continent, in Earhart's footsteps. *"It was an incredible trip that nourished us through the course of shooting,"* says Mira Nair. *"I think people can relate to the plane because it reminds one of all the beauty and potential of flying."*

Veteran pilot and French journalist, Bernard Chabbert, whose own aviator father met Amelia Earhart briefly in Senegal, giving him a unique link to the story, owns this Electra.

*"The Electra is a masterpiece of a flying machine, an Art Deco, sophisticated, refined airplane with a seemingly magical potential for adventures,"* Chabbert muses. *"If you own an Electra – and only a dozen are still in existence – you dream of the day a movie company will call and ask if they can use your aircraft in a film about Amelia Earhart."*

But when that day came for Chabbert, it brought, with the honor and excitement, a massive logistical challenge. After all, his plane was in France and it needed to be in South

Africa where much of the production was taking place. Mira Nair wanted not only to transport the plane to Cape Town, but also to capture its long sweep across the African continent, mirroring Amelia's remarkable travels.

This would be no minor feat. The Electra Chabbert owns – known as *"Hazy Lily"* or just *"Lily"* for short – had already been in operation for more than six decades, had served as a flying limousine during World War II, and had been flown by the British pilot and alleged spy, Sydney Cotton, one of the inspirations for James Bond. After all that, the plane was now sitting in a hangar without an engine or propeller and damaged from a belly landing.

*"Now we had just four months to fix everything, find two new engines, have new propellers made, and more,"* recalls Chabbert. *"We then had to plan a very unusual trip around Africa. In 1937, such a voyage would have made us front page news! We duplicated a flight equivalent to what Amelia had done in her time, allowing the film to honor her travels with shots of ours."*

With barely enough time for a test flight, the refurbished Electra took off from Annemasse Airfield near Geneva and headed towards the coast of Spain. Two days later, it landed in Morocco, then on to Bamako, Mali through rows of thunderstorms. The journey continued as the plane hopped across Africa, often in search

of Avgas. The Electra flew over the shark-infested waters of the Gulf of Guinea, was grounded for several days after landing to fuel on the island of Malabo, crossed Angola and Namibia and at last landed in Cape Town with just 24 hours to spare before it had to be painted and ready for its close-up shot.

The emotions of watching the cast and crew interact with the plane made the long, hard trek worth it for Chabbert, who served on the flight crew. *"That old, graceful lady of the skies really became part of the cast,"* he says. *"Hilary acted right away as if she were Amelia and this was her Electra."*

Most of all, Chabbert was proud of how the plane performed, covering the kind of miles it hadn't seen in decades. *"The old aircraft never coughed,"* he notes. *"We flew difficult scenes, like Amelia's last takeoff from Lae, in New Guinea, when her Electra was so overloaded that she had to make a dive towards the sea to desperately grab some airspeed. We did that 22 times. We filmed Amelia's night take off from Calcutta under monsoon rains, four times in a row, from an unlit dust strip lost in the high grounds north of Capetown. We did many unique things, flying the old machine low above Victoria Falls, skimming the Okavango Delta desert, slipping between vertical mountain slopes, caressing endless soft beige sand dunes near Port Elizabeth. Through it all, it seemed the aircraft became a real actor, far more than a piece of décor."*

In the end, *"Hazy Lily"* would have to make the long, slow reverse journey back to Europe, but Chabbert says the journey was part of the reward. He summarizes: *"Lily had flown a total of 170 hours in eight weeks and never missed a beat. She had been in the hands of seven aviators, not mere pilots, who had lived with her the adventure of their lives. She had brought all of us deep into a time-warped trip, and helped us understand in the flesh what had been Amelia Earhart's personal truth."*



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Joseph Shepherd of Fayetteville, Georgia, owns the Lockheed Electra that was used in the film while shooting in Canada. Yes, there were two Electras and one Beech 18 used in the filming of *Amelia*, although the Electra “*Hazy Lily*” got most of the publicity. (See feature article elsewhere in this issue on Joe Shepherd’s Electra.)

### **The Aerial Unit, Other Planes & Authentic Costumes**

When it came to the look of Amelia Earhart, Mira Nair was most inspired by the things in life that inspired Earhart herself – vibrant style, the spirit of adventure, and most of all, the call of nature’s wide open spaces. To capture the raw thrills of solo flight, cinematographer Stuart Dryburgh put together a crack aerial unit led by 2<sup>nd</sup> Unit Director Marc Wolff, a veteran helicopter pilot in his own right and a leading expert in aerial photography. Aircraft used in the filming included vintage aerobatic biplanes, a beautifully restored Ford Trimotor owned by Greg Herrick of Golden Wings Museum at Anoka County-Blaine Airport in Minneapolis, Minnesota, and of course, the Electras.

For those planes the production could not find in a flight-worthy state, such as the Fokker seaplane named “Friendship,” in which Amelia first crossed the Atlantic, and the Lockheed Vega in which she set many of her records – the production built replicas. In turn, these replicas were then flown “virtually” via computer animation, overseen by the film’s visual effects team at Mr. X in Toronto.

The aerial unit of the film is filled with popular names from the air show entertainment industry and aviation community including Bryan Regan, formerly of the Red Baron Stearman Squadron and currently a member of the Aeroshell Aerobatic Team; Carol Pilon, a wingwalker who was once married to the late Jim Franklin, air show performer extraordinaire; Paul Molnar of Fighter Combat International and “Team Extreme;” and Jimmy Leeward of Leeward Air Ranch, Ocala, Fla., who also flew in the 1980 film “*Cloud Dancer*” with Tom Poberezny, starring David Carradine and Jennifer O’Neill.

The complete aerial unit consisted of the following persons: 2nd Unit Director/Aerial Unit (SA), Marc Wolff; Director of Photography, John Marzanno; 1st Assistant Camera, J. Glynn Williams; Aerial Coordinator, Cam Harrod; Tri-Motor Pilot, James Leeward; Tri-Motor Co-Pilot/ Mechanic, James Obowa; Aerobatic Pilot, Larry Ernewein; Electra Pilot, Joseph R. Shepherd; Electra Co-Pilot, Jay McClure III; Morane Pilot, Arnold Harvey Cleveland; Bleriot Pilot, Eric Andrew Presten; Wingwalker, Carol Pilon; ND Stunt Pilots, Bryan Regan, Michael Potter, Stephen Gray, and Hannua Halminen; Helicopter Pilot, David Tommasini; Ford Tri-Motor provided by Greg Herrick; Assistant to M. Wolff, Nicole Dipietro; and Aerial Safety, Paul Molnar.

The global landscapes that Dryburgh shot, from both above and on the ground, were largely brought to life in just



Actors Richard Gere and Hilary Swank. Gere played Amelia Earhart’s husband and publicist, George P. Putnam.

*Photo by Ken Woroner*

one, enormously diverse country: South Africa, where Nair lived for three years, and which provided the production not only with vintage art deco airports and unending skies, but also the means to forge eight different countries through which Amelia traveled, without ever crossing a border.

The task of turning one country into several fell to production designer Stephanie Carroll. One of her biggest challenges was turning a grassy airfield in the Transkei into the Lae airstrip in New Guinea, where Amelia was last seen



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*"Finding the right airfield was much harder than you might think because flying the Electra has certain demands, so we had to find just the right balance between historical accuracy, what the plane needed, and what we could afford," she points out. "We ended up using an old military airport and turning it into a far more tropical locale."*

Equally key was overseeing the design of numerous historical planes. *"We were basically fabricating planes that don't exist any longer," says Carroll. "But we knew that many aviation enthusiasts would be seeing the film, so we felt a real responsibility to be authentic."*

To help recreate the Fokker F7 seaplane and Lockheed Vega, the filmmakers recruited visual consultant, Paul Austerberry, who oversaw the fabrication and construction of all the vintage planes.

Austerberry tracked down the original Dutch drawings of the F7 from the Fokker factory in Holland to match up the airframe structure and fuselage – and drew from photographic evidence to forge the plane's 29 foot-long pontoons used for water landings. He also was able to use the wrecked fuselage of a Lockheed Vega to rebuild the plane's structure replete with its original gauges. In addition, Austerberry created an interior mock-up of Amelia's Electra that was used for some scenes in addition to the *"Hazy Lily."*

The whole process, Austerberry says, was like a history course in

how modern aviation first got off the ground. *"Amelia's life spanned the birth and development of human flight," he notes. "Her first plane had a wooden fuselage and her last plane was a gleaming Art Deco wonder. In her few short years, there were incredible changes and we had the chance to reflect all of that on screen."*

More changes are reflected in the costume work of Kasia Walicka Maimone, who says the period and character of Amelia were a dream come true for a costume designer. Walicka Maimone especially enjoyed researching the history of flight uniforms – and discovering that, in the 1930s, there was no standard outfit for women pilots, which turned Amelia into a fashion pioneer as well.

*"A lot of Amelia's flight outfits she designed herself," she notes. "She brought in so many interesting twists: the French cuffed shirts, the perfectly tailored slacks and a custom-made, short leather jacket modeled after military jackets of the time. With that jacket, she started her own fashion trend."*

By 1934, Amelia had started Amelia Earhart Fashion Designs, with a line of clothing at Macy's. Her look was instantly recognizable – streamlined, ready-for-action with a powerful, unfussy elegance. The following is a "timeline" of events in the life of Amelia Mary Earhart, who was born in the Midwest, and likely died somewhere in the central Pacific Ocean doing what she lived for – flying! *Amelia" is a must see for aviators!*

## Timeline

- **July 24, 1897** – Amelia Mary Earhart is born in Atchison, Kansas. Her father is a lawyer and inventor, but also an alcoholic. Her mother is the first woman to summit Pike's Peak in Colorado.

- **January 3, 1921** – Just a few months after American women win the right to vote, Earhart starts taking flying lessons from female pilot, Neta Snook.

- **December 15, 1921** – Earhart receives her pilot certificate.

- **October 22, 1922** – Earhart breaks the women's altitude record reaching 14,000 feet.

- **June 17-18, 1928** – Earhart becomes the first woman to fly across the Atlantic (as a passenger) in a Fokker F7 piloted by Wilmer Stultz. Upon her return to New York, she is honored with a parade, handed the key to the city, and invited to meet the President of the United States.

- **October 1928** – Earhart begins a series of lecture tours organized by George Putnam to promote her first book, *"20 Hrs. 40 Minutes,"* which establishes her full-fledged celebrity.

- **August 1929** – Earhart places third in the First Women's Air Derby, aka the "Powder Puff Derby," in her brand new Lockheed Vega. As America falls into the tough times of the Great Depression, Earhart becomes a symbol of can-do optimism and American spirit.

- **November 1929** – Earhart helps to organize "The Ninety-Nines," the first women's pilot organization.

- **July 5, 1930** – Earhart sets the



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women's world speed record of 181.18 mph over a 3K course.

- **February**

**7, 1931** – George Putnam and Amelia Earhart are married in Connecticut.

- **April 8, 1931**

– Earhart sets the women's autogiro altitude record of 18,415 feet.

- **May 20-21,**

**1932** – Earhart becomes the first woman and second person to fly solo across the Atlantic. She receives the National Geographic Society's gold medal from President Hoover and the Distinguished Flying Cross from Congress. She writes her second book, *"The Fun of It,"* about her journey.

- **August 24-25, 1932** – Earhart sets the women's record for fastest non-stop transcontinental flight.

- **April, 1933** – Earhart is invited to dinner at the White House with Franklin and Eleanor Roosevelt, and famously takes the First Lady on her first-ever night flight, sparking a lasting friendship.

- **January 1934** – Earhart turns to the Pacific Ocean and becomes the first pilot to fly solo from Hawaii to California. Soon after, she debuts her own brand-name fashion line at Macy's.

- **January 11, 1935** – Earhart pioneers the first solo flight across the Pacific Ocean, between Honolulu and Oakland, and uses the first civilian plane equipped with a two-way radio.

- **April 19-20, 1935** – Earhart is the first person to fly solo from Los Angeles to Mexico City.

- **June 1, 1937** – Earhart and Fred Noonan take off from Miami, Florida on an around-the-world flight. After 22,000 miles of flying, Earhart and Noonan are last seen in Lae, New Guinea. On July 2, en route to tiny Howland Island for refueling, the U.S. Coast Guard cutter "Itasca" loses contact with Earhart and she is not



Hilary Swank  
Photo by Ken Woroner

heard from again. President Roosevelt orders a massive search, which is called off on July 18, 1937. Two years later, she is declared legally dead.

### Howland Island

Howland Island is an uninhabited coral island located just north of the equator in the central Pacific Ocean, about 1,700 nautical miles (3,100 km) southwest of Honolulu (0°48'07"N

176°38'3"W and 0.80194°N 176.63417°W). The island lies almost halfway between Hawaii and Australia and is an unincorporated, unorganized territory of the United States. Geographically, it is part of the Phoenix Islands. For statistical purposes, Howland is grouped as one of the United States Minor Outlying Islands.

Howland Island covers 455 acres (1.84 km<sup>2</sup>), with 4 miles (6.4 km) of coastline. The island has an elongated shape on a north-south axis, and is devoid of any lagoon.

Howland Island National Wildlife Refuge consists of the 455-acre (1.84



Howland Island  
NASA Photo

km<sup>2</sup>) island and the surrounding 32,074 acres (129.80 km<sup>2</sup>) of submerged land. The island is managed by the U.S. Fish and Wildlife Service as an insular area under the U.S. Department of the Interior and is part of the Pacific Remote Islands Marine National Monument.

An airstrip, built in the late 1930s to accommodate Amelia Earhart's planned stopover, was never used, was subsequently damaged, not maintained, and gradually disappeared.

**"There's more to life than being a passenger."**

Amelia Earhart

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# Amelia's Real Leading Lady...

## Joe Shepherd's Lockheed 12A Electra Junior

Joseph Shepherd Photo



by Steve Schapiro

If you haven't seen the movie *Amelia* yet, you probably think the star is Hilary Swank playing

the title role. Swank may have the top billing, but the real leading lady of this biopic about Amelia Earhart is the 1936 Lockheed 12A Electra Junior owned and flown by Joe Shepherd of Fayetteville, Georgia. For three weeks in the summer of 2008, all the cameras were focused on the polished aluminum of NC2072, repainted to look like the plane Earhart was attempting to fly around the world when she disappeared over the Pacific in 1937.

It didn't take much work to get the Lockheed ready for filming, but Shepherd required a little more make-up. One morning he showed up on the set and was told they needed to shave his moustache, put him in a blond wig, and have him wear a scarf and leather jacket to look like Earhart.

His copilot, Jay McClure of Atlanta, Ga., required less effort since, "I make a more handsome Fred Noonan," McClure said at the AOPA Aviation Summit luncheon in Tampa, Florida, November 6, 2009. The aircraft was on static display at Peter O. Knight Airport in Tampa.

The flight path to fame for Shepherd's Lockheed wasn't direct. H.E. Talbot, who went on to become the Secretary of the Air Force in 1955, originally owned the airplane. The Gulf Oil Company of South America

then owned it before it was pressed into service by the government during the war for two years. After the war it went back to Gulf Oil and then on to a number of individuals, when Shepherd found it in Texas in 1988.

Shepherd, a retired Northwest Airlines pilot, was looking for a Lockheed after flying a friend's plane and falling in love with it. That's when he saw an ad in Trade-a-Plane from an owner looking to swap his Lockheed 12A for a Cessna 195. Shepherd had a 195, so he gave him a call.

The Lockheed was almost derelict. It had been tied down and sitting for 12 years. There was grass growing around it, and all kinds of insects and animals in it. "We cranked up the engines, they ran and that satisfied me," said Shepherd. "We shook hands and we had a deal."

Shepherd and a group of friends spent the next 19 years restoring the aircraft. He put in a totally new instrument panel, equipped it with dual flight instruments and made it IFR capable. It first flew on "April Fool's Day" in 2007, but owning the aircraft has been far from a foolish endeavor.

A few months later, the glistening Lockheed won the "Antique Outstanding Transport Award" at EAA AirVenture in Oshkosh, Wisconsin. It was the first of 10 awards the airplane has won, including the 2007 Grand Champion - Classic at the Antique Airplane Association (AAA) Fly-in in Blakesburg, Iowa; the Midwest Antique Aero Club MAAC Lyle Hoselton Memorial Award in 2007; and the Midwest AAA MACC Antique Project of The Year, also in 2007.

And then came the call that made the plane a movie star. Shepherd's Lockheed landed the role in *Amelia* after the filmmakers contacted Peter Ramm, another Lockheed 12A owner, when they couldn't find a Lockheed 10E like Earhart flew. Ramm's aircraft was under restoration, so he called Shepherd, the flight instructor who checked him out in the Lockheed.

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Joe Shepherd with his 1936 Lockheed 12A Electra Junior.



(L/R) Michelle Shepherd, Hilary Swank, Joe Shepherd, and the Shepherds' daughter, Laura Shepherd.

Shepherd took his role in the movie seriously. Like most actors preparing for a film, he researched his topic.

*"I read four or five books about Amelia before filming to get up to speed."*

Even with his research, filming was a learning experience. *"I had never been around a movie production before. I had no clue how many scenes had to be shot just to get 5 seconds of usable film."* Shepherd estimated that he might have flown 10 hours just to get a minute or less of footage that actually ended up in the movie.

A typical day started at 6 a.m. and often lasted until midnight. Although Shepherd did not have to be on the set the entire time, he didn't want to be away from the aircraft. The crew *"was very good and careful, but a lot of the people were not used to being around airplanes."*

On one occasion a crewmember showed up with long screws and something to cover a window. He was told to black out the window so the plane would resemble the larger Lockheed 10E, the model Earhart flew. A surprised Shepherd had to tell him that you don't just screw things into an airplane.

Another challenge was dealing with where the cinematographers wanted to position cameras to film some of the sequences.

*"We were nervous about where the cameras were moving,"* Shepherd said. *"For one scene they had a*

*Mercedes with a boom camera cross the runway during takeoff."*

While Shepherd was learning how Hollywood works, he also had to teach the filmmakers something about proper aircraft operation. Filming took place in Toronto and St. Catherine's, Ontario during the summer of 2008 with afternoon highs in the mid-80s.

For many of the scenes of the Lockheed taxiing, Shepherd had to be vigilant to keep the oil temperatures in the green. He insisted on shutting the engines down after each shoot

and letting the plane sit for 30 minutes to cool down – something the filmmakers weren't too happy about.

However, as they would do on any other set, the filmmakers made sure to take care of the film's star. Besides, how can you argue with a man who's spent *"two to three hours in the aircraft in a wig"* and leather jacket under a blazing summer sun doing his best imitation of Amelia Earhart?

For additional information on Joe Shepherd's Lockheed 12A, go to [www.electrajr.com](http://www.electrajr.com). □

## Air Show Performer To Finance Aviation Films

SANTA MONICA, CALIF. – Paramount Pictures has negotiated a four-year contract with David Ellison and his Skydance Productions to co-finance four to six pictures per year for the studio. Some of the films will be based on flying stories. Nothing





is expected to happen until Skydance completes raising funds for the projects.

Ellison, 27, is the son of Oracle Corporation founder/CEO Larry Ellison, and a member of air show

**CONTINUED ON PAGE 40**

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## Love Was In The Air At AOPA Summit

Steve Schapiro



Glenn Plymate of Portland, Oregon, places a wedding ring on the finger of Irene Bolam of Mooresburg, Tennessee, with Joe Shepherd's 1936 Lockheed 12A Electra Junior in the background.

by Steve Schapiro

**F**riday afternoon, November 6, 2009, during the Aircraft Owners & Pilots Association (AOPA) Summit in Tampa, Florida, seemed like most other years. There were pilots and aviation enthusiasts walking through the exhibit hall checking out the latest in aircraft supplies and services. There were seminars on safety and learning to fly. And people were boarding buses at the Tampa Convention Center for the short ride to Peter O. Knight Airport to see a variety of Light Sport Aircraft, personal jets and antiques assembled at the “Airportfest” portion of the Summit. Little did they know they would be guests at the impromptu wedding of two Amelia Earhart enthusiasts.

In fact, when Glenn Plymate and Irene Bolam woke up that morning, they didn’t even know they would be taking their vows under partly sunny skies in front of the 1936 Lockheed 12A Electra Junior that was used in the new film “Amelia.”

The couple met in June after Irene posted a photo on an Amelia Earhart Society website of herself next to an Earhart monument in Hawaii. She was bragging a little that she “had seen something most of them hadn’t seen.”

Well, Glenn isn’t most people – he, too, had been to the monument. So he sent Irene an email. Soon the emails turned into phone calls. They talked about the famous aviatrix who disappeared attempting to fly around the world in 1937 and their own flying history. Glenn got his private pilot certificate in 1949 and several ratings since. Irene soloed in 1969. Irene asked, “Would you take me flying in your plane?”

“That question melted me down,” Glenn said. “It spoke volumes about the confidence she placed in me and her desire for us to meet.”

The couple met in person in July, appropriately at an airport. Glenn flew from Portland, Oregon to Knoxville, Tennessee via Seattle and Atlanta. Irene drove from her home in Mooresburg, Tennessee about an hour and a half northeast of Knoxville.

Glenn lost his wife, Erral, in July of 2003 after 56 “wonderful years of marriage.” Irene also is widowed after a long and wonderful marriage, losing her husband, John, of 43 years in 2006. Neither wanted to be lonely any more and the topic of marriage came up.

At breakfast at the AOPA Summit, they were chatting with Pat Ohlsson about the difficulty in getting all the paperwork completed to get married. Glenn and Irene mentioned they were considering going to Las Vegas. Pat said, “My husband can marry you today!” Talk about a done deal!

Pat and Lenny flew their Waco from Spruce Creek Residential Airpark in Daytona Beach, Fla., where he is a realtor and notary public. In Florida, a notary public can marry couples and Lenny has officiated at 15 weddings. He went into action and was able to get the marriage license expedited so the wedding could take place that afternoon.

With the Lockheed 12A as a backdrop and a number of uninvited AOPA members as guests, Glenn Plymate and Irene Bolam tied the knot and celebrated with champagne and cake.

“The only thing we disagree on is what happened to Amelia,” said Bolam. “He thinks she crashed and sank. I know she crashed and survived and made it back to the United States.” □

### ELLISON FROM PAGE 39

performer Sean D. Tucker’s aerobatic team, “The Collaborators.” Oracle Corporation sponsors Tucker’s act, “Team Oracle.”

Ellison attended the University of Southern California Film School and learned to fly aerobatics at an early age. At age 20 he became one of the youngest pilots to perform at EAA AirVenture-Oshkosh, Oshkosh, Wis., when Tucker debuted his new four-plane team that also included his son, Eric, and one other pilot. Ellison created Skydance in 2004

with the goal to combine his passion for acting, aviation and producing. His first aviation film was “Flyboys,” the 2006 Tony Bill-directed WWI film that Ellison co-financed. Ellison was also part of the cast. “Flyboys” did not do well at the box office, but Ellison is not giving up on aviation projects.

Among the many film projects in the works is “Northern Lights,” a drama about four aspiring aerobatic pilots who form a team and compete with a more experienced varsity team to be number one. □



# Aeronautics Report

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## Think Twice Before Flying In Ice

*by Jeff Taylor*

*Aviation Consultant, WisDOT Bureau of Aeronautics*

**W**hen you fly an aircraft that is not certified to fly into known icing conditions and it starts to accumulate ice, like it or not, you have just become a test pilot. Aircraft manufacturers, knowing they will not certify an aircraft for known ice, do not test fly it in icing conditions, so the aircraft's performance and handling characteristics with structural ice are unknown. When you fly this plane into icing conditions, you are at the controls of an aircraft with severely diminished aerodynamics. Is this what you anticipated when you departed?



Jeff Taylor

exposed frontal surface of the airplane – not just on the wings, propeller, and windshield, but also on the antennas, vents, intakes, and cowlings, which can cause antennas to vibrate severely and break. The airplane will stall at much higher speeds and lower angles of attack than it normally would, and it can roll or pitch uncontrollably, making recovery impossible. In moderate to severe conditions, a light aircraft can become so laden with ice that continued flight is impossible.

Icing accidents typically occur during the approach and landing phase of flight. As the aircraft's airspeed is reduced during the approach to the runway, the airplane may stall unexpectedly since the speed at which the airplane will stall is no longer known. Remember, you are a test pilot, so you can forget about the white arc.

Normally, an aircraft's wing is designed to stall first at the root, then progress outward toward the wing tip. However, during a flight through an ice-laden cloud, the outer area of the wing ahead of the aileron will accumulate ice faster than the root area, creating a situation where the wing tip stalls first. In addition, the ice accumulation may not occur symmetrically between both wings, creating major problems with roll control. If you find yourself in an icing situation, maintain a higher than normal approach speed. How much is hard to say since every airplane

and situation will be different.

Nevertheless, you can keep the odds in your favor by looking for a long runway and avoiding the use of flaps.

While we have focused on ice accumulation on the aircraft's wing, we should also pay closer attention to understanding the effects of ice on the aircraft's tail. During normal flight, the horizontal stabilizer provides a counterbalance to the tendency of the nose to pitch down. The tail is, in effect, an upside down wing. When ice accumulates on the tail, it is no longer able to generate enough lift and it will stall, causing the nose to pitch down severely. In addition, the tail is more susceptible to accumulating ice than the wing since its chord length is shorter and the leading edge radius is smaller. In fact, the tail can collect two to three times as much ice as the wing, and the pilot typically will not see it.

So how do you recognize a tail stall? You are probably in a tail stall when you extend flaps and the pitch control forces become abnormal and erratic. In addition, you will feel a shudder in the control column, not in the airframe as you would in a wing stall. Tail stalls usually occur with flap extension or at the high speed limit for flap extension. The challenge in dealing with a tail stall is that the recovery technique is opposite of a wing stall. Begin your recovery by immediately raising the flaps to the previous setting, pull back on the yoke and reduce power if altitude permits; otherwise maintain power, and do not increase airspeed unless you must to avoid a wing stall. See what I mean

When ice accumulates on an aircraft, its aerodynamics change in several ways, and none of these changes are good. Smooth airflow over the wing is required to generate lift. Ice build-up disrupts that airflow, both increasing drag and reducing the airfoil's ability to generate lift, all while the weight of the aircraft increases under accumulating ice. To compensate, the pilot adds power and raises the nose to maintain altitude. Now, with the angle of attack increased, the underside of the wings and fuselage start to accumulate additional ice, adding more weight. Ice will also accumulate on every



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## Terrorism & War Risk Insurance – Do You Really Need It?

by Jeff Rasmussen

Since 9/11, there have been no domestic terrorism events involving aircraft. In early February, someone sought to create a problem with general aviation by planting a fake pipe bomb at Middleton Municipal Airport-Morey Field in Middleton, Wisconsin. When shocking events like these occur, they can lead to many concerns about personal safety and risk management. Aircraft owners and airports see the TRIA and terrorism coverage notices that are available on our aircraft and airport liability insurance policies. Like most things in aviation, our skills can get rusty without practice (*just as my CFI from my last BFR!*). We are overdue for some recurrent training



Jeff Rasmussen

on the topic of terrorism and war risk insurance.

### What is TRIA?

TRIA is an acronym for “Terrorism Risk Insurance Act,” which was first enacted by Congress in 1992. It requires insurance companies to offer terrorism coverage to policyholders. As a part of this legislation, the U.S. Government is partially backing the insurance companies should a TRIA-defined event occur. Like any insurance policy, there are definitions, conditions, and exclusions. TRIA is no different.

In order for an “Act of Terrorism” to have occurred, it must meet with four (4) main conditions.

First, the act must occur on U.S. domestic soil, onboard a U.S. air carrier, U.S. vessel, or on a U.S. mission.

Second, it must be committed by foreign terrorists. Timothy McVeigh and the Oklahoma City bombing

would not meet the TRIA definition.

Third, it must cause bodily injury to more than 50 people or cause more than \$5 million in property damage.

Last, the U.S. Secretary of State must declare it an act of terrorism.

### What are the insurance implications for me?

Terrorism and war are items that are typically excluded by aircraft and airport liability insurance policies. These coverages are usually available to be purchased from most aviation insurance companies. Many of the companies charge a nominal fee for them. One large underwriter of aircraft insurance charges a mere \$1 for TRIA. On some airport liability policies, others can charge considerable amounts upwards of \$5,000 or more for the coverage for TRIA and war. For corporate aviation, it can vary from \$0.05 per \$1,000 of value and 10% of the liability premium.

**CONTINUED ON NEXT PAGE**

### FLYING IN ICE CONTINUED

about tail stall recovery being opposite of a wing stall recovery?

Before your flight, remove all frost, snow, or ice from the wings and control surfaces. There is no such thing as “just a little ice or frost.” FAR 91.527 states: “No pilot may take off in an airplane that has any frost adhering to the wings or stabilizing or control surfaces.” Recent research has shown even a small amount of ice contamination can have very detrimental effects. Armed with this information and details of a high profile accident in Colorado, the National Transportation Safety Board (NTSB) took the unusual step of sending a letter to all pilots urging

them to “run their hands along the aircraft’s wings before takeoff to make sure tiny amounts of ice have not formed and increased the risk of an accident.” They went on to say that fine particles of frost or ice, the size of a grain of table salt, and distributed as sparsely as one per square centimeter over an airplane wing’s upper surface, can eliminate enough lift to prevent that airplane from taking off. A perfectly clean wing is the only safe wing.

There are many resources available to learn more about aircraft icing. One very useful site on the Internet is NASA’s, “Aircraft Icing – Online Courses & Resources,” which can be

found at <http://aircrafticing.grc.nasa.gov/index.html>

One of the best resources available for icing forecasts is at <http://adds.aviationweather.gov/icing/>

Even a small amount of ice can dramatically alter your ability to control an aircraft. Learn all you can about the weather conditions where icing is likely to occur and how to avoid it. If you do enter flight conditions where ice starts to accumulate, take immediate action to change your flight conditions. Generally, an area of icing is not particularly thick or widespread, but do not delay in getting out of it. Leave the test piloting to someone else! □

Terrorism is one of the many perils covered by the typical war risk insurance. If you are currently buying "War Risk Hull and Liability," you are protected for perils such as war, confiscation, hijacking, and foreign and domestic terrorism. War risk insurance has 7 days notice of cancellation.

If you remember back to 9/11, shortly thereafter, all aviation insurance companies sent notice of cancellation of the war risk coverage with 7 days notice. Everyone who previously had war coverage as a free item or nominal item, now had to repurchase the coverage if they wanted to continue it. Many lenders also started requiring war and TRIA coverage as a condition of an aircraft loan.

If you are currently purchasing war risk coverage, you already have coverage for domestic and foreign terrorism. By purchasing TRIA coverage, the only thing that you are buying is a longer cancellation period for an "Act of Terrorism" as defined by the TRIA legislation. In Wisconsin, the typical cancellation options for an insurance company require 30 days notice and then only for nonpayment of premium or material misrepresentation in the underwriting process. An example of a material misrepresentation would be stating that you have an IFR ticket and don't, or stating that your biennial flight review (BFR) was current and it had expired five years ago.

Most states also have protection for policyholders in that insurance companies can not increase the premium by more than a set percentage, such as 25% in Wisconsin, without at least proper advance notice (60 days in Wisconsin).

Every year since the horrific 9/11 events, aviation insurance companies have sent notices of intent to non-renew or possibly increase the premium above the set percentage. These are standard letters that are automatically generated from an insurance company's system based

on renewal date and the state in which the client lives. When you get yours 75 to 120 days prior to your renewal, understand that these notices have become standard operating procedure for the insurance companies. If there were another event like 2001, insurance companies could increase premiums within the renewal timeframe.

Like most things in aviation, there are no certainties. Many of our airports have had odd occurrences

with strange people asking about aircraft rentals. How likely is an "Act of Terrorism" to occur in the Midwest? I hope it never does, but I do hope this recurrent training on the topic helps you to make an educated decision about assessing your needs for war risk coverage and TRIA for your own aviation endeavors.

*EDITOR'S NOTE:* Jeff Rasmussen is Vice President of Johnson Aviation Insurance with offices in Madison, Wisconsin ([www.johnsonins.com/aviation](http://www.johnsonins.com/aviation)).

## Air Force One Visits Madison



As a presidential candidate, Barack Obama campaigned in Madison, Wis. on Feb. 12, 2008, days before the state's Democratic presidential primary. (L/R) Wisconsin Aviation legal counsel, Al Whitaker; then Democratic Presidential Candidate, Barack Obama; and Don Winkler, *Midwest Flyer Magazine*. Photo taken at Wisconsin Aviation, Inc.

MADISON, WIS. – "Air Force One," the Boeing 747 Presidential aircraft, carrying President Barack Obama, Education Secretary Arne Duncan and national media, landed at Dane County Regional Airport, November 4, 2009. President Obama was in Madison to deliver a speech on education. Upon his arrival, he became the first president in 59 years to visit Madison while in office. President Harry S. Truman was the last occupant of the Oval Office to visit the city on May 14, 1950 – a visit that came only one month before the start of the Korean War.

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## You Are The Key!

*You are the key to safe aviation.*

by Christopher Roy  
Director

**T**he pilot is the one in charge of the flight. From the moment he/she walks out to the aircraft, until the moment their flight is completed and they climb out, the pilot remains the person responsible for the safe operation of that aircraft. From walk-around, to taxi, to flight, to landing, to shutdown



Christopher Roy

and securing the aircraft on the ramp, the pilot-in-command IS the responsible party.

Everything related to the safe operation of that aircraft in all phases of its operation must be done with intelligence, clear forethought, sound judgment, and consistent care. It matters little whether you are flying a J-3 or a G-5, the principles and rules are the same. You, as the pilot-in-command, are responsible for the safe operation of your aircraft.

Bear in mind that in nearly 80% of aircraft accidents, the aircraft itself is working fine until controlled flight into terrain, spins, stalls, a runway incursion accident, or loss of control, happens. Through all these situations there is one very important and common link; that is the pilot.

Please take the time during the winter season to thoroughly refresh your memory. Take time to re-read your current FAR-AIM Manual. Schedule time to refresh your skills and proficiencies. It is a wise course of action, and an even wiser investment in yourself and your flying future.

That is why I urge you to take advantage of the winter season to review your flying knowledge and skills. If you schedule proficiency training for the coming spring, then by late spring you will be ready to maximize the enjoyment that safe flying brings.

I wish you and yours a safe and happy holiday season, and an even safer and better new year! Remember, you are the key! □

## Safety & Awareness Go Hand In Hand

by Dan McDowell

**A**s we approach the peak of the holiday season, it is extremely important to everyone to pay close attention to safety practices while maintaining a high level of safety awareness. Whether working, playing, or flying, it is every individual's responsibility to be alert to – and practice – safety at all times.

It isn't just in aviation that safety is important. This is the season of frost, ice, and snow. It can be something of a challenge just getting into a car to go to the airport when conditions are slippery. Thus, it is necessary to always be alert to changing conditions and the necessary safety adjustments that must be made. For instance, slowing down on the road

when visibility is low, or traction is marginal. It is for most people, just common sense, but how many cars end up in the ditch each year because the driver failed to use common sense, good judgment, and practice proper safety habits?

It is no different for pilots. Every move you make with an airplane under power has the potential of affecting safety for you or others around you. You are the one responsible for your actions and safety should always be a guiding factor in the choices you make.

Being prepared for the cold of winter, whether flying or driving, is extremely important. If you get stranded in your car or if you have an off-field landing, ask yourself this question: "Am I prepared to spend the

night in the cold?" In other words, do you have a survival kit packed and available to you in your car or aircraft? If you have one, do you know how to use it? Is it fresh and current? Will it support you and your passengers for at least 24 hours?

Be sure to inspect your kit before placing it in your vehicle or aircraft. Make sure nothing is expired. Replace items that are approaching their expiration date. Be sure your batteries, water, etc., are fresh. Take nothing for granted, because your life and the lives of your passengers – whether in a car or an aircraft – will depend on the decisions you made in preparation for the trip.

One goal of the Minnesota DOT Office of Aeronautics is to get pilots to think about these issues and to take appropriate action to ensure you are thinking about safety. Another goal

is to help ensure that pilots are prepared to handle these situations by doing some preplanning and preparations. There are many very good informational sites on the Internet that provide lists and guides for building and packing your survival kits, and some even tell you where to get the items

## The Guesstimated Prognostications

**E**very winter, we listen to the weather forecasts before and during snow events. It seems odd that with all the technology available to them, the weather folks on TV and radio are often “guesstimating” the amount of snow that will fall at any given location. It begs the question, “why can’t they guess better than they do?” Why do they predict 3 to 5 inches of snow and we get 8? Or, why do they predict 8 and we get 2? Well, there is actually a good answer for each of those questions.

Walt Petersen, an atmospheric scientist with the National Space Science & Technology Center (NSSTC) and the University of Alabama-Huntsville (UAH), says, “Snow is a huge problem. It turns out that estimating snowfall is very hard to do with radar. Rain is easier because it always consists of simple liquid-filled droplets. Radar echoes from rain clouds can be converted into rates of rainfall with fairly good precision.”

He continues, “But frozen precipitation, such as snow, is much more variable. Famously, no two snowflakes are alike. The differing sizes, shapes, and densities of individual flakes mean they won’t all fall at the same speed, complicating efforts to estimate rates of snowfall. Also, snowflakes have lots of crazy angles and planar ‘surfaces,’ which can make tricky radar echoes.” Petersen adds, “The problems don’t end there. Ice and snow have variable dielectric behavior depending on how much ice and how much air is contained in the particle.”

(Note: The dielectric constant of a substance tells how strongly the substance will interact with a radar wave.) And for you electrical engineers and purists, the **relative static permittivity** (or **static relative permittivity**) of a material under given conditions, is a measure of the extent

you will need.

Remember, safety and awareness go hand in hand. It is entirely up to you what actions you take. But remember, time spent in planning and proper preparation is an investment in your safety and the safety of your passengers. □

to which it concentrates electrostatic lines of flux. It is the ratio of the amount of stored electrical energy when a potential is applied, relative to the permittivity of a vacuum. The relative static permittivity is the same as the relative permittivity evaluated for a frequency of zero.

Petersen adds, “With raindrops, you are dealing primarily with water, which has a known and fixed dielectric constant. With snow, we know the dielectric constant for pure ice and we know the dielectric constant for air, but, the amounts of air and ice can vary quite a bit from snowflake to snowflake. Further, snowflakes also rime and melt. This means you can also have water on the surface – another complication!”

“Snow plays a big role in climate. When water evaporates, it carries away a lot of heat (which is why sweat cools down your skin as it evaporates). Later, when that moisture condenses inside clouds to form snowflakes, it releases this stored heat, warming the air. As more snow crystallizes, more heat is released, which in turn makes wind. When the snow falls, it takes water out of the atmosphere, leaving it drier. Snow on the ground also reflects sunlight back into space, which helps cool the planet.”

Petersen concludes, “So learning to portray global snowfall correctly in computer climate simulations is critical for accurately predicting how the real climate will behave in the future.”

In March 2007, NASA funded a suite of 59 research proposals under the agency’s ongoing Precipitation Measurement Mission. The studies looked at ways to improve measurements of rain and snow from Earth orbit. Thanks to NASA Tech Briefs, Mysteries of Rain and Snow, for this enlightening information. <http://science.nasa.gov/headlines/y2007/02marrairandsnow.htm>

EDITOR’S NOTE: Sadly, they haven’t yet found a better definition for dielectric constant. □

## Never Fly With Inoperative Equipment

by Bob Martens

**N**ever operate a plane with a known malfunction. The follow-up to that is that if a malfunction occurs in flight, land as soon as practical and get it fixed. Why start out with problems? Flying can be challenging enough without adding problems to the mix. The broken component or inoperative equipment might just be an item in the chain of events that leads us to an accident site.

I am willing to bet that many pilots are unfamiliar with FAR 91-213, which talks about inoperative instruments and equipment. Basically, it says that everything on our airplane is supposed to work or we don’t fly. Unless you operate with an approved minimum equipment list, you

must strictly comply with the procedures and FAR 91-213 to legally operate an airplane with inoperative equipment.

Far too many pilots fail to write up faulty or broken components or leave them until the annual inspection to get repaired. That is not good. Always start a flight with a healthy airplane. <http://www.pilotworkshops.com/public/375.cfm>

EDITOR’S NOTE: Bob Martens retired from the U.S. Air Force as a Colonel in 2000 after 30 years of active and reserve duty. He served in Operation Desert Storm as an Aircraft Commander on a C-5A. He also served as Flying Safety Officer and Chief of Safety with the 439<sup>th</sup> Air Wing. Martens has logged thousands of flight hours in both military and GA aircraft. Thanks to Bob Martens and the folks at Pilot Workshops.Com for allowing us to share this valuable reminder with our readers. □

## MATA Hosts "Total" Aviation Business Conference



Jamail Larkins



Earl Lawrence



(L/R) Greg Reigel of Reigel & Associates and Secretary of the Minnesota Aviation Trades Association, presents the 2009 MATA Flight Training Scholarship to Adam Kruse of Princeton, Minn.



Shawn Carrick

All aviation businesses deserve to be represented, and that is what the Minnesota Aviation Trades Association (MATA) is all about. The organization held its annual one-day conference, September 25, 2009, at the Crowne Plaza Minneapolis North Hotel in the Twin Cities. Featured speakers included Jamail Larkins, President of *Larkins Enterprises, Inc.*, an aviation sales and advertising company; Earl Lawrence, Vice President of Governmental Affairs, Experimental Aircraft Association; Kate Dougherty, President, Kate Dougherty PR and former public relations director for

Cirrus Aircraft Design; Chris Roy, Director of the Minnesota Office of Aeronautics; and Shawn Carrick, a Supervisory U.S. Customs & Border Protection (CBP) Officer based at Minneapolis-St. Paul International Airport.

**Chris Roy** of the Minnesota Office of Aeronautics was appointed Director in August 2009. Roy briefed members on his career with the Minnesota Department of Transportation. He has extensive experience managing projects and programs that have significant public interest, such as the Lafayette Bridge and the nearly \$250 million in improvements on Interstate 494, including accommodations for the new runway at Minneapolis-St. Paul International Airport (MSP).

Roy reviewed the upcoming budget, noting that aeronautics received a 10% increase, which will be used for airport development projects. Sixty-three projects were funded in fiscal year 2009, and of the \$1 billion in U.S. Stimulus Plan grants devoted to airports, Minnesota received \$20 million.

"Everyone benefits from the 136 public airports in Minnesota," said Roy, and emphasized the economic

impact of general aviation airports.

Roy said that he believes in listening, educating, learning, partnering, and innovating, and welcomes input from the aviation community. He will meet with the boards of all aviation organizations in the state in January 2010, to get input on industry concerns.

**Shawn Carrick** of U.S. Customs & Border Protection (CBP) discussed international travel requirements for aircraft, crew and passengers; considerations for flight schools accepting foreign students; and what to expect when arriving into the United States at a port of entry.

"Our number one mission (at CBP) is anti-terrorism," said Carrick. In addition, CBP works to prevent illegal immigration.

Carrick said that CBP's definition of a "commercial operator" is different than other federal agencies. "If you depart the United States as a commercial operator, you have to return to the United States as a commercial operator, even if you are alone," said Carrick. "The local Customs agent has flexibility in working with pilots and operators, so be honest with the agent."



Carrick reviewed the procedures of the new electronic Advance Passenger Information System (eAPIS), and noted that the traditional Customs Form 178 can still be required, and is a good "back-up if CBP does not get the eAPIS because of a system "hick-up." It is best to have all documentation completed in advance and "on hand," said Carrick.

Annual aircraft decals are also still required. "As long as you have applied for a decal, you are good to go, in the event of processing delays," said Carrick. For additional information on eAPIS and U.S. Customs procedures, refer to the article entitled "Streamlining Customs & Flight Service Would Enhance Security...Cut Costs!" in the August/September 2009 issue of *Midwest Flyer Magazine* ([www.midwestflyer.com](http://www.midwestflyer.com)), and refer to the Customs procedures at the AOPA website ([www.aopa.org](http://www.aopa.org)).

Carrick says that it generally takes between 5-10 minutes to clear an aircraft at a port of entry, but if a pilot experiences a problem with an agent, they are encouraged to file a complaint with CBP online, or contact the local or area Customs office and ask for a supervisor. "We are not going to treat a pilot as a criminal," said Carrick. Officers are required to sweep all aircraft for explosives with an electronic box, and some ports of entry have dogs to check for explosives and drugs. Searches are done at random, and are very thorough.

Carrick warns that Driving While Intoxicated violations (DWIs) by pilots are a big issue in Canada, but not so in the United States.

**Earl Lawrence**, Vice President of Industry & Regulatory Affairs with the Experimental Aircraft Association (EAA) in Oshkosh, Wisconsin, flew in for the



L/R) MATA President Kevin Doering of North Star Aviation, Mankato, Minn., presents the "MATA Distinguished Service Award" to Bruce D. Jaeger, President of Jaeger Aviation, Inc., Willmar, Minn.

conference to provide MATA members an update on current regulations and issues facing the industry. Lawrence has been nicknamed the "Rocket Scientist," because he used to be one. He worked for NASA on the Space Station project before coming to EAA, and before that, as an aircraft mechanic.

Lawrence said that the *USA Today* reporter that slammed general aviation in his September 17, 2009 article on general aviation airports, lied (see article entitled "USA Today Article Attacks GA Airport Funding In Support of Airlines," October/November 2009, *Midwest Flyer Magazine*, [www.midwestflyer.com](http://www.midwestflyer.com)). The fact is, said Lawrence, "fuel taxes pay for infrastructure at airports, not airline ticket taxes." Lawrence continued: "Congress also said to USA Today, 'you are wrong!'" Lawrence believes

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that the article originated from the airlines, because it suggests that money is wasted on general aviation airports when air carrier airports are in need of funding.

"Who is going to pay for NextGen?" Lawrence asked members. NextGen is the new air traffic control system being proposed.

"User fees!" answered Lawrence. "General aviation is already paying fees (through the tax on aviation fuel). What we are now debating are toll booth fees, in addition to all the other fees," said Lawrence. "We are never going to avoid paying fees, but hopefully we can avoid toll booths."

Lawrence expects Congress to come back in 2010 with requests for more and more fees, and he will ask them if they feel aviation is of benefit to society or only to itself?

"Congress is on our side for the General Fund still contributing," said Lawrence, "but the Senate is not as supportive. We (GA) prefer an increase in the fuel tax over toll booths."

Lawrence commented on the new Automatic Dependent Surveillance-Broadcast (ADS-B) system. ADS-B is a crucial component of the nation's Next-Generation Air Transportation System, and its implementation over the next 20 years will turn NextGen into reality.

With ADS-B, both pilots and controllers will see radar-like displays with highly accurate traffic data from satellites – displays that update in real time and don't degrade with distance or terrain. The system will also give pilots access to weather services, terrain maps and flight information services. The improved situational awareness will mean that pilots will be able to fly at safe distances from one another with less assistance from air traffic controllers.

"ADS-B will cost the aviation community, but will cut costs to the FAA because radar will not be needed," said Lawrence. "The Department of Defense will now pay for radar because they still want it."

Concerning "national security," Lawrence says that there are many problems with creating a new agency (Homeland Security), and in developing new rules. He noted that the Security Directive imposed on airports is hard to comply with, but they are the rules we have to live with for the time being.

"There was no comment period," said Lawrence. Before Congress can pass a new bill, there must be a comment period, but not so with Homeland Security.

The Large Aircraft Security proposal is now being completely redone, because it was overly restrictive without just cause. The original rule is being rewritten because it would have been too costly and would not have improved security.

Lawrence said that U.S. Customs & Border Protection (CBP) has been extremely cooperative in dealing with general aviation. CBP is making improvements to the eAPIS procedures and is making progress.

The head guy of general aviation at TSA was at Oshkosh for the first time, and Lawrence expects that cooperation and understanding will improve security and make the eAPIS filing process more efficient.

Concerning Unmanned Aerial Vehicles (UAVs) like the "*Predator*" used by the Department of Defense and Homeland Security, Lawrence says that we need to learn how to deal with them, and there are airspace and equipment concerns for aircraft. Three people are flying each UAV, says Lawrence, "so they can see us, before we can see them." EAA is working to develop policy on UAVs.

Lawrence urged members to write to their Congressman to avoid ridiculous national security requirements from occurring. There are more pilots training in Saudi Arabia now thanks to Homeland Security in the United States. The United States has long been a leader in flight training for foreign countries because of lower costs and fewer

restrictions.

Fuel is on everyone's mind, nowadays. Lawrence says: "Jet fuel is set, but leaded 100LL is getting scarce, as no cars in the world use lead.

"100LL is the target of environmentalists and the Environmental Protection Agency (EPA). A rule is coming out in 2010. January 2017 is the deadline to eliminate all leaded fuel. The problem is, there is no replacement for 100LL. We will end up with a 95-octane fuel, but the entire fleet will need new certification to handle a lower octane fuel except for the 70% of the fleet, which is already certified, and 87-91-octane capable. Continental and Lycoming are committed to building new engines, and GAMA is committed to converting the fleet."

Lawrence gave a plug to the Aircraft Owners & Pilots Association's program "*GA Serving America*." The program is open to every aviation organization and governmental agency to educate the public.

"The EAA Young Eagles program has helped educate the public," said Lawrence, "because it gets parents out to the airport."

Lawrence said that despite FAA Administrator Randy Babbitt's affiliation with the Air Line Pilots Association and his airline background, which concerns some in general aviation, Congress likes him, and aviation is more likely to get what it needs with him at the helm. "Whenever Congress does not like an Administrator, we have problems like the Southwest Airlines inspection problems," said Lawrence.

**Kate Dougherty** of Kate Dougherty PR (Public Relations), formerly with Cirrus Design, discussed the importance of good public relations for businesses, combined with cost-effective advertising. She also noted that if we do not create and build our industry, some day it will not exist.

Dougherty said that "perception"

is everything. "What people see when they look at your business."

She warned members not to make it difficult for customers to do business with them. Be clear on what your business does, and make sure you provide good contact information (i.e. phone number, physical address, email address, website). Dougherty also urged members to take their mayors and civic leaders flying from time to time, and to join their local chambers of commerce to tap decision-makers. It's difficult for the community to get rid of the airport if they have a relationship with it," she said. "Have fly-ins and civic events at the airport. Make the airport a community meeting place."

Dougherty was asked to comment on Alan Klapmeier's future in aviation. Klapmeier is the cofounder of Cirrus Design, but is no longer employed at the company. She said not to worry...that Alan will resurface, and when he does, look out, "it will be something fantastic!"

Emphasis at the MATA Conference this year was on introducing area high school students to aviation business careers. Over 100 area

students attended the conference and luncheon featuring Jamail Larkins of Atlanta, Georgia. As a national spokesperson for EAA Young Eagles, Careers in Aviation, and Embry-Riddle Aeronautical University, and the first official Ambassador for Aviation & Space Education for the Federal Aviation Administration, Larkins described how he got started in aviation business at the age of 15. In addition to his public speaking, Larkins founded an aircraft sales and leasing company, and an aviation-consulting firm. Collectively, Larkins' companies have generated over \$7.5 million in annual sales.

Recognized during the conference with the "MATA Distinguished Service Award" was Bruce Jaeger of Willmar, Minnesota, for his service to the Minnesota aviation community as owner of Willmar Air Service from 1979 to 2008, and manager of Willmar Municipal Airport-John L. Rice Field from 1979-2001.

Willmar Air Service specializes in Mooney sales, maintenance and flight training, and Jaeger has been involved nationally with the Mooney Aircraft Pilots Association and its Safety

Foundation since 1993. He is currently serving on the foundation's board of directors, and has likewise served on the MATA board of directors. Jaeger sold Willmar Air Service in 2008, and now manages Jaeger Aviation, Inc., which specializes in Mooney flight training and the promotion of a unique new Mooney interior design.

Receiving the "MATA Flight Training Scholarship" for 2009 was Adam Kruse, 21 of Princeton, Minnesota, a student at Luther College in Decorah, Iowa. Kruse is working on his Private Pilot Certificate and is pursuing a career as a commercial pilot. During the summers, Kruse works in Talkeetna, Alaska at K2 Aviation as a tarmac worker and Spanish translator.

For additional information on the Minnesota Aviation Trades Association, contact Mike Higgins at 651-450-6200 or email [mike@exclusiveaviation.com](mailto:mike@exclusiveaviation.com) ([www.mnaviationtrades.org](http://www.mnaviationtrades.org)).

Ground transportation from Minneapolis-Crystal Airport and the Crowne Plaza Hotel was provided courtesy of Thunderbird Aviation-Crystal. □

## The Mormon Conspiracy

**T**he book "The Mormon Conspiracy" is written by Dale Seitzer and set in Pierre, S.D. A pilot – Jerry Sherwood – gives a ride to a stranger in his homebuilt aircraft, who is asking about building a plane. The pilot is hijacked at gunpoint and trapped in a conspiracy that involves Homeland Security, the Transportation Security Administration (TSA), the FBI and the Mormon Church. Sherwood partners with the local police chief and an FBI agent to face danger, learn and grow, crack the conspiracy and corruption, and prevent the catastrophe. The flying



adventures include piloting a kit built Skyranger aircraft, Cessna 182 Skylane, and Piper Warrior.

The book is fast paced with twists and turns, and action. General aviation pilots will especially enjoy this book.

The book is 228 pages in length, sells for \$14.95, and is available through [www.seitviewpublishing.com/](http://www.seitviewpublishing.com/).

The author, Dale Seitzer of St. Paul, Minnesota, is a pilot, and is now exercising his Sport Pilot Certificate. He keeps his plane at the Lake Elmo Airport (21D). His wife is also a pilot. Dale Seitzer works as a Business Analyst at Ameriprise Financial. He is also a Certified Six Sigma Black Belt. This is Seitzer's first novel. □

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(TOP) Wipaire, Inc. was represented at Northern Exposure Aviation Expo (L/R): Mike Aune (Regional Sales Manager); Jason Erickson (Director of Maintenance); David Utsch (Manager, Aircraft Interiors & Refinishing); and Rick Wahlman (Avionics Manager). Wipaire, Inc. is located at Fleming Field in South St. Paul, Minnesota, and in addition to full-service aircraft maintenance, the company manufactures and distributes Wipline floats ([www.wipcaire.com](http://www.wipcaire.com)).

(BOTTOM) Tim Ashenfelter, President of ASI Jet Center, hosted Northern Exposure Aviation Expo at Flying Cloud Airport, Eden Prairie, Minn.

(BOTTOM) Tom Ashenfelter is responsible for Diamond Aircraft sales at ASI Jet Center.

## Northern Exposure Aviation Expo In The Twin Cities

EDEN PRAIRIE, MINN. – Tim Ashenfelter, President and CEO of ASI Jet Center, located at Flying Cloud Airport, Eden Prairie, Minnesota, hosted the first annual “Northern Exposure Aviation Expo,” September 23-24 in the Twin Cities.

ASI – established in 1983 – is a full-service fixed base operation, represents three aircraft manufacturers in new aircraft sales – the complete line of Diamond Aircraft; Piper Aircraft in the Twin Cities, representing Des Moines Flying Service; and “Caravan” sales for Cessna. In addition, ASI is a factory-authorized service center for these manufacturers, as well as Mooney Aircraft, and is one of the largest dealers of pre-owned Cessna Citations in the Upper Midwest. ASI also has an avionics shop and charter services. The company buys airplanes, sells airplanes, leases airplanes, services airplanes, manages airplanes and flies airplanes, so their affiliations with manufacturers and suppliers are strong, which was essential in hosting the trade show.

ASI’s 35,000 sq. ft. hangar, which normally stores 17 corporate aircraft, was the central location for the show.

Aircraft were on display inside and outside the hangar, including conventional piston aircraft, personal and corporate jets, and light sport aircraft.

Aircraft displayed included a Beechcraft Premier, Beechcraft Baron, Cessna 206, Cessna Corvalis, Cessna Grand Caravan, Cessna Citation Mustang, Cessna Citation CJ, Cessna Citation Ultra, Cessna Citation Excel, Cirrus SR22, Cirrus Vision Jet, Diamond DA20, Diamond DA40, Diamond DA42, Pilatus PC-12, Piper Matrix and a TBM 850.

Companies represented included ASI Jet Center & Modern Aero, Inc., Cessna Aircraft Company, Des Moines Flying Service, P2 Technology, Piper Aircraft Company, Elliott Aviation, Cirrus Aircraft Company, National Aircraft Finance Company, Hawker Beechcraft, Daher-Socata, Wings Insurance, Donaldson Filtration Solutions, Aviation Tax Consultants, LLC, Shadin Avionics, Sandia Aerospace, L3 Communications, Wipaire, Inc., Alpha Systems, Pilatus, Garmin, OptAir, Aero Shine, JSSI, Bank of America, Jetcraft Trading, Wings Financial, Flight Design

Pilot Center, LSA North, Western Petroleum Company and Executive Aviation.

*"We wanted to create an event where aircraft buyers, sellers and aviation enthusiasts could get all of their questions answered, whether the questions were about purchasing and*

*financing a new plane, or installing a new avionics system,"* said Ashenfelter.

ASI Jet Center plans to host the second annual NEAE, September 15-16, 2010 (dates subject to change). With the opening of Flying Cloud Airport's expanded runway (from

3,900 to 5,000 feet) in November 2009, they are hoping to add some of the medium and large cabin-class jets to the static display next year.

To learn more about NEAE, visit [www.northernexposureaviationexpo.com](http://www.northernexposureaviationexpo.com). To learn more about ASI Jet Center visit [www.asijet.com](http://www.asijet.com). □

## Minnesota Business Aviation Association (MBAA) Proposes Increasing Fuel Tax On Turbine Aircraft & Reducing Aircraft Registration Fees

ST. PAUL, MINN. – If you own a \$20 million corporate jet in Minnesota, you can pay up to \$200,000.00 to register it the first year, and less in subsequent years. If you own a Cessna 150, you pay about \$75.00 per year.

The Minnesota Business Aviation Association (MBAA) believes that the rates for the larger aircraft are too high, and have proposed reducing registration fees on turbine aircraft, and replacing it with a higher tax on jet fuel, so transient aircraft pay their fair share.

According to Gordon Hoff, Executive Director of MBAA, and a former employee with the Minnesota DOT Office of Aeronautics, the proposal does not include any changes to piston aircraft registration or avgas fuel rates. Aircraft registration fees and avfuel taxes would continue to operate under the current policies, says Hoff. MBAA is proposing changes only for turbine aircraft and jet fuel. Under the proposal, turbine aircraft would pay a registration fee based on weight – \$ .50 per lb. of the maximum gross takeoff weight. Some members of the MBAA task force would like to see upper end piston aircraft be considered in the new \$ .50 per lb. registration fee rate, but that has yet to be decided.

Currently, aircraft registration fees are based on the manufacturer's base list price of the aircraft: 1% of the value of the aircraft for the first year, and for the next 6 years, this is reduced from 1% to 0.25%. For years 7 and

for the next 43 years, the rate drops to \$25,000.00 per year. Turbine aircraft owners in surrounding states pay as little as \$300.00 in South Dakota and as much as \$5,000.00 in Iowa to register their aircraft, says Hoff.

Here's a side-by-side comparison of current and proposed fees:

<u>Non-Turbine Aircraft</u>	<u>Current</u>	<u>Proposed Change</u>
<u>Registration Fees</u>		
C150 (Example)	\$75.00 per year	None
<u>Fuel Tax</u>	\$ .05 per gallon	None (Assuming they are not burning over 50,000 gallons in a year.)
<u>Turbine Aircraft</u>		
<u>Registration Fees</u>		
Citation X (\$20M Value)	\$200,000.00	\$18,000.00 (\$ .50/lb)
<u>Fuel Tax</u>	\$ .05 to \$50K	\$ .06 (no limit)
	\$ .02 to \$150K	
	\$ .01 to \$200K	
	\$ .005 after \$200K	

MBAA is soliciting input and support from other aviation organizations in the state. Individuals can email Gordon Hoff at [gordon.hoff@comcast.net](mailto:gordon.hoff@comcast.net), or call 651-398-4649. □

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# From The Hudson To Toulouse, From Right Seat To Left...

## Flying The World's Largest Commercial Airliner – The Airbus A380

by Jeff Skiles

*“Ok, flaps full. When I tell you we’ll pretend there is a helicopter in front of you, you’ll pull the*

*stick all the way aft and all the way to the left and hold it,” said Airbus A380 test pilot, Terry Lutz.*

*“Helicopter!” Terry said.*

*I dutifully pull the stick all the way to the aft left.*

The aircraft rolls to a 45-degree bank angle and assumes about a 25-degree nose-up attitude. As the speed slows to V<sub>so</sub>, the auto-throttles automatically come in to take-off thrust and the giant plane pirouettes in the air, slowly gaining altitude at 16,000 feet. The rugged Pyrenees Mountains, separating France from Spain, give way to the placid Mediterranean as we rotate in the sky. This maneuver is designed to demonstrate one of the selling points of a fly-by-wire aircraft; it’s impossible to stall. We’re flying the “Airbus A380,” the largest airplane in the world! I was invited to Toulouse, France in October 2009, and given the opportunity to fly this grand aircraft with test pilots from the factory.

I arrived in this beautiful southern France city and met the man who would guide me through this process – Terry Lutz. Terry is an American citizen and a former Northwest Airlines Captain based in Detroit. A few years ago he was offered a job as an Airbus test pilot and he took it. Having seen the beauty of this area, I can see why. The U.S. Air Force trained Terry as a test pilot. All these years later, he has been putting that background to use at Airbus.



Bruno Sarda



Dave Weiman





The Airbus A380 touches down on Runway 36 at EAA AirVenture-Oshkosh 2009, Wittman Regional Airport, Oshkosh, Wis.



After landing, the Airbus A380 taxis by AeroShell Aerobatic Team aircraft #1, en route to AeroShell Square at EAA AirVenture-Oshkosh 2009.

After a 45-minute *get-to-know-you-meeting* with the Director of Flight Tests, we spent about 2 hours in a Flight Training Device (FTD). I am familiar with FTDs from my airline training. They are basically a simulator that does not move, allowing you to get the feel for the aircraft and learn procedures without the expense of using a full motion simulator. In fact, this was the only preparation I would receive since their A380 simulator was down for modification.

While the A380 is designed with 25-year newer technology than the small Airbus I fly, it was so intuitive I had no problem mastering the computers and systems. One of the advantages of the Airbus family of aircraft is that they have very similar cockpits and procedures. This allows a pilot to easily transition from one aircraft type to another. My own airline (U.S. Airways) flies the A319, 320 and 321 (small bus equipment), and the much larger A330 intercontinental aircraft. The cockpits are so similar, it would take an Airbus pilot to see the differences.

The A380 is different from smaller Airbus aircraft, but I quickly felt at home. The FTD experience ended too soon, as we had to break for lunch with some of the Airbus people that worked on my accident investigation. (For those who do not remember, I was the U.S. Airways First Officer that made Captain Chesley B. "Sully" Sullenberger famous

on January 15, 2009, on Flight 1549, when the Airbus A320 I was flying hit a flock of Canada geese, causing both engines to fail, and we made an emergency landing in the Hudson River.) The rest of the day was spent touring the manufacturing facilities for the A330 and looking at the "Belugas," a massive aircraft in its own right that transports aircraft assemblies around Europe.

The Airbus is made in many different locations. Fuselage components and entire wing assemblies are transported by various means to Toulouse where they are assembled. The advantage to this is that any large warehouse facility can become an assembly structure. The wings of the Airbus A380 are so large that they must be shipped up river, transferred to shallow draft barges to go further, and finally transferred to a truck. The choke point for the journey is an intersection in a small French village where the wing has only a one-foot clearance on either side. All the parts are brought to this series of massive hangars for assembly. At 4:30 pm, my car comes and takes me back to my hotel. Tomorrow will be my actual flight.

The new day dawns bright and clear skies as we brief for the flight. This will be a standard demonstration flight to display some of the A380's more unusual features. We will also be accomplishing an actual small test function while we are at it, so this flight does serve a purpose for Airbus.

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(L/R) Jeff Skiles and Terry Lutz in the cockpit of the Airbus A380 in Toulouse, France.

At the end of the flight, a request has been forwarded to deploy the RAT (Ram Air Turbine), and to verify its operation. This is a small hydraulic pump, which drops down from one of the wing nacelles to provide hydraulics and electrics, if needed.

As we approach the aircraft on the ground, its massive size becomes apparent. This is the same aircraft that flew to EAA AirVenture in Oshkosh, Wisconsin, this past summer. It takes many steps to get from the ramp up to the cabin, and another three steps up into the cockpit. I automatically head for the right seat until Terry says, “*Why don’t you take the left...it’ll look better in pictures.*” I’m a little hesitant about this because frankly I want to do well and 15,000 of my 20,500 hours are from the right seat. But I climb in the left seat as ordered.

We load the computers with basic information for our local flight and Terry calls for the pushback. One of the advantages to test flying is that you work with one air traffic controller throughout the flight and he coordinates with the regular ground, tower and departure controllers as necessary.

After the pushback, it’s time for engine start. The A380 has four really big 70,000 lb. thrust Trent engines, and you start two engines at a time. The two left engines and then the two right engines. After engine start, we conduct a brief checklist off of one of the glass cockpit screens. This is another difference from airline flying, in which we still use paper checklists.

In airline operations, the First Officer is never allowed to taxi the aircraft. Clearly, Terry is planning on me taxiing, so I point out to him that the biggest aircraft I have ever taxied is a Fokker 100, which I was once a Captain on about 10 years ago. He seems unconcerned and pushes the taxi button, which changes the Captain’s Primary Flight Display (PFD) to a split screen TV picture. The bottom picture is from a camera hanging below the belly of the aircraft showing the nose wheel tires and the taxi

stripe. The upper picture is from a camera atop the vertical fin, aimed forward showing the aircraft and the ramp environment. Magenta slashes on top of the wings represent the outermost gear trucks, invisible below the wings, for help with taxiing. If the magenta bars are inside the taxiway edge, so are the outboard main gear trucks.

We slowly taxi out to the runway. We “*position and hold,*” the taxi camera goes off, and we wait for takeoff clearance. The procedures are identical to the small bus, so I feel very comfortable. The Airbus “call outs” are slightly different than what we use at U.S. Airways, but they are still very easy to follow.

“*Cleared for Take-Off.*”

I move all four throttles forward to the take-off power detent. The A380 accelerates down the runway. At the call “*rotate,*” I pull back on the side stick to 15 degrees of pitch and we’re airborne. At 1500 feet, I pull the throttles back to the climb detent and command “*climb.*” We retract the flaps and head out to the west.

Terry and I initially climbed to 20,000 feet to perform a few maneuvers. We try some turns and a few maneuvers to allow me to get the feel of the aircraft.

The big Airbus flies like a Piper Cub in the air, better than the small bus in my opinion. You don’t feel the size difference at all. The largest Airbus I fly is the A321, which is about the size of a Boeing 757. The A321 has a maximum ramp weight of just over 200,000 lbs. In contrast, the A380 has a maximum ramp weight of 1.2 million lbs. But with the large wing, it flies like a pussycat. We head back to Toulouse for an approach and touch and go, just like we do in General Aviation, eh?

The airbus has a sort of mechanical landing procedure. In the small bus, you wait until the automated radio altimeter calls out “*30 feet,*” then you bring the throttles out of the climb detent to idle and raise the pitch a degree or two and let the airplane fly on. In the Airbus A380, you simply accomplish the same thing at the 40-foot call out. It lands



sweetly and I push the throttles up to half power. The cockpit is a whirl of activity, as Terry and the engineer reset trim and flaps. Then Terry says, "Go!"

Take-off power again and we are in the air. Terry at this point pulls one of the outboard engines to idle, simulating an engine failure and shows me one of the new features on the A380. The aircraft's computers automatically compensate for an engine failure. The A380 gives you a little bit of yaw for engine identification and then adds rudder to compensate. I think back to my DC-9 days when we would practice engine failures at lift-off. The pilot would simply slam the rudder all the way to the floor to compensate for a failed engine, and even that wasn't enough. This airplane is a dream in the same situation.

We fly a pattern avoiding the city.

This is a test flight, and Terry shows me how to set up for another new feature, "Brake to Vacate."

The Airbus can be set to automatically brake to a 10-knot speed at a taxiway that you designate. Once the aircraft has slowed to 10 knots, it will automatically knock off the auto-brakes and you can steer clear of the runway. Another easy approach and landing, auto brakes off, taxi camera on, and we taxi into the ramp and up to the flight test office. My once-in-a-lifetime flight in the A380 has come to an end. The A380 is a truly magnificent aircraft that is a huge step forward in aircraft design.

*EDITOR'S NOTE:* Jeff Skiles of Oregon, Wisconsin, is a First Officer with U.S. Airways. After successfully completing an emergency landing of an Airbus A320 in the Hudson River

in New York City on January 15, 2009 with Capt. Chesley B. Sullenberger, Skiles and Sullenberger gained world notoriety, in part due to where the emergency landing occurred in the center of world news media... in part due to a successful water landing, which is rare... and in part because the event occurred at a time when the world was looking for good news in lieu of the downturn in the economy and conflicts in the Middle East.

Skiles is modest of their feat, and will be the first to admit that there have been many other pilots who he feels deserve equal recognition, but because their incidents occurred in the boonies of rural America, the news media did not pick up on them, as much as it did in New York. Skiles and Sullenberger are now giving back to aviation as co-chairmen of the EAA Young Eagles program, a torch recently passed by pilot/actor, Harrison Ford ([www.midwestflyer.com](http://www.midwestflyer.com)). □

## EDUCATION

# EAA Names U.S. Airways Flight 1549 Pilots Skiles & Sullenberger To Lead EAA Young Eagles Program

SANTA MONICA, CALIF. – Captain Chesley "Sully" Sullenberger and First Officer Jeffrey Skiles, known for their emergency landing on the Hudson River on January 15, 2009, were named co-chairmen of the EAA Young Eagles Program. In a news conference, September 29, EAA member, pilot, and actor, Harrison Ford, officially passed the baton after having served for 5 years as the chairman of the program, which introduces young people to flying.

EAA Chairman/President Tom Poberezny, who launched the EAA Young Eagles Program in 1992, moderated the news conference. Later that evening, Poberezny hosted a special dinner recognizing Ford for his service and welcoming the program's new co-chairs.

"Harrison and I were delighted when Sully and Jeff agreed to co-chair the program. They were ideal



Harrison Ford with two Young Eagles.

candidates, not only because of the skill they demonstrated on that fateful day in January, but also, and perhaps more significantly, because of the leadership they've shown since that time," Poberezny added. "They've been excellent ambassadors on behalf of aviation."

Ford agreed. "For 5

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years as the program chair, I've stressed the program's message of earned reward, showing young people that, by disciplining and applying themselves, they can earn marvelous rewards, such as the freedom and thrill of flight," Ford said. "Now, Sully and Jeff will add an emphasis on the value of training, preparation, and teamwork. No one could bring more credibility in sharing these concepts with our youth."

Sullenberger and Skiles accepted the offer to lead the program in discussions with Poberezny and Ford that took place during this year's EAA AirVenture Oshkosh (Wisconsin).

Skiles and Sullenberger were inspired to get involved in the program during their visit at AirVenture. A native of Wisconsin, Skiles had been a regular to the annual fly-in. This was Sullenberger's first time to the event.

For Skiles, a rekindled enthusiasm for flight fueled his acceptance of the co-chair role. "I'm grateful to EAA and the AirVenture Oshkosh convention for allowing me to fall in love with aviation for a second time in my life. I'm eager to share this passion with young people and encourage participation in aviation," he said.

The EAA Young Eagles Program, now in its 17th year, has provided inspirational and educational first-flight experiences to nearly 1.5 million youth, thanks to the volunteer efforts of 42,000 EAA member pilots and countless supporters.

In addition to Ford, previous EAA Young Eagles

Program chairs were: Oscar-winning actor and pilot, Cliff Robertson (1992-1993); and the first pilot to break the sound barrier, Chuck Yeager (1994-2003).

Highlights of Harrison Ford's chairmanship of the EAA Young Eagles Program include the following:

- Nearly 500,000 young people received inspirational first-flight Young Eagles experiences while he chaired the program.

- He personally raised considerable funds for the program by donating auction items, such as movie-set experiences.

- He elevated the stature of the Gathering of Eagles event, which takes place during EAA AirVenture Oshkosh, to make it a more effective fundraising vehicle for the program.

- He enhanced the program's public profile and exposure.

- He emphasized the "ambassadorship" message, underscoring the EAA Young Eagles Program's significant potential to enhance the image of general aviation among policymakers and the broad public.

- He personally provided flights to nearly 300 Young Eagles.

Sporty's Pilot Shop, in partnership with EAA, provides free online flight training to participating youth who are inspired by the Young Eagles flight experience to continue pursuing an interest in aviation. ConocoPhillips is the presenting sponsor of the EAA Young Eagles Program.

Learn more at [www.young eagles.org](http://www.young eagles.org). □

## GRASSROOTS AVIATION

### From GA To The Airlines & Back... Jeff Skiles Buys A Waco!

*Story & Photos by Dave Weiman*



What good is an EAA Young Eagles co-chairman if he doesn't have a general aviation aircraft to take kids flying? Especially when his predecessor, Harrison Ford, introduced young people to aviation using his de Havilland Beaver and helicopter?

Well, that's what Jeff Skiles thought, so after discussing it with his wife, Barb, and friends, he decided to buy a 1935 Waco YOC vintage cabin-class biplane, which an old airline



Jeff Skiles with his new 1935 Waco YOC biplane in Brodhead, Wis.



Jeff Skiles on approach to Runway 27 at Brodhead, Wisconsin.

pilot buddy of his, Larry Harmacinski, helped him to locate.

The Waco was owned for nearly three decades by R.J. Hardin, and then sold to Dr. Robert Jaeger who restored it before Skiles bought it earlier this fall (2009).

When first built, the YOC was a Waco CUC, with a Wright Whirlwind engine. Later, when the owner went back to Waco to order a new airplane, he insisted that Waco remove the Wright from the CUC and install it in his new airplane. During the subsequent aircraft overhaul, among other things, Waco then re-engined the CUC with a 275 hp Jacobs during the conversion to a YOC model.

Skiles' YOC is the only one currently flying in the world. He currently keeps the aircraft in Brodhead, Wisconsin – home of EAA Chapter 431 and the location of the Midwest Antique Airplane Club annual fly-in.

When it was announced that Jeff Skiles was named cochairman of EAA's Young Eagles program, I contacted him to set up a time when we could do a photo shoot of him and his new biplane. It was then that he invited me to go flying with him, which in turn became an invitation for him to fly with me.

Our flights were rather convenient, seeing that we both live in the same town – Oregon, Wisconsin, just 7 miles south of Madison.

I flew our Skylane to the airport in nearby Brooklyn, Wisconsin to pick up Jeff for the 20-minute flight to Brodhead. When I touched down at Brooklyn, Jeff had already met one of the locals – Pete Aarsvold of Verona, Wis. – who unbeknown to me was judging my landing. “On a scale of 1 to 10, I’ll give you a 9, Dave,” said Pete. “Gee, thanks, Pete!” I responded with disappointment.

Jeff intervene, commenting that he thought the landing was worth a “10,” and asked Pete what I had to do to earn it. Being the money king that he is at the local bank, Pete said greasing the palm of his hand never hurts. Jeff and I departed without further ado.

Shortly after takeoff, I asked Jeff to pull out the 2009-2010 edition of the Wisconsin DOT Airport Directory & Pilot’s Guide from the side pocket of the cabin, so we could check the airport elevation, frequency and the direction of the flight pattern at Brodhead. He graciously accepted his duties as first officer and relayed the information I needed.

Certainly, I wanted to make a decent landing at Brodhead knowing the celebrity I had onboard, so I gently set down and stopped short of the crosswind runway, at which time Jeff commented, “I will give you a 9 on that one.”

“What,” I asked, “only a 9? What do I have to do to earn a 10 from you?”

“You know what your buddy back in Brooklyn said,” remarked Jeff. He learns too quickly.

We parked and shut down the Skylane near his hangar and that’s when the fun began. Compared with the Skylane, Jeff’s Waco is a tank, but a beautiful tank. The aircraft takes two strong, young men to pull it out of the hangar, so we quickly looked around, saw no one but ourselves, and decided to give it a try. The soft ground on the apron didn’t help, but we managed. Getting the plane back in the hangar after our flight was more of a challenge.

With the Waco, you climb into the biplane from the cabin door. Jeff’s Waco is beautifully restored with leather interior and aside from only a few modern radios, the aircraft is as original as one can get.

We taxied out to Runway 27 for departure, and this time it was my turn to be the first officer, so I pointed out a flock of geese to the east.

“Oh, those things follow me everywhere I go,” said Jeff with the sense of humor that earned him applause at EAA AirVenture-Oshkosh last July (2009).

“I know...that’s why I’m pointing them out to you,” I said.

All joking aside, we both kept an eye on the geese as we prepared for takeoff.

With one last glance, Jeff pushed in the throttle and we were off in the opposite direction from the geese.

There’s something about flying in a vintage aircraft that gets a pilot’s blood flowing, just thinking about the people that have flown the aircraft before you, about the time and effort involved in restoring it, and about the golden age of aviation when pioneers like Lindbergh and Earhart were making history. It’s a good feeling!



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I was also in the moment, realizing that I was flying with the guy that had landed an airliner on the Hudson River. Jeff remained focus on our flight, as I know he was focused that cold, wintry day on January 15, 2009.

In addition to flying Young Eagles in the Waco (his first Young Eagles were his three children), Jeff is looking forward to hanging out with his fellow antiquers at the Waco fly-ins; the Antique Airplane Association Fly-In in Blakesburg, Iowa; and EAA AirVenture-Oshkosh in 2010.

When he owned his 1947 Cessna 140, Jeff didn't fly it that much because there really wasn't any social element for him, he said. The Waco, on the other hand, came complete with a large extended family of Waco owners, two Waco owners' clubs with their own fly-ins, and of course the even larger vintage airplane crowd.

"I am extremely excited about flying to the various vintage airplane events in the area next year," said Jeff. It was the camaraderie he was missing for many years. His involvement in EAA AirVenture-Oshkosh this year rekindled his spirit for sport aviation, which had been lost somewhere in the airline terminals he frequented over the past decade.

We flew around the Brodhead area for awhile, and Jeff handed me the controls so I could get a feel for the Waco. After about 30 minutes, we landed, pushed the Waco back into its hangar, and flew home in the Skylane.

I haven't had Jeff sign my logbook yet, but I will. It's not every day you fly with a guy who can land and score a perfect "10."

*EDITOR'S NOTE:* Jeffrey B. "Jeff" Skiles was the First Officer on U.S.

Airways Flight 1549 on January 15, 2009, when the Airbus A320 in which he and Captain Chesley B. "Sully" Sullenberger were flying hit a flock of geese causing both engines to lose power. They had just departed LaGuardia International Airport in New York on a flight to Charlotte, North Carolina, and were at an altitude of 3,200 feet when they were faced with the decision of either returning to LaGuardia, trying to make nearby Teterboro, or landing instead in the Hudson River. With but minutes before touchdown, Capt. Sullenberger told air traffic controllers that they would be landing in the Hudson. Not sure if he heard him correctly, the controller asked him to repeat, and Capt. Sullenberger reaffirmed, "We are landing in the Hudson." Both Sully and Skiles responded to the incident with professionalism, teamwork and determination and together they landed safely, and all 155 passengers and crew were rescued without serious injury. □

## PEOPLE IN THE NEWS

### First Lee, Then Rose Gilligan

MINNEAPOLIS, MINN. – Rose Marie Gilligan, 77, died October 22, 2009, at her home in South Texas.

Rose was the wife of Lee Gilligan

who together built Crystal Shamrock, one of the largest flight schools and charter operations in Minnesota at Minneapolis-Crystal Airport. Lee Gilligan, 76, died July 30, 2009. "Gilligan established a flight school

that allowed pilots to be trained and eligible for a Private Pilot Certificate in just 35 hours prior to adoption of FAR 141."

Rose Gilligan was born July 7, 1932 in Minneapolis, Minnesota. □

### Poberezny To Be Inducted Into Air Show Hall of Fame

OSHKOSH, WIS. – EAA President & Chairman Tom Poberezny will be among three performers to be inducted into the "Air Show Hall of Fame" during the



International Council of Air Shows (ICAS) Convention in Las Vegas, December 6-9, 2009. The awards program is sponsored by the ICAS Foundation.

Poberezny's 25-year career with the Eagles Aerobatic Team was legendary, with fellow team members Charlie Hillard and Gene Soucy. As an air show organizer, Poberezny has overseen the growth and success of EAA AirVenture in Oshkosh, Wis.

over the past 30 years.

Other inductees will include Charlie Kulp and the late Bobby Younkin. In 1971, Charlie Kulp became a charter member/founder of the famous Flying Circus located in Bealton, Virginia. Bobby Younkin was best known for his Twin Beech, Lear Jet, and "Samson" biplane aerobatic routines. Younkin also performed in a T6, Decathlon and stock Stearmn for many years. □

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## Associate Editor To *Midwest Flyer* Runs For Court of Appeals

RICHLAND CENTER, WIS. – Richland County Circuit Court Judge, Edward E. Leineweber, has announced that he is a candidate in the Spring 2010 election to the Wisconsin Court of Appeals. An opening on District IV of the Court of Appeals, which includes the southwest quarter of the state, will be created by the retirement of long-time incumbent Judge Charles Dykman. The six-year term will begin in August 2010.

In declaring his candidacy for the appellate court seat, Judge Leineweber cited his broad experience in the courts of Wisconsin over the past 33 years. In addition to serving on the circuit court for over 12 years, he was in practice as an attorney for over 20 years before taking the bench.

This experience included 10 years as a defense attorney and another decade as a prosecutor, including three terms as the Richland County District Attorney and three years as the City Attorney for Richland Center. Leineweber also has experience in private practice in family law, estate planning and probate, and representing small businesses, farmers and individuals.

Judge Leineweber also cited his knowledge of the internal operating procedures of the Court of Appeals and its decision-making process, having participated in the Judicial Exchange Program in which a trial court judge serves temporarily on the Court of Appeals to gain the perspective of the appellate court. He suggested that this experience will also contribute to a quick and productive transition to the higher court.

Off the bench, Judge Leineweber is an active pilot and associate editor to *Midwest Flyer Magazine*. His column on Sport Pilot-Light Sport Aircraft appears regularly. He holds Commercial Pilot, Flight Instructor, and Aircraft Repairman Certificates.

Judge Leineweber pointed to his down-to-earth, sensible approach to judging, which upholds the rule of law, but also recognizes the real-life situations

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### DECEMBER 2009

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### JANUARY 2010

- 30 GREENFIELD (GFZ), IOWA** - Annual Chili Fly-In & tour of the Iowa Aviation Museum 11:30am-2:30pm. 641-343-7184

### MARCH 2010

- 6 STEVENS POINT, WIS.** - Mechanics Refresher & Inspection Authorization (IA) Renewal Seminar at Holiday Inn. 608-267-7110.
- 7-9 FARGO, N.D.** - Upper Midwest Aviation Symposium at the Holiday Inn. 701-328-9650.  
[www.ndac.aero/umas9.htm](http://www.ndac.aero/umas9.htm)
- 29-30 BROOKLYN CENTER, MINN.** - 2010 Minnesota Aviation Maintenance Technician Conference at the Earle Brown Heritage

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### APRIL 2010

- 13-18 LAKELAND, FLA.** - Sun 'n Fun Fly-In 863-644-2431. [www.sun-n-fun.org](http://www.sun-n-fun.org)
- 21-22 DES MOINES, IOWA** - Iowa Aviation Conference at the Sheraton West Des Moines Hotel. For more information, visit [iawings.com](http://iawings.com)
- 24 BLOOMINGTON, MINN.** - Minnesota Aviation Hall of Fame at the Ramada, Mall of America Hotel. [mnaviationhalloffame.org](http://mnaviationhalloffame.org) 218-732-5100 or [nallard@unitelc.com](mailto:nallard@unitelc.com)

### MAY 2010

- 3-5 WAUKESHA, WIS.** - Wisconsin Aviation Conference at Country Springs Hotel. [www.wiama.org](http://www.wiama.org)

### JULY 2010

- 2-3\* PHILLIPS, WIS.** - Price County Airport & Harbor View (on Long Lake) Fri. 7pm Aerobatic show; 9pm live music at Harbor View. Sat. 8am-noon - Breakfast by the AMVETS; 8:30am Breakfast Buffet at Harbor View; 10am aerobatic show; planes on display & plane rides; admission is free. 5pm - 2 am Lake, Rattle & Roll (3 bands) at Harbor View. 715-339-3701 / 2626

- 26-8/1 OSHKOSH (OSH), WIS.** - EAA AirVenture at Wittman Regional Airport. 920-426-4800. [www.airventure.org](http://www.airventure.org)

### AUGUST 2010

- 1 OSHKOSH (OSH), WIS.** - EAA AirVenture at Wittman Regional Airport. 920-426-4800. [www.airventure.org](http://www.airventure.org)
- 18-22\* MIMINISKA LODGE, ONTARIO** - "Midwest Flyer Canadian Fishing Fly-Out." For details email [info@midwestflyer.com](mailto:info@midwestflyer.com), or call 608-835-7063 (see [midwestflyer.com](http://midwestflyer.com) and [wildernessnorth.com](http://wildernessnorth.com)) Reservations are handled directly through Wilderness North in Thunder Bay. Call 1-888-465-3474.

Any pilots wishing to support Ed Leineweber's election efforts may contact him through his website at [www.JudgeLeineweber2010.com](http://www.JudgeLeineweber2010.com) or call (608) 604-6515.

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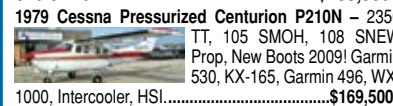
**1985 Beech King Air C-90A** - 7725 TT, 524 SMOH, 61/524 SPOH, King digital, Skywatch 497, Bendix color radar, KFC-250, 406 ELT, Raisbeck. Great plane! Great buy! **Reduced to \$925,000!**



**2005 Cirrus SR22-GTS** - Only 350 TT! Platinum engine, STEC-55X, TAWS, traffic, CMAX, de-ice, XM weather, Tanis heater, NDH, always hangared! This one has it all plus a \$3500 fuel card and 4 Bose headsets! .....**Reduced to \$329,000!**



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**1979 Cessna Pressurized Centurion P210N** - 2350 TT, 105 SMOH, 108 SNEW Prop, New Boots 2009! Garmin 530, KX-165, Garmin 496, WX-1000, Intercooler, HSI!.....**\$169,500**



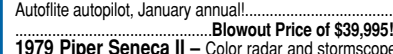
**1969 Piper Cherokee 6-300** - 5025 TT, 1485 SMOH, Dual MK-12D NavComs, ADF, Narco 890 DME, GX-50 GPS,

Autocontrol III with S-Tec 30 Altitude Hold, WX-900 Stormscope, Knots 2U, 7 seats, Clean. ....**\$69,900/trade**



**1977 Piper Archer II** - 7000 TT, 2468 SFOH, KX-170B with glideslope, MX-170C Digital NavCom, KR-86 ADF, Garmin 327 Transponder,

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**1967 Piper Arrow 180** - 4180 TTSN, 530 SMOH, MK-12D NavCom With glideslope, MX-12 NavCom, ADF, 4-place intercom, Horton STOL kit,

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**1979 Piper Seneca II** - Color radar and stormscope, GPS, HSI, 3-bladed hot props, club seating, 135-maintained,

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**1981 Cessna Conquest II Dash 10** - Collins Proline, Bendix RDR-1100, stormscope, Argus 5000, TCAD, 4-bladed Hartzells, Dual VCRs, Part 135, SIDs complete! Fresh props, 1675 SMOH, 9725 TT. Leaseback wanted! ....**\$1,575,000!**

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(TOP LEFT) Clay Adams of Nostalgic Wings was giving rides in his 1929 Curtiss Wright Travel Air.



## Wheels & Wings At Osceola

A Chinook CH-47 helicopter, flown by Capt. Jeremy Degier of St. Cloud, Minnesota, got the attention of Michael O'Shea of Lindstrom, Minnesota, who flew Chinooks with the First Cavalry in Viet Nam. The two soldiers shared experiences flying the helicopter. There remains 400 Chinooks in inventory, and the one at the fly-in is one of four in the Minnesota Army National Guard based in St. Cloud. This particular aircraft, nicknamed "Big Sexy," was completely rebuilt and modernized in 1992.

The Chinook requires a crew of three: two pilots and a flight engineer. Their mission in Minnesota is to support the Governor in flood and disaster relief, and to remain combat ready. There is also a Blackhawk medivac helicopter at St. Cloud, but the main Blackhawk unit is based at St. Paul Downtown Airport, St. Paul, Minnesota.

O'Shea was already a pilot when he was drafted in 1968. He learned to fly at the original "Wings" flight school at St. Paul Downtown Airport. His instructor was Brian Addis, who now works at Wipaire, Inc. at South St. Paul Municipal Airport-Fleming Field (SGS) in South St. Paul, Minnesota.

A 1929 Curtiss Wright Travel Air was giving rides for \$80.00 per person, as fast as pilot Clay Adams of Nostalgic Wings could load and unload passengers. Airport chairman, Phil Mattison, was giving rides to friends in his J-3 Piper



(L/R) A Chinook CH-47 helicopter, flown by Capt. Jeremy Degier of St. Cloud, Minnesota with Viet Nam veteran, Michael O'Shea of Lindstrom, Minnesota.

OSCEOLA, WIS. – Motorbooks International and the Osceola, Wisconsin airport commission, team up each year to produce the "Wheels & Wings" fly-in/drive-in. This year's event took place September 12, 2009.

Motorbooks International publishes books on cars and airplanes, so they are well known for putting on a good show.

Car collectors turn out in droves from throughout the region and nearby Minneapolis-St. Paul, Minnesota. If you love classic Corvettes, Camaros, Mustangs, Dodge Chargers, Malibus, MGs, Austin Healeys, Porphes – you name it – Wheels & Wings is for you. The car portion of the show is held 1 mile north of the airport at Motorbooks International's headquarters, and shuttle service is provided free of charge from the airport where aircraft are on display, and a pancake breakfast is held.

Cub on amphibious floats.

Darrel Gibson of Rice Lake, Wisconsin, flew his Cessna Cardinal to the fly-in with his son, Darrel, Jr., and grandson, Corbin. Gibson and his wife, Cleo, used to own Gibson Aviation in Eau Claire, Wisconsin. He now operates an RV park in Rice Lake, and Darrel, Jr. has an aircraft maintenance shop at the Amery, Wisconsin airport.

Osceola Airport Commission member, Kevin Rector, and his son, Jack, were on hand to assist pilots. Jack is involved with the "Soaring Eagles" Boys Scouts program in Osceola, and as their name implies, this is a flying program for Scouts. In exchange for helping to park planes and cars at the show, Scouts receive credit towards flight training. □

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