THE NORTH DAKOTA AVIATION COUNCIL PRESENTS:
THE 2008 UPPER MIDWEST AVIATION SYMPOSIUM

RAMADA PLAZA SUITES
FARGO, ND
MARCH 2-4, 2008

FOR MORE INFO - CONTACT
NDAC - 701.229.9850

BRUCE SMITH
Dean - UND/BO
Tuesday, March 4
7:15 a.m. - Crystal Court South

MICHAEL C. KOSTELNIK
Assistant Commissioner/CEP
Monday, March 3
4:30 p.m. - Mozart I C N RM

BARRY COOPER
FAA/FAA Regional Adm.
Monday, March 3
7:15 a.m. - Crystal Court South

ALLAN KLPMEIER
President - Grryz Aircraft Design Corp.
Tuesday, March 4
11 a.m. - Mozart I C N

Sponsors:

[List of sponsors]

[Image of aircraft flying over mountains]
You can't just change the carpet and call it "improved."
This winter, weather reporting will be better in North Dakota. The Aeronautics Commission, in cooperation with eleven airports, the FAA and four engineering firms, have put together a statewide weather reporting system. A grant ($1.3 million) was given by the FAA-BIS-Airport District Office, to the Aeronautics Commission to construct eleven AWOS units across the state. Those eleven airport communities transferred to the Aeronautics Commission their AIP General Aviation Entitlement Funds and the four engineering firms representing those airports, in consort, coordinated the planning, design and construction of the units. The communities cooperating are: Oakes, Cooperstown, Cavalier, Grafton, Langdon, Rugby, Harvey, Linton, Watford City, Crosby and Carrington. The engineering firms are Ulteig, KLJ, Moore and Interstate. All the units should be up, running and certified by December 1, 2007. There are plans to have all the units in the state hooked into the national weather service reporting system by the end of 2008.

We have a tremendous program in store for you this year. Contact the hotel now (701-277-9000) and make your reservations. Then find the registration form in this issue of the AQ, fill it out and send it in. Registering early saves you money and us a lot of time on the first day of the Symposium.

Emergency Locator Transmitters
What is an Emergency Locator Transmitter (ELT)? How much do you know about an ELT? Do you check it on a regular basis? Do you check it after each landing? Are you familiar with the regulation on its use and when it needs to be serviced? These questions are not an examination for testing. I only wanted to start you thinking about it.

Each year the Air Force Rescue Coordination Center (AFRCC) gets hundreds of ELT signals from a satellite in the sky. The satellite monitors the emergency frequencies for all distress signals. When they get a signal they activate a search to find the location of the signal. These searches are generally all accomplished through the Civil Air Patrol (CAP). The CAP has equipment to seek out the signal either

Continued on page 2
The new ELT’s distress signal can be more accurately located by the use of GPS. Latitude/longitude can be down to less than 100 yards. False alerts will be fewer with about 1 in 12 being actual distress signals. If the owner wishes to purchase the additional options, the ELT can identify the owner’s name, address and phone number.

The current frequency 121.5 MHz will no longer be monitored by the satellite after 1 February 2009.

The current frequency 121.5 MHz will no longer be monitored by the satellite after 1 February 2009. The AFRCC will start monitoring frequency 406 MHz after that time. The frequency 121.5 MHz will not go away. However, it will be monitored by fewer facilities yet, probably military. It’s possible that some flights may happen over a remote distress area and report a signal on the old frequency. Do you want to take that chance? I don’t.

How much are they?

How much they will cost is a question I cannot answer. I’ve attached a sheet of data comparing the two ELT’s which gives some cost. I can tell you this, I’m going to start saving a little each month toward a new unit for my Skyhawk.

See you at the Symposium.

Cleared to land,
Darrel

NDAC FAA Initiative

In November of 2006 The North Dakota Aviation Council (NDAC) appointed a three-member committee to look into the many complaints that surfaced from the North Dakota aviation community about some concerns over the FAA and some of the legal actions that had been imposed.

That committee consisted of NDAC Chairman Darrel Pittman, NDAC Past Chairman Fred Adams and NDAC member Todd Schwarz. The committee worked in concert with the North Dakota Aeronautics Commission Chairman Bob Miller and Director Gary Ness.

The FAA has implemented an action plan called the Customer Service Initiative (CSI) to allow such investigations.

The FAA has implemented an action plan called the Customer Service Initiative (CSI) to allow such investigations. The committee followed the CSI totally without any results at first. They met with the FAA two times, once as an entire council. The next step was to review the records. The records were requested from the FAA through the Freedom of Information Act (FOIA). The committee reviewed files and determined that the next step of the CSI needed to take place.

After arranging compatible schedules for October 5, 2007, the committee met with Mr. David Hanley, manager of AGL-200, and Mr. Barry Cooper, newly assigned Director of the Great Lakes Regional Headquarters. Mr. Hanley and Mr. Cooper listened to our concerns and said they would review all the material the committee had provided. Mr. Hanley told us that FAA Headquarters had just approved a new enforcement order, 2150.3B, which now allows for most actions to be settled by remedial training as a first step. The committee members all felt good with the outcome of the meeting.

Previously Mr. Hanley had made a visit with the local FAA office. Recently Mr. Hanley and Gary Ness visited with Bruce Smith at UND. As a follow-up the next day, Mr. Hanley made a second visit to the local FAA office.

Mr. Hanley and Mr. Cooper are invited to the UMAS. Mr. Cooper accepted. Mr. Hanley needed to check his busy schedule.

It is our hope and goal that all of this CSI action will help to heal the wounds between the North Dakota Aviation community and the FAA. The invitation to attend the UMAS goes out to all the FAA folks. Let’s make that a first step toward the goal.

Darrel
COMPARISON OF THE 406 MHz AND 121.5 MHz DISTRESS BEACONS

The following table compares 406 MHz and 121.5 MHz beacons in these critical areas:

<table>
<thead>
<tr>
<th>406 MHz Beacons</th>
<th>121.5 MHz Beacons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coverage:</strong></td>
<td><strong>Ground station dependent; ground stations have an effective radius of about 1800 nm (2300 km). Both ground station and beacon must be in satellite footprint. Current coverage is about two-thirds of the world.</strong></td>
</tr>
<tr>
<td>o Global</td>
<td>o Only about 1 in 5 alerts come from beacons. Satellites cannot discern beacon signals from many non-beacon sources. Beacons transmit anonymously with no unique identifier. Non-beacon interferers have included ATM machines, pizza ovens, and stadium scoreboards!</td>
</tr>
<tr>
<td><strong>False Alerts:</strong></td>
<td>o Fewer than 2 in 1000 alerts and 2 in 100 composite alerts are actual distress.</td>
</tr>
<tr>
<td>o All alerts come from beacons. Satellite beacon transmissions are digital, coded signals. Satellites process only encoded data, other signals are rejected.</td>
<td>o Since 121.5 MHz beacons transmit anonymously, the only way to ascertain the situation is to dispatch resources to investigate -- a costly disadvantage.</td>
</tr>
<tr>
<td>o About 1 in 12 alerts are actual distress.</td>
<td>o High false alert rate makes first-alert launch unfeasible. Absent independent distress information means RCCs must wait for additional alert information.</td>
</tr>
<tr>
<td>o Beacon-unique coding/registration allow rapid incident corroboration. Registration mandatory since 1994. 90% beacons registered. About 70% of false alerts are resolved by a phone or radio call to registration POCs prior to launching SAR assets.</td>
<td>o Same as 406 MHz.</td>
</tr>
<tr>
<td><strong>Alerting:</strong></td>
<td>o Same as 406 MHz.</td>
</tr>
<tr>
<td>o First alert warrants launch of SAR assets. Earlier launches puts assets on scene sooner--Average 3 hrs saved in maritime, 6 hrs in inland.</td>
<td>o Alerts are anonymous. 121.5 MHz analog technology not capable of transmitting data.</td>
</tr>
<tr>
<td>o Average initial detection/alerting by orbiting satellites is about 45 minutes.</td>
<td>o No false alert follow-up capability.</td>
</tr>
<tr>
<td>o Average subsequent satellite passes every 60 minutes.</td>
<td>o No GEO detection capability = no instantaneous detection.</td>
</tr>
<tr>
<td>o Vessel/aircraft ID, point of contact information provided with alerts allows rapid verification or stand-down.</td>
<td>o 12-15 nm (15-25 km) accuracy on average. Position calculated by Doppler shift analysis.</td>
</tr>
<tr>
<td>o Allows false alert follow-up to continuously improve system integrity/reliability.</td>
<td>o No GPS capability.</td>
</tr>
<tr>
<td>o Near instantaneous detection by geostationary satellites. System provides world-wide coverage.</td>
<td>o Initial position uncertainty result in 500 sq. nm (800 sq. km) search area on average.</td>
</tr>
<tr>
<td><strong>Position Information:</strong></td>
<td>o No GPS capability.</td>
</tr>
<tr>
<td>o 1-3 nm (2-5 km) accuracy on average. Position calculated by Doppler shift analysis.</td>
<td>o Same as 406 MHz.</td>
</tr>
<tr>
<td>o Less than 100 yard accuracy with GPS-equipped beacons. GPS position processed with initial alert. Major beacon enhancement.</td>
<td>o 0.1 Watt (Weaker power output) - Hard for satellites to detect</td>
</tr>
<tr>
<td><strong>Locating the Target:</strong></td>
<td>o Average cost is $200.00 - $400.00 (EPIRB)</td>
</tr>
<tr>
<td>o Superior alert (non-GPS) position accuracy limits initial search area to about 25 sq. nm (65 sq. km).</td>
<td>o Average cost is $600.00 - $1200.00 (ELT)</td>
</tr>
<tr>
<td>o GPS-equipped beacons reduce search area to a significantly smaller area.</td>
<td>o 121.5 MHz beacons are being phased out.</td>
</tr>
<tr>
<td>o 121.5 MHz homing signal facilitates target location by radio detection finder equipped search units.</td>
<td></td>
</tr>
<tr>
<td><strong>Power Output:</strong></td>
<td></td>
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<tr>
<td>o 5.0 Watts (Strong power output)</td>
<td></td>
</tr>
<tr>
<td><strong>Cost:</strong></td>
<td></td>
</tr>
<tr>
<td>o Average cost is $1000 (GPS-equipped EPIRB)</td>
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<tr>
<td>o Average cost is $500 (Personal Locator Beacon)</td>
<td></td>
</tr>
<tr>
<td>o Average cost is $1500.00 - $3000.00 (ELT)</td>
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</tbody>
</table>

For Additional Information Contact NOAA-SARSAT at: (888) 212-SAVE or (301) 457-5678
Or you can visit our website at: www.sarsat.noaa.gov
FROM THE DIRECTOR'S CHAIR

By Gary Ness, Director, North Dakota Aeronautics Commission

Have I called to tell you that I flew a PFFTY-ONE? If I didn’t, I’m sorry. You are in a small minority. Only complete oversight on my part made it so, and I truly apologize. You should have received that call or a visit to your office on or for about 2 weeks after November 7, 2007. That was the day I had a life-long dream come true. I flew a PFFTY-ONE.

You see my Father, Oscar, was a charter member of the ND Air National Guard and their first wing aircraft was the P-51 “Mustang.” As a youngster of five years old, I was enthralled and amazed with the Mustang. My Father cultivated that interest and let me get as close as possible to the “PFFTY-ONE.”

He couldn’t take me on a baggage-compartment ride in that aircraft like in the C-140’s and Aeronca Chiefs, but he told me story after story about the PFFTY-ONE. I would sit and listen to the hangar flying stories in Walhalla and Lisbon...stories about that “best airplane I ever flew.” Over the last 57 years, I have wanted...no lusted...for a chance to fly one. Last November, Dr. Henry Reichert gave me that chance in the “Dakota Kid.” About three years ago, Henry asked me if I would like a ride. My answer was very cool and calm. “Yes, I think that would be just fine, thank you.” Inside a very little boy was saying, “YES, YES, YES, YA, YA, I WANT TO, I WANT TO, THANK YOU, THANK YOU.” On that November day, Doc walked into my office with a parachute for me, ex-large of course, with a big smile. The day had come! “If we plan to go over 60 degrees angle of bank, we need to wear this equipment,” he announced. Then he asked, “Do you want to go over 60 degrees?” My answer, “You bet your bibby, I do.”

Within 20 minutes we were strapped into the “Dakota Kid” (Is there anything like the sound of that engine?) and headed South West of Bismarck into the practice area. I don’t have the ability to describe the sensation of the flight without sounding like I’m five again! I enjoyed that horse like none other I’ve flown. The Mustang is one of the most stable aircraft I have had the pleasure to fly.

As we maneuvered around the wild blue yonder, my thoughts went back to those young men of WWII. Those pilots, without beards, who climbed into the European skies to do battle with confidence, mounted on a great horse of war.

Well, my P-51 ride certainly met the expectations that originated many years ago. Thank you, Henry.

Did I tell you that I flew the PFFTY-ONE?
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HAPPY NEW YEAR!

I have recently returned from upgrade training on the new TAA (Technologically Advance Aircraft). It was a great school on the Cirrus systems hosted by Cirrus, online training by Jeppessen, and flight training by UNO. I had a great instructor. He did an excellent job of teaching an old dog some new tricks. I came away from there with a whole new respect for these new aircraft. They are certainly redundant and not as hard to fly as I had expected. The online course took me 2 days. A major portion of that time was spent educating my computer on how to be compatible with the Jeppessen school. The online course did a great job of teaching the operating systems of the “Glass Cockpit”. It is amazing how much information is at your fingertips inside those black screens of the new aircraft.

Once the online was complete, it was off to Duluth and the Cirrus factory to get the required hours of flight training. They have rewritten the books on teaching how to transition to this new aircraft. It is called “scenario” based training. Most of our time was spent by planning and flying a route, only to never end up where we had originally planned. The instructor was a master at breaking everything in that aircraft and causing diversions to places that we had not planned on. At the end of 3 days, we had logged over 10 hours, 20 instrument approaches, and over 35 landings. It was a great experience.

So, what did I learn? I learned that these new aircraft are perfectly capable of flying themselves from point “A” to point “B” with no physical input from the “Pilot.” I learned that these new computer systems monitor and report everything. I learned that if you don’t “pay attention” (a term that my wife really hates), you can get a long way behind the airplane; and I learned that you can get a deep, false sense of security from all of the automatic equipment. I also relearned that airplanes still fly by needle, ball and airspeed. In the end, not much has changed in that without thrust, drag, lift and weight, all of that fancy electronic equipment will not move.

Really, it was a great experience and now I am a CSI (Cirrus Certified Instructor). I hope that anyone who flies, gets to experience the next generation of aircraft. Remember, the basics are still the same.

Watch your airspeed,

Bob Simmers

HAPPY FLYING
By Chris Adams, FCM ATC DEV

Since the nation has more and more new controllers, I thought I would add my two cents worth of information for all of those pilots that may need a refresher.

First off, we new controllers aren’t as good at picking up your call-signs. That means that even though you know it’s N...BE and can ramble it off like a McD’s order doesn’t mean that we are going to catch it. I know, nothing is less helpful than a controller saying “say again” or “aircraft calling ground, say again.” To help ATC out a little, say your call-sign at a speed that is understandable. Also we should review what the rules say about call-signs in general (hint AIM 4-2-2). We are allowed, after first, contact to shorten call-signs to type and last three characters. Example “N12345 or CESSNA 12345” can be stated as “Cessna 345” after your initial transmission. If you choose to use this abbreviated call-sign you should be including aircraft type like Cessna, Cherokee, Piper, Mooney, etc... because that is what the rule is.

Next when you call up, tell where you are, and what you want. That way we don’t have to play twenty questions. And what I mean by where you are, I mean where exactly you are on the airfield. We have lots of area to cover and we might not be looking at you, so help ATC out and let us know. Of course, this means you need to know where that is, hence all of those signs. You should have a basic understanding of the layout of the airport, where you are. It might not be your home airport or one you are really familiar with, so you should take a look at the layout BEFORE you leave. I know of at least one corporate pilot, who we will leave nameless for security, that puts the IFR chart of the layout on the yoke. Also, when you land and are told to turn (left/right) and contact ground, that doesn’t give you permission to start taxiing to your parking ramp. It means vacate the runway and call ground before you start taxiing anywhere. You might ask why? Because you may just find yourself nose to nose with a jet that can’t turn around on the taxi and now has to find a nice FBO line guy to come and fix it with his “golden tow bar.”

That being said, if you are departing, tell us where you are, which direction of departure, if VFR, and with the current ATIS code, if one is available. When inbound, let us know if you are full stop or want options. After you land and are off the runway, let ground know where you want to park. Example, “Flying Cloud Ground, CESSNA 12345 is off of Runway 28R at Alpha 3 parking at ASI Jet Center.” I found that many pilots call up ground like this: “FCM ground, N12345.” Now what am I supposed to do with that? Let’s see.... Maybe he’s inside the hangar or hiding out of sight of the tower, or just wants to say hi, or... you get the idea. I’d like to answer him and say “CAR 54 WHERE ARE YOU?”

I hope this has not made you think that I’m nuts. In reality, lots of bad transmissions are happening on both sides, maybe with a little reflection and work we can iron out the faults, and we can get down to having fun flying in the wind...

Cleared To Land!
Chris
The ND Aviation Hall of Fame Selects Nationally Noted Aviator

Gerry Beck

The ND Aviation Hall of Fame chose as a member, nationally noted aviator, the late Gerry Beck of Wahpeton, at their annual meeting.

Gerry Beck was born in Britton, SD, and grew up in Guelph, ND. He became interested in aviation after graduation from the University of North Dakota in 1971. After an early career as an industrial educational instructor for the Grand Forks School District, his interests in aviation led to a start-up aerial application business, Tri-State Aviation, in Wahpeton. Being constantly interested in new and different things, Gerry developed a number of crop spraying innovations that are in wide use today. His influence in the aerial application industry helped create an effective ND Aerial Agricultural Aviation Association (NDAAA). That influence led to the development of a national aerial applicator educational program named Professional Aerial Applicator Support System (PAASS).

A vintage aircraft restoration business grew out of the Tri-State Aviation start-up venture. Gerry’s passion for keeping aircraft flying and displaying those aircraft of old was instrumental in the creation of the Fargo Air Museum. His mastery of the secrets of the WAR BIRDS’ restoration became noticed by the national aviation community. His restorations of the Navy TBM “Avenger” and the F-4U “Corsair” are classics that are recognized in all corners. His complete construction of the P-51A, which included producing the parts as well as his contribution to the “Red Tail” Tuskegee Airmen P-51C restoration, is the talk of the restoration industry.

Gerry died on July 27, 2007, as the result of an aircraft accident during the Showcase Flight at AirVenture at Oshkosh, WI. He is survived by his wife Cindy and daughter Whitney of Wahpeton.

The ND Aviation Hall of Fame will honor Gerald S. Beck at the ND Aviation Council’s Upper Midwest Aviation Symposium on March 2, 3 & 4, 2008, at the Ramada Plaza Suites, Fargo, ND. More information is available at 701-328-9650.

CERTIFICATION

Pietsch Aircraft employees and FAA Inspector Vance Emerson gather together to congratulate John Martin, owner of M&M Avionics, on receiving his Repair Station Certificate.

FAA AIRPORT GRANTS DELAYED

By Mark J. Holzer, ND Aeronautics Commission

The job of rebuilding and maintaining the safety of North Dakota’s 54 federal airports is jeopardized in 2008 by a lack of FAA Airports Improvement Program funding. Congress has left FAA with a $3.515 Billion program but no ability to issue grants until a dispute over aviation excise taxes is negotiated. These taxes will expire on Feb 29th 2008 and could push airport grants back into a time that airports, due to seasonal constraints, could not accomplish many priority projects.

What complicates the process is that local airport boards have submitted plans to FAA for programming funds and have hired engineering firms to prepare bids and environmental clearances. Without receiving a grant, the airport has to front end the project costs that may lead them to headaches on how to pay their bills. Rural ND airports do not have a surplus of funds in budgets to handle this banking of FAA paperwork too long.

The state Aeronautics Commission grants generally support 2.5% of share in an FAA project. Some 36 airports in ND do not qualify for FAA funds thus depending on the state for grants up to 50% of eligible work. With a strong FAA program in ND, generating over $24 million in projects in 2007, the airports would suffer the ripple effect of less funds.
The FAA has named its Grand Forks Air Traffic Control Tower “Facility of the Year” for facilities of its size (Level 7 to 9).

“I’m really proud of the teamwork shown in this facility,” Cink said. “We have good people here doing good things: inside the facility, and in the community.”

The Grand Forks facility was recognized for its ongoing support of the University of North Dakota’s aviation program, including a program to mitigate potential language and phrasing barriers with foreign aviation students. Tower staff sponsored an active mentoring program for youth and college students, and employees enthusiastically supported a variety of pilot education and community volunteer programs.

“Safety, service and value to the customer are our top goals,” Cink continued. “We do an outstanding job. But it’s the extra mile that I see every day. Our people are giving their own time to help our customers and our community.”

Facilities were selected on the basis of customer service, employee focus, and innovation. The Grand Forks tower, which has 23 employees, handled 229,470 take-offs and landings during calendar year 2006. A large amount of traffic served comes from the University of North Dakota School of Aeronautics.

“We enjoy working with students, and we value the relationships we have with our entire aviation community,” Cink says. “We strongly believe education leads to greater safety.”

Grand Forks was chosen for the national honor from a pool of 35 FAA air traffic control towers nationwide, categorized as Level 7-9 for the number and complexity of operations, types of operations and equipment/runway configurations.
### Sunday, March 2, 2008  
Upper Midwest Aviation Symposium – March 2–4, 2008

<table>
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<th>AAND</th>
<th>NDPA</th>
<th>NDAAA &amp; NDAC</th>
<th>NDPAMA</th>
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<tr>
<td>Mozart II</td>
<td>Mozart II</td>
<td>BRAHMS</td>
<td>Bach</td>
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#### PROGRAM

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 11:00 am to 12:00 pm | Registration - 12:00 noon - 5:00 pm  
Noon Meal on your own or organizational meetings  
Aviation Council Meeting for Board Members at Noon |
| 1:30 pm to 2:20 pm | AOPA - VIDEO  
Maneuvering Flight |
| 2:30 pm to 3:20 pm | EAA Technical Counselor  
Andy Tibert, EAA |
| 3:30 pm to 4:20 pm | EAA Flight Advisor  
Warren Pietsch  
Open Forum |
| 1:00 pm - 3:00 pm | ND Aeronautics Commission  
Aerial Applicators  
Security/Safety  
Mandatory Meeting |

**ICE BREAKER:** Fargo Air Museum — 5:00 pm to 9:00 pm

Shuttle Bus Schedule – Buses will pick up and return to the Airport from hotel (Look for time schedule in hotel lobby)

### Monday, March 3, 2008  
Upper Midwest Aviation Symposium – March 2–4, 2008

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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>7:00 am to 8:00 am</td>
<td>7:00 a.m. Contiental Breakfast Crystal Court East</td>
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</tbody>
</table>
| 8:00 am to 9:30 am | Marketing Your GA Airport  
Larry Mueller, Hillsboro |
| 9:00 am to 10:00 am | State Grants & Projects  
M. Holzer & G. Ness  
Obstructions GPS  
Rich King, Ultraig |
| 10:00 am to 11:00 am | Airport Roundtable  
Grants Compliance Airspace  
Steve Johnson, GFK |
| 11:00 am to 12:00 pm | "SKYCATCATCHER"  
RM: MOZART I & II  
CESSNA AIRCRAFT COMPANY |
| 12:00 - 1:00 pm | LUNCH IN THE EXHIBIT HALL - Crystal Ballroom |

**BREAKFAST:** - 7:00 am  
CRYSTAL COURT E  
Speaker - 7:15 am  
CRYSTAL COURTS

**REGISTRATION**  
E ENTRANCE LOBBY  
8:00 am to 5:00 pm

**EXHIBITOR SETUP**  
CRYSTAL BALLROOM  
8:00 am to 10:00 am  
Exhibitors Meeting  
CRYSTAL BALLROOM  
10:15 AM

**EXHIBIT HALL OPEN**  
CRYSTAL BALLROOM  
10:30 am to 3:00 pm

**SPouse Program**  
SONATA 1  
9:30 to noon (w/ lunch)

**Noon Luncheon in CRyStAL BallRoom**

**General Session**  
MOZART I & II  
4:30 pm to 5:30 pm

**Exhibit Hall Open to Public**  
7:30 pm to 9:30 pm

**Exhibit Hall Night**  
Exhibit Hall Open  
6:15 pm to 9:30 pm

**Exhibitors Night**  
Crystal BallRoom  
6:15 pm to 9:30 pm

**Exhibit Hall Open to Public**  
7:30 pm to 9:30 pm

**General Session**  
4:30 pm to 5:30 pm Mozart I & II RM  
Michael C. Kostelnik - Assistant Commissioner  
Office of CBP Air and Marine, US Customs & Border Protection  
Exhibitors' Night - Crystal BallRoom  
6:15 pm to 9:30 pm  
Exhibit Hall - Open to Public - 7:30pm to 9:30pm
### Upper Midwest Aviation Symposium - March 2–4, 2008

**TUESDAY, MARCH 4, 2008**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>7:00 am to 8:00 am</td>
<td>7:00 a.m. Centennial Breakfast Crystal Court East</td>
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<tr>
<td>7:15 am</td>
<td>Speaker - Bruce Smith, Dean, UND/JDO - Crystal Court South</td>
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<tr>
<td>8:00 am to 8:50 am</td>
<td>Sealing Secrets on Runways Tom Underdahl, ARTech</td>
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<tr>
<td>9:00 am to 9:50 am</td>
<td>FAASTeam - Steve, Hoogerhyde</td>
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<tr>
<td>9:00 am</td>
<td>Airport Role in Border Protection Mark Johnson, CBP</td>
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<tr>
<td>10:00 am to 10:50 am</td>
<td>AAND BUSINESS MEETING Tim Thorsen, Pres. AAND</td>
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<tr>
<td>11:00 am to 11:50 am</td>
<td>LIGHT SPORT AIRCRAFT PRESENTATION Mozart I &amp; II, New Generation Cirrus VLJ and LSA's</td>
</tr>
<tr>
<td>12:00 - 1:20 pm</td>
<td>LUNCH IN THE EXHIBIT HALL - Crystal Ballroom Nagota Aviation Industry Luncheon With Exhibitors And Vendors</td>
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<tr>
<td>1:30 pm to 2:20 pm</td>
<td>Land Acquisition - Steve Aldinger, Interstate</td>
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<tr>
<td>2:30 pm to 3:20 pm</td>
<td>Communications - Mike Seminary, M2</td>
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<tr>
<td>3:30 pm to 4:20 pm</td>
<td>Flight Service Notams Today Joe Morgan, Lockheed/Martin</td>
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<tr>
<td>8:00 am</td>
<td>GFK - CBP Mission Brief Mark Johnson, Chief</td>
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<tr>
<td>8:00 am</td>
<td>Aero Space Welding Steve Hunter</td>
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<td>8:00 am</td>
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**NDPAMA BUSINESS MEETING**

**NOON LUNCHEON IN EXHIBIT HALL**

**EXHIBIT HALL OPEN CRYSTAL BALLROOM**
10:00 a.m. to 2:00 p.m.

### Educational Program

**NDAC Elementary Education Program**

- **Wednesday, March 5, 2008**
  - **Two Sessions:**
    - 9:30 a.m. to 12:00 p.m.
    - 1:00 p.m. to 3:00 p.m.

**PROGRAM TO INCLUDE THESE TOPICS:**
- FAA Air Traffic Control
- Civil Air Patrol
- ND Air Guard
- Aviation Mechanics
- Photography and Aviation
- Airline Pilots
- Airport Management

**Upper Midwest Aviation Symposium - March 2–4, 2008**

**ND AVIATION COUNCIL ORGANIZATION MTG.**
4:30 PM - 5:15 PM - ROOM - SONATA 2

**ND AVIATION AWARDS AND ND AVIATION HALL OF FAME BANQUET**
Social Hour from 6:00 - 7:00 p.m.
Banquet - 7:00 p.m.
Vocal Entertainment: Julie Joyce-Smith and Group
Banquet Entertainment: Steve Stark - Carl Ben Eielson, ND Aviation Hero

**SPOUSES’ PROGRAM**

ALL PROGRAMS WILL BE FROM 9:30 AM TO NOON AND WILL START IN THE SONATA 1 ROOM
LUNCH WILL BE PROVIDED BOTH DAYS

**MONDAY, MARCH 3, 2008**
- **TOURS:**
  - Heritage Hjemkomst Interpretive Center

**TUESDAY, MARCH 4, 2008**
- **TOURS:**
  - Plains Arts Museum
Next Generation Air Traffic System, NextGen, is looming on the horizon. A key component is the ADS-B (Automatic Dependent Surveillance—Broadcast) navigation system based on GPS/GNSS. For the past few years we have been hearing about the updating of the National Air Space ATC system, changing from a ground-based system to a satellite-based system.

Recently ITT was awarded a 1.8 billion dollar 5-year contract to design, develop, and deploy equipment necessary for ADS-B system. As satellites are already in place, ITT’s job is to get the ground-based transmission equipment installed.

The FAA has published an NPRM on ADS-B with a January 8, 2008, deadline for comments, which has been extended into March 2008. This is a 100-page document that should be read thoroughly to understand what it is saying. There are different parts of ADS-B and this first NPRM deals with what is termed “ADS-B out,” meaning the standard for your aircraft transmitting information to ATC. “ADS-B in” stands for information you receive in your aircraft, which there are different levels of service such as flight information system—broadcast (FIS-B), traffic information system—broadcast (TIS-B).

The first part of the system is to be up and running by 2014 and the whole system by 2020.

Questions arise as to how ADS-B will be implemented, who maintains it, who oversees the operation to make sure the system operates as billed, and so on. Cost to the consumer, the general aviation pilot, business aviation and commercial aviation range from the low end estimate of $10,000 to hundreds of thousands for the airline, cost per aircraft.

ADS-B integration of VFR traffic with IFR traffic is still out on debate as to what kinds of equipment will be required on VFR aircraft. Aircraft without electrical systems are still another question that will get discussed.

When attending the Upper Midwest Aviation Symposium, I hope you will bring up questions about this new system. Alaska has had the Capstone project for a few years, the proving ground for ADS-B, which has reduced accidents in remote areas substantially.

Meanwhile, homework — get on the internet, google ADS-B, read the NPRM, read what other countries like Australia are doing with their version of ADS-B. It all makes some interesting reading.

Keep safe and have fun flying
FAA EXCEEDS ANNUAL GOAL FOR GENERAL AVIATION SAFETY

By FAASTeam

The number of fatal general aviation accidents declined by 5 percent this year, the Federal Aviation Administration (FAA) announced.

The FAA’s goal was to have no more than 331 fatal general aviation accidents during the 12 months ending Sept. 30. The actual number was 314. Fatalities in general aviation accidents also declined significantly, from 676 in fiscal 2006 to 564 in fiscal 2007. For these calculations, “general aviation” includes not only privately flown planes but also non-scheduled air taxi flights.

“This record is due to a dedicated commitment to safety by everyone in general aviation,” said FAA Associate Administrator for Aviation Safety Nicholas A. Sabatini. “In particular, manufacturers are providing sophisticated technology like GPS and glass cockpits — and the training to go with them — and the FAA is vigorously encouraging adoption of these safety enhancements.”

In October 2006, the FAA ushered in a new effort to help aircraft owners, pilots and aviation maintenance technicians avoid mistakes that lead to accidents. Called the FAA Safety Team, the program is devoted to decreasing aircraft accidents by promoting a cultural change in the aviation community toward a higher level of safety. The program features data mining and analysis, teamwork, instruction in the use of safety management systems and risk management tools, and development and distribution of educational materials.

For more than 37 years, the FAA has pursued a comprehensive program to improve the safety of the general aviation community. The original program introduced the concept of a joint effort sponsored by the FAA and the aviation community to reduce the aviation accident rate. Over the years, the endeavor evolved into the Aviation Safety Program, and demonstrated that the general aviation accident rate could be reduced. In the 1990s, the program expanded to include aviation maintenance technicians.

THE NEW “WINGS” PILOT PROFICIENCY PROGRAM

By FAASTeam

Why is this new program better than the old program?

First, and foremost, the new WINGS program puts each pilot in control of his or her own training program. Second, it is fully adaptable to each pilot’s current level of flying and can be changed at any time. Third, the level of proficiency required is easily attainable at any level for which you are rated. Finally, the system is user-friendly and automatically keeps track of your accomplishments.

What are the benefits? Bottom line — you are a safer pilot! Let me put that another way — you and your passengers will feel a lot more comfortable about flying and you will be a better member of the aviation community. As an incidental, you could also save some money on your insurance rates.

The WINGS website gives you the nuts and bolts of how to use the WINGS program, so my justification for each of the points just offered will be general, rather than specific, instructions on how to use it.

Many general aviation pilots don’t have the background or resources to develop a comprehensive and continuous training program and those that do probably don’t have the time. We do the best we can to maintain and improve our skills, but it’s likely with no outline or organized plan. Now, in step the folks who developed the new WINGS program. They have an extensive training background and a wealth of resources they used to create an interactive website where you can be your own training manager with tools and options you quickly organize and administer. You develop a plan you want and run it at a pace that is comfortable for you and your wallet.

The adaptability of the new program is the matrix of training activities available based on the level of proficiency you select. You do that when you sign up for the program but you can change it at any time. When you register, the system asks you what ratings you have so it can develop a set of tasks commensurate with your qualifications. The trick is, you don’t have to tell any more than you want. For example, if you are a 747 captain who flies a single engine, six-place airplane for family trips, you get all your heavy training from your employer so all you have to select when you sign up for WINGS is Private Pilot, single-engine land with an instrument rating. Then your WINGS flight and ground training event selections will be tailored to your personal flying. You will be able to quickly and easily accomplish your annual WINGS training events and perhaps even enjoy a lower insurance premium if your underwriter recognizes the WINGS Pilot Proficiency Program. By the way, all you have to do to meet the requirements for your flight review is maintain your WINGS at the Basic level.

While the old WINGS program had 20 repetitive phases, there are just three levels — Basic, Advanced, and Master — in the new WINGS program. Once you enter your aircraft category and class and pilot certificate, the program will give you a different set of requirements at each of the three levels.

Unlike the old WINGS program where all you had to do was walk away from the landings after your required three hours of dual with a CFI, the new WINGS program actually has criteria for successful accomplishment of the tasks. However, there is no minimum time required. The yardstick for your CFI to sign you off is the FAA practical test standards (PTS) for the required tasks at the appropriate level. The good point about this is that you, the average pilot, can usually accomplish all the required tasks in less than three hours of dual. And, if it does happen to take as much as three hours, you’ll likely feel a lot better about your flying skills when you’re done. It is these performance criteria that insurance companies will recognize and reward.

Finally, once you’ve completed a flight training event,
"AVIATE IN '08"

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MARCH 2-4, 2008
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Pre-registration Form
(Please print or type)

Name of Participant ______________________ Spouse's Name ____________________

Address ______________________________ City ______ State ____ Zip __

Phone _______________________________ E-Mail Address ____________________

*Pre-Registration Fee: (You must register for the Symposium and be a member of one organization below)

Member ........................................................................................................ ($100 after Feb. 23rd) $75.00**
Spouse ........................................................................................................... $35.00
Awards/Hall of Fame Banquet ........................................................................ $30.00 x no.= __

*Registration Fee includes admission to Symposium, exhibit area, speakers and meals (banquet extra)

Organizational Dues: (circle amounts)

AAND — Airport Association of North Dakota
General Aviation Airport............................................................................... $25.00
Regional Commercial Service Airports......................................................... $100.00
Primary Commercial Service Airports........................................................... $200.00
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NDPA — North Dakota Pilots Association
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Associate Member (Non-pilot)....................................................................... $10.00

NDPAMA — North Dakota Professional Aviation Mechanics Association
Member (Voting)............................................................................................ $20.00
Associate Member (Non-voting)................................................................. $10.00

NDEAA — North Dakota Experimental Aviation Association
(Includes National and Local Dues)............................................................... $55.00

NDAAM — North Dakota Association of Aircraft Museums
................................................................................................................... $35.00

GRAND TOTAL $ ____

Mail to: Fred Adams, PO Box 1072, Bismarck, North Dakota 58502

Do not mail registration form after February 23, 2008

Make checks payable to NDAC. For further information, call Fred Adams - (701) 224-5360/226-0117

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**Registration Fee after February 23, 2008, is $100.00.
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<td>GOLF (17 different courses)</td>
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<td>SPORTING EVENTS (including 5 area college teams)</td>
<td>Airport Terminal and lounge</td>
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<td>DINING (hundreds of different restaurants)</td>
<td>Weather station and computer system (wireless internet available – no charge)</td>
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<td>ARTS AND THEATER</td>
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<td>NIGHT LIFE</td>
<td>New Full Service FBO on field (see ad below)</td>
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<td>MAJOR MEDICAL FACILITIES</td>
<td>Youth Flight Activities</td>
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<tr>
<td>ENTERTAINMENT (57 movie screens, alone)</td>
<td>Annual Fly In (held in summer)</td>
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<td>PARKS AND CAMPING</td>
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<tr>
<td>SHOPPING (including several major malls)</td>
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**LOCAL HILLSBORO ATTRACTIONS**

- Goose River Golf Club – 9 hole golf course (701-636-5556)
- Hillsboro Inn Hotel – Pilot special $38/night (701-436-5501)
- Museum’s (Plummer House and agriculture museum)
- Goose River Park (swimming pool and camping)

**Shopping**

- Annual Fly In (held in summer)

**Dining:**

- Burger King
- Chicken Shack
- Country Hearth
- Paddle Wheel
- Pizza Ranch
- Sports Bar and Grill
- Stop n Go Deli

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- Paddle Wheel
- Vets Club
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EATC PURCHASES “FLY WITH FLAIR”

Executive Air Taxi Corporation, the full-service, fixed-base operator (FBO) located at the Bismarck, North Dakota, Municipal Airport, recently purchased Fly with Flair, a.k.a. DL Custom Upholstery, an aircraft interiors business, formerly located in Detroit Lakes, Minnesota. Fly with Flair has been regarded by many as the region’s premier aircraft interior design and completion center. The move to Bismarck not only enhances North Dakota aviation, but brings to the area a one-stop-shop aircraft services center. The former owner, Cemone Oberg is joining the staff at Executive Air as the Interior Sales Manager. Oberg brings over eighteen years in the aviation business to Executive Air. She feels the partnership is a natural fit and states: “I am looking forward to being part of a great aviation team. With Executive Air’s full range of services and Fly with Flair’s quality interiors, we will continue to provide our customers superior workmanship, now with added options.”

“We are extremely excited to have purchased the assets and relocated the business Fly with Flair, and are fortunate to have employed the talent of Cemone Oberg as our Interior Sales Manager. This acquisition is part of our strategic growth plan to provide the gamut of aviation services and make Executive Air Taxi Corp. a leading aviation provider in the region,” says CFO and co-owner Kelly Cermak.

Chief Operating Officer and co-owner Paul Vetter echoes those statements: “Cemone has earned a solid reputation for quality workmanship with an eye on detail and design. We are excited to add this capability to our ever-expanding organization here at the Bismarck Airport. Our goal is to provide a full range of services to our customers here at one location. The aircraft interior refurbishing and completions center fills a highly specialized niche in the marketplace which will benefit all of our customers throughout the aviation community. This acquisition further demonstrates our commitment to our customers and employees, as well as Bismarck/Mandan and surrounding communities through the creation of quality jobs and services.”

TO AWOS OR NOT?
By Mark Holzer, ND Aeronautics Commission

What a question an airport is faced with as they look at future projects to enhance the safety and accessibility of their local modern airport. Airport boards must look to safety as number one goal and not just building pavements or installing lights. The installation of an AWOS or automated weather observation system is a $150,000 question that FAA may fund at 95% that helps rationalize the decision.

AWOS provides ceiling and visibility minimums along with altimeter settings, wind speeds, rain and thunderstorm detections. Air taxi and air ambulance are required by their operating certificate to have these readings in order to fly IFR into your airport.

Many federally funded airports in ND have the new and amazingly accurate GPS approaches with minimums down to 400’-600’ and one mile. Aerial sprayers can also assess and record winds, dew points and other factors in deciding to apply crop protection. These are some of the positive users.

Negative aspects of AWOS is the quarterly checks by FAA approved technician estimated to be $2,000-$3,000 annually. Airport insurance for liability updated with carrier and State Fire and Tornado coverage of equipment is needed. The systems are fenced to avoid deer or cattle damages in a rectangular area 40’x 80’ size, 500’ outside the runway edge. Thus, land is needed and 100’ crop radius for small grain is required.

In 1988, Bowman and Wahpeton airports installed AWOS. In 2001, Gwinner Airport installed the new sensor type system proving that operational costs are what is estimated. Thus, in 2007 eleven new AWOS units have been installed and again in 2008, the Aeronautics Commission acting on behalf of airports, will apply for nine new federal funded systems at Beach, Cando, Hazen, Mandan, Rolla, Stanley, Tioga, Valley City, Walhalla for 2008.

For more information on AWOS project in North Dakota, you can contact the Aeronautics Commission at (701) 328-9650.

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2008 is a Great Year to Buy or Sell, Call Me!
"WINGS" continued from page 13

you enter the information into your WINGS webpage and the system will record the event when your CFI, or other qualified person, verifies the training. That means that if the CFI you like and are comfortable with still doesn't own a computer, you can show the logbook entry to another instructor who has on-line access and he or she can verify your training, as can any FAA Safety Team Representative or Program Manager. The system will show you a rolling 12-month look back at your recent training, but it will also keep a permanent record of all your WINGS related flight and ground training. You can, at your discretion, share your training record with your insurance company or your flying club or FBO at any time. Or, you can simply print a copy of the page with your training events and give it to the person who needs it.

Because of the automated recordkeeping, it's much easier to spread your training out over an entire 12-month cycle, rather than lumping it together once every 12 months. That actually enhances your proficiency by doing a little training more often, rather than a lot of training less frequently. And, again, because of its design, it's easier on your budget.

One word of caution, like any new software, the FAA is still working out some minor bugs, particularly in the area of training options. They haven't quite got all the conditions coordinated, so it is possible to see an option for training you can't really use. For instance, you can get training credits for completing a new certificate or rating but, the system offers the opportunity to take credit for commercial and private ratings you may have received more than a year ago. The information is there for you; but you have to read all the text displayed with your training options. Just maintain a little situational awareness and you'll do fine while the FAA fine tunes the software.

So there it is, a recurring and continuous flight proficiency program you can develop and administer, tailored to your specific parameters. For individual aircraft owners, insurance companies are already starting to offer incentives to participate in WINGS. In the future, I can see flying clubs and FBOs requiring pilots to maintain the WINGS Basic level of proficiency in order for pilots to rent aircraft and keep the organization's insurance rates lower. Many flying clubs I am familiar with already mandate an annual flight review instead of the FAA's 24-month requirement. You can check out the WINGS program in more detail, with no obligation, by going to the FAA safety website at FAASafety.gov. Then you can make a decision to register and participate. If you wish, you can just sign up to be alerted to safety events in your local area without signing up to participate in the WINGS program. But, I encourage you to take full advantage of this new powerful training management tool that the FAA is providing for free because they want to make general aviation safer for everyone.
Aviation adventures usually deal with some form of flight by the participant. This adventure will be a little different. Although aircraft are involved, I did not do any of the flying. It all started the first of October when my friend Jerry asked if I would help him and his brother Stan install some A/C units in Moorhead, MN. When he mentioned a helicopter would be involved, I gladly accepted.

Preliminary information indicated just a couple hours of work. Well, it would be more than a couple of hours. The night before the job I was informed we had to be in Moorhead by 8:00 a.m. and we would be done by noon, maybe. So early Saturday morning I hooked up with my friend and his brother Eric and headed to Moorhead, MN, from Grand Forks, ND. We were to meet Stan at the building site of a new Super Wal-Mart where he had a contract to install A/C units.

Arriving on time, we looked up Stan, who was on top of the building with one of the helicopter crew who would act as a flight coordinator for the lifting of the A/C units.

On the parking lot sat 39 A/C units arranged in order to be lifted and installed on the roof of the building. There was some large, medium and small units ranging in weight from 3,300 lbs to 2,100 lbs. To coordinate location and units, all were numbered.

Looking around we didn’t see a helicopter. Stan informed us that it was in transit from Hibbing, MN. The company was on a job there and had to go back after this job here. So we sat and waited, meanwhile I talked with the flight coordinator who happened to be the mechanic for the company. They were operating a Huey F model, formerly US Air Force inventory, with a large engine for lifting. Since it was an ex-military machine, it had to be operated in a restricted category, which did not matter much because once it started lifting operations, it had to operate in the restricted category anyway.

One of the restrictions was that no people could be in the building while it was lifting objects. So this operation was one of risk for handler and ground crew. The flight coordinator briefed us on what was going to happen and how it was to be performed. Jerry’s brother Stan had worked with the helicopter company on two other installations prior to this one, so with his experience, we were set to go. Meanwhile, in the parking lot, another crew member and more family members of Jerry’s and Stan’s hooked slings to the respective stations for the operations, others directing the operation.

Then without much warning, the word came that unit #27 was coming first, one that would go to the back of the building. Up came the helicopter, sliding to the side a little, then hooking up to the first unit. Up it came, 50 ft. below the helicopter, as it moved slowly toward our position. This is when the flight coordinator reminded us to watch for static build-up. The first person to touch the A/C was going to receive a static discharge shock. Well, Jerry was the first to touch, and of course he got zapped. Nothing drastic, mind you. Each of us had a turn at feeling the discharge over time, not bad, being we were all wearing gloves. Some light rain appeared, causing an increase in the static discharge. Ouch!

With four of us on the roof, plus the flight coordinator, we could easily maneuver the A/C unit. Things were moving fast as it came into position, the signal to lower went out. Down it came slowly, but not that slowly. Then, all of a sudden, plump, it was in place. The flight coordinator signaled thumbs up for disconnect, which the pilot did, and away he went.

As the helicopter went for another A/C unit, we had to remove the slings, cleaves and pins, put them together to be lifted back down later. As soon as this was done, the next unit was on the way. The A/C units started to come about two to three minutes apart. First some small units, then some of the larger units, due to the lowering of fuel on board the helicopter.

After about 30 minutes it was time to refuel and take a small break. We reviewed which units had been placed and got an update on the next unit after refueling. After a 10-minute refueling – back to work, only this time it was going to be a challenge. First one up was to go on the NW corner of the building. No problem – up the A/C unit came, and went into place. Then we were informed the next unit went in on the opposite end of the building. You could have seen some out-of-shape people scramble the length of a Wal-Mart. We made it only to get a little out of sync with the up and down of the helicopter, “ouch,“ nicked one skylight – had to happen. Once in place, word came next unit was for the other end of the building. Sprinting back to the other end we were, huffing and puffing. We grabbed the next unit which went into place surprisingly easy.

In due time the complete operation was accomplished with no incident other than the skylight. Total time from start to finish was about two hours and 40 minutes. Not bad considering 39 units were lifted into position – the larger units had specific placement, and two refuelings were done.

Back at ground level, we talked some more with the lift team, then it was time for them to depart to Hibbing. Off went the majority of the crew, except for one lone member. His job was to drive the support vehicle back to Hibbing – long drive.

Although this operation only took two hours plus to do, it definitely was a workout. Did not have to go to the gym for exercise – sure did work up an appetite.

Adventures involving aviation can be enjoyed from the ground as a participant, doing something different and out of the ordinary – this one sure was for this pilot.

Keep safe and have fun flying.
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**Calendar of Events**

**MARCH 2-4, 2008**
Upper Midwest Aviation Symposium
Ramada Plaza Suites, Fargo, ND
Call 701-277-9000 for hotel reservations.
To get convention rate, call before February 4th.
For more info on convention, call (701) 328-9650.

**JUNE 8, 2008**
Mandan Municipal Airport Fly-In Breakfast and Buggies & Blues Car Show
Contact: Brad Kramer
(701) 527-1950

**JUNE 14, 2008**
Beulah Municipal Airport Fly-In Breakfast (free)
8:00 a.m. - 11:00 am MDT
Contact: Kevin Lee
(701) 873-2259

**JUNE 15, 2008**
Garrison Municipal Airport Fly-In Breakfast
Contact: Brian Klabunde
(701) 337-2294

**JUNE 22, 2008**
Fly-In
Mercer County Regional Airport, Hazen
Contact: Steve Frovarp
(701) 748-2550

**JULY 20, 2008**
Planes on the Plains
Casselton Regional Airport
Contact: Robert Miller
(701) 347-0201 or
(701) 347-5519

**JULY 28-AUG. 3, 2008**
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