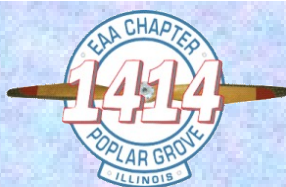




The Leader In Recreational Aviation



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Vol. 3, No. 1, March 2007

LEADING EDGE



Looking Back --
Our
Second Year

EAA Chapter 1414
February 8, 2005 - February 13, 2007

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Mission
Statement

**Promote,
encourage
and facilitate
an environment
that fosters
safety, education
and high standards
in the design,
construction,
restoration and
operation of all
types of recreational
aircraft as well
as nurture
camaraderie
and friendship
amongst all
members!**

PRESIDENT'S MESSAGE



Steve Langdon

Survey Time is almost upon us. As promised I have completed the chapter survey. It will be coming out the first part of March . The Survey will be in two parts Part I will request personal information so that we can better know our membership. This will allow us to see if there are any strong trends in demographics that will help us focus the Chapter activities. Part II will ask for candid if not brutal responses as to how you think the chapter is run and where you would like to see it go. Part II may be sent back in a separate envelope if so desired. As you are reading over the survey and deciding if you are going to complete it remember, this is your Chapter, there is no way we can meet your needs and expectations with out honest feed back. So, please complete and return the survey in a timely manner.

I hope you all enjoyed our January speaker Dave Mitok's talk on engine break in and engine oils as much as I did. I am sure Dave dispelled some long standing wives tales that have plagued the aviation community for years.

This month's speaker is a second offering from Emery Air. A group from Emery's Avionics will put on a program covering topics such as the new transponders and the new elt's that are coming. They will also be ready to answer your avionics questions, come prepared with some good questions.

Any body that was there knows what a great time we had at the first annual USO Dance. Even the food was pretty good. (cans sos good?)

Keep warm and Fly Safe! Keep the greasy side down and the spinny thing turning.

Steve

NOTE: EAA Chapter 1414 does not project or accept any responsibility for the participation by any newsletter reader or Chapter member at any fly-ins, functions, forums or events that may be publicized in this newsletter. All material herein of a technical nature is for reference only and is not necessarily recommended or approved by the editor of this publication or any official of Chapter 1414. This publication is produced only as a medium of communication amongst members and friends of Chapter 1414.

February Meeting

Due to the worst storm of the year, our regular February meeting was canceled. As a result, there are no pictures for us to see this month. The good news is that the speaker from Emery Air has agreed to come back to the March meeting. Please join us on Tuesday, March 13 at 7PM for an informative presentation.

February was the second anniversary of Chapter 1414. The first meeting was held on February 8, 2005. Our chapter newsletter, **The Leading Edge**, was first published in March.

Happy Anniversary to all of us!

Chapter 1414 Logo Apparel



Prices and Information on Page Seven

Dick Hill of Chapter 1414 has written an inspirational and educational story. He shares his experience and love of flying. Here is the second installment of his article.

Those Beautiful Contrails

*Or, the story of making the white line in the sky
and viewing nature's other interesting sights from the air.*

During these crazy times when most anything can happen, an airliner uses a secret code on their 'black box' as the transponder is called, or makes a radio call if there is something wrong in the cabin, such as a hijacking or other threat. It then becomes necessary to call down an intercept by the fighter planes that are cruising far above the normal traffic. They have been making those patrols over congested areas ever since 9-11.

If you happen to be standing outside, when this event takes place, it is preceded by the sonic boom that calls your attention to the contrails that are descending toward the target plane. If the intercept is at low altitude, the fighter's contrail disappears on the way down and if you happen to be close enough, you can watch as they take up position for escort. Then, you wait for the evening news report or morning paper to cover the event.

After all those years of watching others pulling the contrails I finally progressed through the chairs to become a captain on the Douglas DC-9 and later on the Boeing 757/767. Then I could climb into the high strata and make contrails of my own.

The best time for watching your own contrail is when you have the shadow on your side of the plane with the sun behind the opposite wing. Then the trail is painted on the clouds below, or on the ground if the air is clear. Broken clouds almost make the trail disappear and suddenly, in a flash, it is lying there beside you with a rainbow circling your place in the plane.

The closer you are to the cloud deck, the more exacting the location of the rainbow. I have seen it

Events Calendar - 2006

- | | |
|--------------------|--|
| March 13 | Chapter 1414 Board of Director's Meeting, Poplar Grove AP Maintenance Hangar, 5:45PM
All Members are welcome. |
| March 13 | Chapter 1414 Monthly meeting, Poplar Grove AP Maintenance Hangar, 7-9PM |
| March 13 | Emery Air Avionics Open House, Maintenance Hangar, Poplar Grove Airmotive, 9-12AM |
| April 17-23 | Sun 'n Fun Fly-in, Lakeland Linder Regional Airport, Lakeland FL |
| May 20 | Chapter 1414 Pancake Breakfast |
| June 8-10 | L-Bird (Liaison WWII Aircraft) Fly-in. For information contact Steve Ross or Lee Hilbert. |

from both, the cockpit and the cabin with the rainbow circling my window from each angle.

Once while flying as a passenger from Chicago to Florida in an Eastern Airlines Boeing 727, I glanced out the right window. On the leading edge of the wing, just about where the outboard slat engages the one at mid-wing, there was a 'blur' in the window pane. Just then, we encountered a slight bump. The blur danced inward and outward as the wing flexed. The sun was at a high angle above and beyond the wing.

I was leaning across my young son's lap and pointed out the movement to him. Then we were both intently watching that blur as it danced along the slats with each bump. Being at thirty or more thousands of feet altitude, the stewardess became interested in what we were watching so intently.

She asked what could be so important that we sat transfixed staring at the window. She wondered if another plane was out there. I explained that the item of interest was the shadow of the sonic wave that was formed on the wing as the airspeed at that point exceeded the speed of sound.

She leaned over us and watched until another bump moved it. Then each of the other stewardesses came to see. Soon one of them went to the cockpit and the flight engineer came to lean over us and stared at the sight of the shock wave where its shadow moved along the wing. The shadow was visible because the air was condensed by the shockwave that formed at that point on the leading edge of the wing.

The flight engineer walked back to the cockpit and then the copilot and soon, the captain followed. All returned forward, shaking their heads.

Scanning for traffic you can innocently observe as other planes make their white lines in the sky. Flying along an airway with a crosswind drift and meeting another plane, above or below you, it is easy to see how the wind angles affect your tracks as they approach and you pass by.

Crossing an airway with a contrail above you presents another interesting illusion. You note the shadow from the trail and as you pass beneath it, the complete shadow formed by the sun, extends from the trail, clear to the ground like a huge stage curtain built on the dust particles. It lasts for just that moment and then, it is gone as you punch through it.

That same phenomena can also be observed while traveling along on the ground. With a contrail passing over either east or westbound, if you look closely as you pass beneath the trail and you might see that 'curtain of dust' hanging, off and away from the sunset.

Leading Edge

Passing another plane that is making a trail is exhilarating, sort of like winning a race. While having another pass you are like loosing and you want to pour on some more power, but, of course you are restricted by the aircraft limitations. The difference in speed is usually caused by the different winds aloft.

Aircraft ground speeds at different levels are affected by the winds aloft. Some levels produce head winds and others produce tail winds. Both planes can be operating with identical speeds, or Mach Numbers and the wind will cause this difference to be noticed. *Most airliners operate at speeds of about 80% to 87% of the speed of sound, or MACH 87.*

An approaching cold front carries moisture to the extreme altitudes where it is cooled by expansion and that makes contrails become visible on the beautiful blue sky. Contrails appear during weather changes. The beautiful, mare's tails of cirrus clouds build paintings, random patterns that become like a wispy layer of feathers in the sky.

When the air mass above is dry, there are no cirrus clouds and neither are there any contrails. But, at those times, there are just as many planes aloft as there are on days when the air is moist. Occasionally, you can see a glint of reflection from the plane as it passes through your sun line, with or without a contrail.

Read the Conclusion to Dick's Story in the April Issue.

Contrails

**An Original Story Written By,
Captain Richard C. Hill**

**North Central to Republic to Northwest.
From the DC-3 to the Boeing 757/767,
Illinois Aviation Hall of Fame, class of 2001.
Wright Brothers Master Pilot Award, 2006.**

Edited By,

Jeannie C. Hill

**Member: Board of Directors EAA Vintage
Aircraft Association
Board of Directors EAA Chapter 1414
Board of Directors Vintage Airplane
Association.
Board of Directors Classic Car Rally,
Lake Geneva, WI**

Airplane of the Month

What our members are flying...

The featured airplane of the month of March is an exceptional beauty owned and flown by Steve Langdon. It is hangared at Poplar Grove Airport.



Cessna C140

Engine	C190	Maximum Weight	1450 lbs.
Construction	Aluminum	Useful Load	590 lbs.
Wing Span	32'10"	Airspeed Limits-level	115MPH
Length	21'6"	Glide or dive	140MPH
Fuel Capacity	25 lbs.	Flaps extended	82 MPH
No. Seats	2	Take-off	650 Feet

C140 History

Cessna began manufacturing the C140 in 1946 to fill the post-war demand for a line of aircraft, rather than single models, that would provide efficient transportation. This remains the philosophy for the company to this day. It was one of the first aircraft to use the spring steel landing gear designed by Steve Wittman still in use today. A total of 5560 aircraft were manufactured before it was phased out in 1950.



Pig Wrestling *by Ed Harvey*

This is a story from my commuter days. I was a Captain on an SD360 (which we affectionately named the "PIG") from Detroit Michigan to Houghton Michigan,

one night. I had been assigned a fairly new FO who had just got out of the Navy. I don't know if you are familiar with Houghton, but it's part of the UP which juts out into Lake Superior. The average snow fall up there in the winter would average around 600 plus inches.

Sometimes the winds would get so strong across the peninsula you couldn't land a pigeon tied to string there. It had gusts up to 50 60 knots on a good day. As we approached the airport that night, the ATIS reported winds out of the north northwest to north at 35 to 40 knots with occasional gusts to 55, 800' overcast and 2 1/2 miles in blowing snow, braking action reported fair by a pickup truck. Rwy 31 ILS approach in use. Now

the airport set up on top of a bluff which fell off sharply down to Houghton Bay on the east end and at the time had trees on the departure end. The runway was cut out in the middle of the trees which bordered the airport. At night the runway lights were pilot controlled (when they worked) and only outlined the edge of the runway, everything else was pitch dark like a black hole.

After being cleared for a decent and given a vector to intercept the localizer for the ILS31 Apch, I briefed the new FO on the approach and what to expect if we had to miss and go around. Which at this point could be a real possibility. We bugged our approach speeds and intercepted the localizer. I advised the cabin and we began setting up for the approach. MSP apch advised that an earlier flight had reported moderate turbulence and light icing in the clouds on the approach to Rwy 31. We acknowledged the controller and he cleared us for the approach with no reported traffic.

Crossing the marker we began to encounter some turbulence and some very light icing. Except for the ice, this was pretty common for CMX, even on a sunny day! As we continued our decent on the glide slope, the turbulence became so bad that it was all I could do to keep the airplane right side up and pointed in the right direction. I noticed the FO straining to make each required call out during the approach. I had flown into CMX many times over the years, so my comfort level with the approach was still intact, but I was beginning to sense a little discomfort on the FO side. We broke out of the clouds about 700 feet above the approach end of the

runway with the runway about 30 degrees to my left. I called runway insight. The FO was looking straight ahead so he didn't see the runway and kept saying "I don't have it", So I told him to look out the left side window which he did, his response was "Oh My God! I got it" at this point the turbulence was worse, so I had him work the throttles while I used both hands to wrestle with the controls and get the airplane on the ground. As we rolled out, the airplane was constantly trying to weather vane into the wind, it took a combination of power forward and reverse to keep it going straight until we exited the runway. The anti skid kept cycling on and off during the braking due to compacted ice and snow on the runway. We reported to MSP that we were on the ground and clear of the active runway.

During the taxi into the ramp I noticed that the FO when reaching for switches was shaking and trembling as he ran the after landing checklists. After shutting down at the gate, I said to him, "something wrong, are you OK?" His response was that he had been in the Navy for 12 years, he had flown off of and landed on many a carrier deck for years, but even his first night landing on a carrier couldn't compare to that approach and landing at CMX. He had never experienced conditions like that. I just wanted to make sure he was comfortable with my decision to continue the approach and landing, to which he replied he was. It was just that he had not seen anything like that in his entire flying career up to that point. I explained to him that when flying up in the northern tier of states like Michigan, Minnesota and Wisconsin to name a few, that it was common during the winter months and would take some getting use to. As well as a little speech about knowing your own limits and when to apply them as well. Also I told him that he needed to learn to grab a hold of the pig by its ear and show it who's boss. In other words learn how to "pig wrestle".

A month or two later I saw FO Steve in the crew lounge. He told me about a landing up north again at night in similar conditions. This time it was his landing. He was a little more comfortable this time since he had experienced it once before. He found himself very nervous, but hearing my words he grabbed the pig by the ear as I had told him and "pig wrestled" that piggy to the ground. We both just stood there and laughed. He said that the guys in his reserve unit had threaten to paint "Pig Man" as new handle on his reserve bird after he told them about flying the Pig and that night at CMX..

Buy, Sell, Trade, Give Away, or Participate!

Classified ads may be submitted by any member free of charge.

If you have an item to throw away, don't! List it here.

Remember one man's trash is another's treasure.

If anyone needs some help, list it here.

Adds will run for three months unless cancelled or renewed.

For Sale

Four Sitka Spruce Panels. Available for wing or tail spars, parts making, etc. Panels are 3/4" long X 10" wide X 18" long. Bargain priced at half off the retail. Call Lon Danek at (847) 381-4286.

Lon Danek knows of a very nice Tailwind available for sale that is hangared at Poplar Grove Airport. He believes that it should stay in the area. Here are the particulars:

Wittman W-8 Tailwind, VFR panel, transponder/intercom, 1298TTAF, 559SMOHE, restored in 1995, C90-12F Continental. Slick mags and harness, auto gas. Plane has always been hangared and is in very good condition. 135 mph @ 5.9gph, 170 max. Contact Dick McClung, (815) 397-8091.

Chapter 1414 Logo Apparel

Jacket	\$60
Wind Shirt	\$35
Polo Shirt	\$25
Cap	\$15
Nametag	\$ 5

Available in twelve colors!

**Order at next meeting or
online at eaa1414.org**

Visit the website for more aviation ads!
There's lots of other fun information, too.

Coming Soon!

EAA Chapter 1414 Pancake Breakfast

The first pancake breakfast of 2007 will be held on Sunday, May 20, 2007. Mark your Calendars, now.

If you would like to help, contact Jeanie Hill, social committee chair, or any chapter officer.

Don't Miss the Fun!

Just for Fun

Airport Eyeball Bender

In the January issue, an obscure photo appeared on this page. It was too obscure to even guess it's origin.



Here it is again with a little more context. Now can you see what it is?

Hint: Frank Herdzina should recognize it.

Challenge: See if you can stump us with your airport eyeball benders, trivia, puzzles, fun facts, etc. Send it to the editor

Editor Note: Thanks to everyone who contributed stories, articles, information, suggestions, photos and all other support to *The Leading Edge*. If you have something you would like to see in these pages, see me, call me, mail me or email me. My telephone and email are on page two. This is the chapter newsletter and should represent all of you.

Premeeting Checklist

- ____ • Bring suggestion for activities, etc.
- ____ • Your member profile for the Newsletter
- ____ • Any aviation article of interest that you would like to share
With the other members

EAA Chapter 1414 meets on the second Tuesday of the month in the Maintenance Hangar at the Poplar Grove Airport, unless notified otherwise in the newsletter.

The meeting starts at 7:00 PM. **Directions:** From Belvidere, IL, go north on Rout 76 approx. 3.5 miles and turn right at the main airport entrance. Make the first right turn and the hangar is on the left.

The Newsletter is always looking for interesting articles and pictures by our chapter members. Please submit anything you have written or would like to write something or have pictures that you believe would be of interest to the chapter membership. The preferred method for the editor to receive articles is by e-mail to: mayge46@verizon.net. Alternately, a ZIP disk or CD with articles written with any major word processor with a printed copy may be submitted to any board member at the meetings.

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1414

EAA CHAPTER

