THE UPPER MIDWEST AVIATION SYMPOSIUM



Sunday, March 7, 2004 thru Tuesday, March 9, 2004

ımada Plaza Suites, Fargo, ND

Main Speakers

Governor John Hoeven

Tuesday Luncheon Noon, March 9, 2004





Senator Byron Dorgan

Monday Luncheon Noon, March 8, 2004

Robert "Bob" Hoover An Evening With an "Aviation Icon"

6:00 pm - 9:00 pm - Crystal Ballroom



Robert Miller

Breakfast Speaker Monday, March 8, 2004 7:30 am - Exhibit Hall "The" Wright Flyer & ND-EAA

Special Events:

Static Display & Open House

Fargo Jet Center Sunday, March 7, 2004

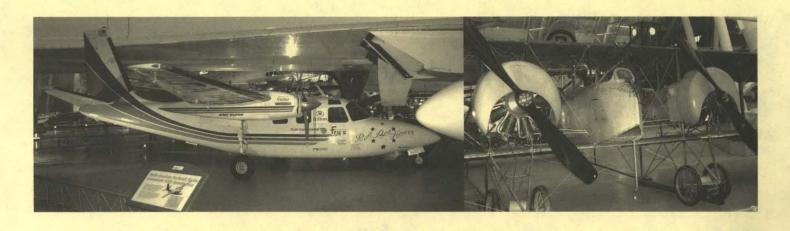
Symposium "Ice Breaker"

Fargo Air Museum Sunday, March 7, 2004 5:00 pm to 9:00 pm

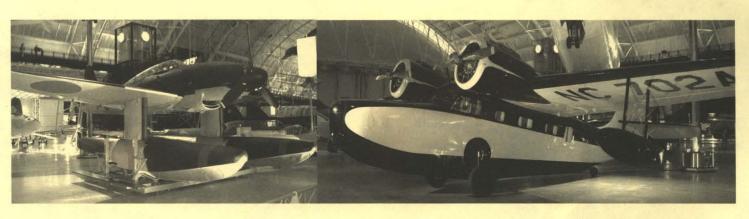


Dr. Bruce Smith

Breakfast Speaker 7:30 am - Exhibit Hall Tuesday, March 9, 2004 "UND/JDO & the Future"







Winter, 2004

EAA Commissions The "Wright" Organization For The Job

Since it was first organized in late 1998, "The Wright Experience" has focused its efforts on rediscovering the secrets of the Wright Brothers' pioneering work in aviation. Now, with the assignment of building an authentic flying Wright Flyer, the Warrenton, Va., organization assumes a central role in EAA's "Countdown to Kitty Hawk^{TM"} celebration.

As was announced on September 12, 2000, at a special event held at the National Air and Space Museum, Washington, D.C., EAA commissioned The Wright Experience to reconstruct the 1903 Wright Flyer Reproduction. The crowning event will take place on Dec. 17, 2003, at 10:35 a.m. in Kitty Hawk, North Carolina, when the meticulously reconstructed Flyer attempts to repeat Orville Wright's remarkable first flight—100 years later.

While neither brother had any formal training, the Wrights worked methodically and creatively designing and building a myriad of kites, gliders, powered flyers, wind tunnels and other test devices from 1900 to 1912. Unfortunately, many of their discoveries were lost or de-



Wright Brothers National Memorial, December 17, 2003. At 12:35 p.m. today, the Wright Experience attempted a recreation of the first flight. The weather and engine power were not with us today, as both were insufficient for successful flights. Dr. Kevin Kochersberger was at the controls, and almost succeeded in lifting the Flyer off the launching rail. BUT WE DID FLY! On November 20 and December 3, the flyer flew!

stroyed in their unending effort to protect their secrets from competitors.

"Our goal is to re-create what they did by reverseengineering so we can fully understand the secrets of the Wright Brothers," explained Ken Hyde, executive director of The Wright Experience. "They left a great paper trail with writings and letters." Orville spent his whole life defending the fact that he and his brother were the first to invent the airplane, Hyde

noted, because so many others were infringing on their patent.

"We know how to put the man on the moon, but we have not been successful in flying a true Wright airplane," Hyde continued. "The last time a Wright airplane flew was in 1934." That Model B is now at the Franklin Institute in Philadelphia. Now, the task is clearly before them: Construct an airworthy reproduction to be ready to commemorate

the 100th anniversary of Orville and Wilbur's inaugural powered flight on December 17, 2003.

"Today we see the magnificent evolution of the Wrights' original efforts," Hyde said. "Our quest is to discover how the first steps were made steps that are lost in history. We are confident that we will retrace those steps and finish the first century of flight as it began, by flying over the sands of Kitty Hawk."

Chairman's Corner

By Dan Kasowski

Greetings, I hope everyone had a safe and happy holiday! Now I know what they mean when they say time flies; I'm still trying to figure out what happened to 2003.

Speaking of time, it's time to mark your calendars and make plans to attend the 2004 Upper Midwest Aviation Symposium, "Exploring the Second Century of Flight." I hope, while reading this issue of the Aviation Quarterly, everyone picks up their phone, dials 701-277-9000 and makes reservations at the Ramada Plaza Suites in Fargo for this year's Symposium. The Ramada is holding a block of discounted rooms for Symposium attendees until February 13th. Once again, those important Symposium dates are March 7th, 8th, and 9th. Make your reservations today!

Trivia Question #1: What is 42 feet, 11 3/4 inches long, is 14 feet 6 inches high, weighs 5647 lbs, empty, has a wing span of 44 feet 3/4 inches, and is powered by two 290

hp Lycoming IO-540-E1B5 engines with a Max speed of 215 mph?

Answer: North American Rockwell Shrike Commander...

Trivia Question #2: Who flew aShrikeCommanderN500RA at air shows throughout the United States and around the world demonstrating the Shrike's excellent high and low speed capabilities and its one-engine and no-engine performance? Who flew sixteen point rolls and loops in his Shrike Commander in addition to a precise dead stick (no-engine) maneuver with a loop, eight-point roll, a 180-degree turn to a touchdown with first one wheel and then the other wheel, landing, and taxiing to the air show center?

Answer: Mr. Bob Hoover. Trivia Question #3: What's up with Mr. Bob Hoover? Answer: Mr. Bob Hoover is going to be our Banquet speaker at this year's Upper

Midwest Aviation Sympo-

sium! Mr. Hoover is considered by his peers as the "pilot's pilot," He has served his country in war and peace as fighter pilot, test pilot and a master of aerobatics. Don't miss this opportunity to hear one of the greatest pilots in history!

Besides having Mr. Hoover as this year's banquet speaker, this year's Symposium schedule is looking great. The Symposium gets underway on Sunday, March 7th with the registration desk opening at 10:00 a.m. The speaker schedules are already filling up with many of them qualifying for IA renewal or for FAA wings credit. On Sunday there will an aircraft static display at Fargo Jet Center from 1:00 p.m. to 5:00 p.m. followed by this year's Ice-breaker, at the Fargo Air Museum from 5:00 p.m. to 9:00 p.m. What a great opportunity to enjoy the Hall of Fame wall, view the many nostalgic aircraft including the "Wright Flyer," and just mingle with great friends.

On Monday, in addition to the great line-up of seminar speakers, we have invited Senator Byron Dorgan to speak at our noon luncheon. Monday evening will be our ever popular "exhibitors night," which is always a great night to visit with all our vendors, enjoy some good food, a couple cold bevys, and once again visit with those people you haven't seen since last year's Symposium.

Tuesday features yet even more great speakers. The luncheon speaker for Tuesday will be ND Governor John Hoeven (invited). And of course as I mentioned earlier, Mr. Bob Hoover will be our banquet speaker.

So as you can see, this year's Symposium is looking like a great time!

I hope that 2003 was a good year for everyone and that 2004 will be even better. See ya in March.

North Dakota Aviation Quarterly Official Publication of the North Dakota Aviation Council Phone (701) 328-9650 North Dakota Aviation Council

Board Members 03/04
Dan Kasowski NDPAMA Chairman
Roger Pfeiffer Secretary
Jim Lawler AAND/Treasurer
Charity SpeichAAND
Randy AarestadNDPA
Paul HansonNDPA
Fred AdamsNDAA
Darren HallNDAA
Glenn WharamNDAAA
Ron EricksonNDAAA
Mike DeVriesNDPAMA
Morgan StrohNDPAMA
Michael GuniaNDFF
William StramerNDFF
Don LarsonNDAAM
Darrol SchroederNDAAM
Todd SchwarzNDSAA
Dave HillNDSAA
Gary NessND Aero. Comm.
North Dakota Aviation Quarterly
Published January 15, April 15, July 15, October 15
Send Address Changes To:

North Dakota Aviation Quarterly ndaero@state.nd.us P.O. Box 5020.

Bismarck, ND 58502-5020

www.ndac.aero



North Dakota Aeronautics Director Gary Ness provided insight into a Naval aviator's life and a little humor during the dinner portion of the Navy Birthday Ball held annually in Fargo at the Fargo Air Museum last October.

FROM THE DIRECTOR'S CHAIR

By Gary Ness, Director, ND Aeronautical Commission

The year has passed so fast and with such style that there is no wonder why we arrived at a "Century of Flight" so quickly. It seems like just yesterday that the EAA announced plans to introduce aviation to one million American youth by December 17, 2003. I remember the first couple of years when the numbers were struggling and the nay-sayers were closely watching. But with enthusiasm and persistence the EAA did it, they reached the goal. One million "Young Eagles" passed through the portals of aviation and received their certificate of the introductory flight. EAA can be proud of the completion of the dream, a great accomplishment and a job well done.

The introduction to the Wright brothers Memorial Historical Site by Darrell Collins at the Symposium in 2001 and his two revisits in 2003 were highlights that will affect North Dakota for a very long time. His passion for the Brothers and their accomplishments makes the story enjoyable, interesting and real. Darrell's contribution to the "Century of Flight" celebration in North Dakota helped make our little celebration insightful, informative and important.

The two EAA-Wright Flyers construction projects represented teamwork at its best. Like that of the original aircraft, the organizational effort of the statewide EAA chapters was a feat that will never be surpassed. The two aircraft could have been con-



structed only by people who have passion for and love of aviation. Completed with volunteer labor only, the total cost of the two aircraft was a fraction of the cost in comparison of the funding of the EAA/Ford Motor Company sponsored aircraft. EAA and Ford sponsored the attempt to recreate the fight in Kitty Hawk. The storied cost of that "Wright Flyer" is \$1.5 million. The Discovery Channel documentary focuses on the Wright Flyer and the effort to recreate the "First Flight." It is a very special production worth sharing with mankind again and again, whether or not there is knowledge of or appreciation for aviation in general. Check your local listing for time and channel for replay. You don't want to miss it.

What is in the future for aviation? I know of only one who has that insight today and he hasn't shared that personal stuff with us mortals. We don't seem to have the first set of instructions mastered yet! If we were given a look, we probably wouldn't believe what's in store for aviation over the next hundred years. Why do I say that? Because who would have believed anyone

who said on December 18, 1903, "In 66 years we will walk on the moon." No, we probably don't have the capacity to predict what it will be like, but we know it will be wondrous and inspiring! People will be as astounded as we are at the celebration of the first hundred years of flight.

This North Dakota Aviation Quarterly is what is called, "The Symposium Issue."

In this issue you will find the announcements of the good and great things that your Council has planned for March. Look and read carefully and join the group in Fargo for the 2004 Symposium "Exploring the Second Century of Flight." See you there.



NORTH CENTRAL AVIATION

Parts & Service
Annual Inspections
Major & Minor Repairs
100L/ Jet 'A'

Linton Airport (7L2) Linton, North Dakota Mike & Terri Gunia

701/254-5449

FUEL YOUR BUSINESS



JET/AVGAS TANKS & CABINETS THAT FIT YOUR BUSINESS AND YOUR BUDGET!

- 500 50,000 gallon capacities
- Cylindrical or rectangular designs
- 30-600 GPM flow rates
- Credit card systems
- Monitoring systems
- Systems are shipped pre-wired and assembled
- · In-house engineering department
- Technical service available
- Site evaluations

Call us today for more information and a competitive price quote! 800-876-8265 or 701-663-6245



WESTMOR INDUSTRIES, LLC. Mandan, ND 58554 E-mail: westmor@westmor.biz Web site: www.westmor.biz

CARRY ON The Next 100

By Darrel Pittman

One hundred years, just think of it. If that sounds like a long time, well it is. In looking back it appears to be a short span of time, considering how far we have come in aviation. From that historic morning flight at Kitty Hawk on the outer banks of North Carolina we have transitioned to the sophisticated airplanes of our modern day. Just think, we've done all this in only one hundred years. I'm impressed.

As the barnstorming and experimenting of early aviation began to fade, along came World War II and thrust us into aviation big time. Many of our pioneer aviators went into the military. Since that time we've made tremendous strides in aircraft design and speed. We are now seeing more pilots interested in building their own airplanes and enjoying the fun of flying. We fly our own airplanes to fly-ins like the annual breakfast fly-ins at Turtle Lake and Garrison. All in 100 years. Yes, we have come a long way.

Now we are on the threshold of our next hundred years. The Wright Brothers started it 100 years ago. The next century is our responsibility. A good start will be to attend the "Upper Midwest Aviation Symposium" on

March 7 - 10, 2004 in Fargo. The Aviation Council is planning another great program for you.

I remember my high school graduation 50 years ago in Mesa, Arizona. I remember my first car, it was a 1931 Model A Ford. That was in 1950. It was about that time my Dad told me about his first car. He bought it in 1928. I remember thinking, "Wow that's a long time." Looking back it doesn't seem like that long. So, is 100 years really that long?

Our pioneers gave us what we have today. What are we willing to do with it? What are we passing on to the next generation? We must instill in our future aviators the same courage and conviction our pioneers gave us. We are carrying the torch now and must be in the lead when we hand it off.

I think those before us are proud of what we've accomplished. From what I see in the upcoming group, I am pleased to say they will "Carry On."

CLEARED FOR TAKE-OFF

Darrel

AIRLOAN.COM AIRCRAFT FINANCING

WE MAKE DREAMS COME TRUE

Visit our website at

www.airloan.com

or call

1-800-472-1754

to visit with one of our Airloan Specialists



Randy



Deanna



Perry



Danielle

A Division of Red River State Bank 300 2nd Ave. West, Halstad, MN 56548-0025 Member FDIC



ExonMobil Aviation

Now Serving the Dakotas!

- Avgas 100 LL
- Jet A with additive
- Branded & unbranded programs

Call Breezy at 406-668-9126
For information or our home office
call us at 888-718-4616



Kalispell, Montana
Petroleum Distributors
cityservice.com
ejc@cityservice.com

NDPA

By Paul Hanson

Exploration into the next 100 years of Flight

In the past 100 years since the flight of the Wright Brothers, many a milestone have been made. Science and technology have advanced at a pace more rapid then ever before. Such dreams, as setting foot on the moon, going faster than the speed of sound, circling the earth without refueling are accomplishments never thought possible. Yet today each of these feats have been done, some on a routine basis, such as the Concord exceeding the speed of sound on a daily basis.

We are about to embark on another segment of this great journey of aviation. Things we thought were out of this world 20 years ago are here right now today for the general aviation pilot. The question is, are we, as pilots, ready for the next advancement in aviation.

Avionics have advanced so fast in the past 20 years it is a wonder we are keeping up. The Nintendo game type instrument panel simulation of 15 years ago, are now in our aircraft today. The glass instrument panel is here, all electric and more accurate then analog steam gauges of recent past. We're in the transition stage and we better be ready for the next evolution of avionic flight information systems. It is going to be one thrilling time in aviation.

Advancements in the home build arena are leading to advances in the certified manufactured market.

In 2004 Cessna, Diamond will be certifying the new Garmin G-1000 PFD (Primary Flight Device) in their aircraft. These all electric, devices, are the start of a new

generation of flight information systems.

Welcome to the start of the next 100 years of aviation. What lies beyond the immediate time-frame is anyone's guest. Hopefully it will be as exciting as the past. I am quite sure the Wright Brothers had no idea what would evolve from their creation, the flyer.

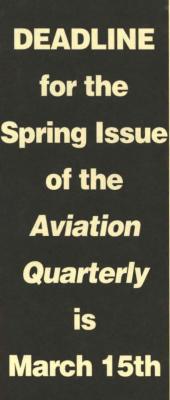
Upper Midwest Aviation Symposium

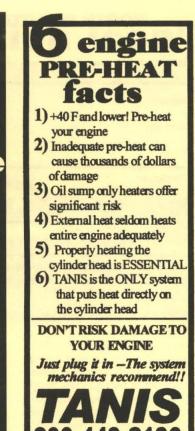
This year the Upper Midwest Aviation Symposium is being held in Fargo, ND, March 7-9, 2004. North Dakota Pilots Association has a nice schedule of events for the everyday general aviation pilot. As always, discussions on weather information and ATC will be presented. Additional sessions on Aircraft Systems from a Pilots perspective, Aviation Law, and a case study on what can go wrong, and Flight Discipline with an FAA Wings program are on the agenda. Take time out to come to the Symposium and put your opinion in on matters.

A topic of interest will be Special Use Airspace. We are working on having representatives from Minot, Grand Forks AFB, and the ND Air Guard, discussing SUA over the entire state of North Dakota. A second session will encompass the AFB aircraft and their mission in ND.

Should be a great time to attend and meet fellow pilots across the state. This would be an excellent time to let others know about your flyin's, kids' ride, etc. NDPA will have a board set up for listing of the aviation events in the great state of North Dakota for the year 2004.

So what are you waiting for? An invitation, it's right here, come to the Upper Midwest Aviation Symposium. Join the NDPA, have some fun and gain some knowledge. See you there.







NORTH DAKOTA PROFESSIONAL AVIATION MECHANICS ASSOCIATION MECHANIC OF THE YEAR

INSTRUCTIONS: Use a separate form for each entry. All entries must be either typewritten or neatly hand lettered. Name: FAA Certificate No.: Address: FCC License No.: Telephone No.: Employer: Employer's Address: Year first designated a Maintenance Technician: Years Experience: ENTRY DETAILS: Give brief but factual description. Drawings, photographs or other presentations may be included to assist the judging committee. All entries become the property of the Selection Committee and will not be returned. PAMA ECHANIC'S ASSOCIA (If additional space is required, attach additional sheets.) ENTRY SUBMITTED BY: (If other than entrant) (Optional) Address: Name: Employed by: (Name and Address) Position held: Date: Signature of person submitting entry:

FOR SELECTION COMMITTEE USE ONLY

MAIL ENTRY FORM TO: David Teets, 507 Park Drive, Manvel, ND 58256 - OR: <u>Hand deliver to a NDPAMA Council Member before 3:00 PM. Monday March 8, 2004.</u>
QUALIFICATIONS: Each person submitted on the entry form must hold FAA Airframe and/or Powerplant rating, or Repairman Certificate, and must be employed in the field of aviation maintenance in the state of North Dakota.

JUDGING: Persons responsible for judging will be the former NDPAMA President. He will form a committee including himself, a representative from the FAA and one (1) representative from the NDAC to assist in the judging. If the former President is not present for the annual meeting, then the NDPAMA officers will be responsible for selecting a former NDPAMA officer to take his/her place.

AWARD: The award given out will be \$300.00 to the selected Mechanic of the Year.

An Evening with an "Aviation Icon"

Robert "Bob" Hoover

Banquet Speaker Tuesday March 9, 2004



Bob Hoover is considered by his peers as the "pilot's pilot." He has served his country in war and peace as a fighter pilot, test pilot and as a master of aerobatics.

His famous yellow P-51 Mustang has been one of the main attractions at the Reno National Air Races for many years. His demonstrations in the Shrike Commander performing his energy management maneuvers with both engines shut down is nothing short of spectacular.

Pilots and aviation buffs travel far and wide to see him fly. Accolades hail from America's leading flight personalities including Chuck Yeager, who calls Hoover the best pilot flying today. General Jimmy Doolittle acknowledged the pre-eminence of this aviator.

Hoover learned to fly at Nashville's Berry Field. He worked at a grocery store to earn the money required for flight instruction. Almost immediately, he began to try his hand at rolls and loops and taught himself aerobatics. The young pilot enlisted in the Tennessee National Guard and was later sent to Army Pilot Training.

After Hoover graduated, he was sent to England. Then, after the invasion of North Africa by the Allies, he was sent to Casablanca where he tested all types of airplanes that had been transported overseas on ships, then assembled. Bob was 21 years old at the time. He then obtained an assignment with the 52nd Fighter Group stationed in Sicily, one of the two Spitfire outfits in the Army's air forces.

He flew 58 successful missions, but was shot down on the 59th off the coast of Southern France. Hoover spent 16 months in Stalag Luft 1, a German prison camp.

Upon returning to the U.S. following the war's end in Europe, Bob was assigned to the Flight Test Division at Wright Field, where he test-flew for evaluation many of the captured Japanese and German airplanes. He also flew the latest aircraft being tested for our own Air Force. In 1948, he accepted a position with General Motors as a test pilot for high altitude performance testing of Allison jet engines and the development of propellers.

In 1950, Hoover was hired by North American Aviation to do experimental flight testing on all models of the F-86 Sabre jet and the Navy FJ-2 jet fighter and later on, the famous F-100. During these early days with North American, he demonstrated safe handling and flying qualities on F-86 and F-100 series fighters to pilots all over the world. Beyond the normal call of duty, he also flew combat dive bombing missions with Air Force squadrons in Korea, demonstrating the capabilities of the F-86 over enemy

He was the first man to fly the XFJ-2 Fury Jet and the Navy's T-28 trainer and has also set a number of world aviation records including three climb to altitude records of a turbo prop Commander, and performed at the Hanover Air Show in West Germany in April 1978. Another coast-to-coast record was set in a P-51 in five hours and 20 min-

utes from Los Angeles, California to Daytona Beach, Florida in 1985. Hoover also holds a number of world records in jet aircraft and was also awarded the Distinguished Flying Cross, the Soldier's Medal, Air Medal and Purple Heart. He was presented the Aviation Pioneer Award as the world's most notable, decorated and respected living pilot by Parks College in St. Louis.

He received the Arthur Godfrey Aviation Award from the Minneapolis Aquatennial for accomplishments in flight testing. In 1981, he received the Flying Tiger Pilot Award for his outstanding contribution to aviation. The Los Angeles Chamber of Commerce awarded him the 1982 Kitty Hawk Award. That same year he received the Wilkinson Silver Sword for his airshow work. He received the Lindbergh Award at the Smithsonian in May of 1986. In August of 1986, Hoover was honored during Bob Hoover Day at the 34th Annual Oshkosh Celebration by the Experimental Aircraft Association ("EAX). He is also an Honorary Member of the Fighter Aces Association and the Eagle Squadron Association. In July of 1988, Bob was enshrined in the National Aviation Hall of Fame in Dayton, Ohio along with other aviation and space pioneers such as; Neil Armstrong, James Doolittle, Barry Goldwater, Charles Lindbergh, Eddie Rickenbacker, The Wright Brothers, Chuck Yeager, Richard Byrd and Howard Hughes.

Hoover served as the backup and chase pilot to General Chuck Yeager on the X-1flights. Yeager participated in the EAA program honoring Hoover along with other leading citizens of the aviation community.

The recipient of countless awards and honors, Hoover is the only man to serve two terms as President of the exclusive Society of Experimental Test Pilots. He was the Captain of the United States Aerobatic Team, which participated in the 1966 International Competition in Moscow.

In 1988, 1989 and 1990 he was selected as the most outstanding airshow performer of the year and received the number one Showmanship Award from the International Council of Air Shows for 1989. He was presented with the annual Cliff Henderson Memorial Award for contributions to aviation for 1989 at the Ohio Hall of Fame.

Bob Hoover, in over fifty years of flying, has performed many thousands of times in more different types of aircraft, in more countries and before many more millions of people than any other pilot in the history of aviation.

Åt the bureau he is known as "Gentleman Bob." He is a softspoken, honorable man, tall and lean, and he continues to amaze his peers and fans alike for the remarkable enthusiasm he still holds for flying, as well as his management activities. His book *Forever Flying* (1996 Pocket Books) is an aviation must-read.

Daily Schedules for the 2004 Midwest Aviation

Sunday, March 7, 2004 Upper Midwest Aviation Symposium – March 7–9, 2004

	AAND Rm: Brahms	NDPA Rm: Etude	NDAAA Rm: Bach	NDPAMA Rm: Mozart I	NDPAMA Rm: Mozart II	Registration Crystal Court East Lobby
2:00 pm to 2:50 pm	ND Sports Aviation Association (NDSAA) Business Meeting Sonata I	Aviation Video "May Day, May Day" Aviation Emergencies	NAAA 1:00 to 4:00 pm	FAA Refresher Course IA Renewal Credit FAA Personnel		Exhibit Setup 8:00 am - 10:00 pm NDAC Meetings Council Meeting, 1:00 pm Sunday Afternoon Static Displays
3:00 pm to 3:50 pm	AAND NO	Medical Certification Case Study Dr. Warren Jensen	National Agricultural Aviation Association	FAA Refresher Course IA Renewal Credit FAA Personnel		FARGO JET CENTER (Blue Bldg) 1:00 pm - 5:00 pm NDAAA Annual Business Meeting All Aerial Applicators, FREE Box Lunch during meeting Noon - Bach Rm ND Aeronautics Commission
4:00 pm to 4:50 pm	to	AOPA Airport Support Network Airport Watch Program Keith Holt AOPA	PAASS Program * Substitute for the State Mandatory Meeting	PAMA Annual Business Meeting		Aerial Applicators Mandatory Meeting Registration 9:00 am - 10:00 am Program 10:00 am - Noon Bach /Brahms Rm NDAC Council Meeting 1:00 pm - Sonata II Rm

Ice Breaker — 5:00 pm till 9:00 pm Fargo Air Museum

(Buses From Hotel to Air Museum will run continuous loop until 10:00 pm)

Buses will run between Jet Center — Museum — Hotel continuous until 5:00 pm

Monday, March 8, 2004 Upper Midwest Aviation Symposium – March 7–9, 2004

	Rm: Brahms	NDPA Rm: Etude	Rm: Bach	NDPAMA Rm: Mozart I	NDPAMA Rm: Mozart II	
8:00 am to 8:50 am	Airport Layout Plans Mark Rutyna Ulteig Engineers UEI Concrete Repairs Steve Synhorst UEI	Garmin Avionics Aviation Wayne McGee Regional Representative	Recertification Registration 8:00 am - 8:30 am	AVANTEX (Tech Data) Mike Limar	Eagle Fuel Cells (Fuel Cells) Carl Hartwig	Continental Breakfast Exhibit Hall 7:00 am Breakfast Speaker Robert J. Miller "The Wright Flyer and ND-EAA" Exhibit Hall 7:30 am
9:00 am to 9:50 am	Airport Fencing/Signage Steve Synhorst UEI Airport Safety Reporting George Kelly FAA-GFK-AFSS	Garmin Avionics Wayne McGee, Regional Representative	AG Chemical Recertification NDSU Staff 8:30 am - 11:30 am	C&D Associates (Cabin Heaters) Sandy Sandman	Maxwell Propellers Butch Maxell	Exhibit Setup 8:00 am - 10:00 am Exhibit Area Open 11:00 am - 2:00 pm Lunch Served
10:00 am to 10:50 am	Minimum Standards S. Dobberstein Fargo Airport Mgr. Minimum Standards Greg Haug Bismarck Airport Mgr.	"Aviation Law- A Case Study" Brett Van Huesien Ernie Anderson UND/JDO Aerospace	AG Chemical Recertification NDSU Staff 8:30 am - 11:30 am		Dallas Airmotive (Engine Prebuy) Phil Reinpold	Spouse's Program Shopping Tours Sonata I Rm 1:00 pm - 4:00 pm

NORTH DAKOTA AVIATION QUARTERLY 5

Symposium, Fargo North Dakota

Monday, March 8, 2004 **Upper Midwest Aviation Symposium - March 7-9, 2004**

_	1.9	AAND Rm: Brahms	NDPA Rm: Etude	NDAAA Rm: Bach	NDPAMA Rm: Mozart I	NDPAMA Rm: Mozart II
	2:00 pm to 2:50 pm	"The DC Perspective" Charles "Chip" Barclay, President American Assoc. of Airport Executives (AAAE)	erspective" harles "Chip" clay, President erican Assoc. of Airport "A Critical Look at Pilot Discipline" Jim Dunlop UND/JDO		Precision Inc. (Carburetors) Alan Jessmer	Superior NDT (Non-Destructive) Testing) Wade Peterson
	3:00 pm to 3:50 pm	AWOS Steve Aldinger Interstate Eng. Overlay or Recycle Nick Gludt Moore Eng. Air Service Marketing Chuck Pineo, NWA	"FAA Wings Program" Les Ellingson FAA-FSDO-Fargo	Ag Chemical Recertification NDSU Staff 2:00 pm to	Precision Inc. (Fuel Injections Systems) Alan Jessmer	RAPCO, Inc. (Vacuum Pumps- De-Icer Systems) Mike Lotzer
	4:00 pm to 4:50 pm	TSA — Air Carrier & General Aviation Future Security Paul Missel TSA-BIS	Weather Information Flight Service Stations Joe Morgan FAA-GFK-AFSS	4:15 pm	ATP, Inc. (Tech Data) Ron O'Dea	AeroSpace Welding (Aircraft Exhaust Systems) Tom Heid

"Military Operations and Special Use Airspace"

Presenters: Minot/Grand Forks AFB & USAF HQ's

General Session 5:15 pm - 6:00 pm Mozart I & II Rm

EXHIBITORS' NIGHT — 6:15 pm till 10:00 pm

Exhibit Hall - Crystal Ballroom Hospitality Areas open 10:00 pm till 1:00 am

Upper Midwest Aviation Symposium – March 7–9, 2004 Tuesday, March 9, 2004

	AAND Rm: Brahms	NDPA Rm: Etude	NDAAA Rm: Bach	NDPAMA Rm: Mozart I	NDPAMA Rm: Mozart II	
8:00 am to 8:50 am	Air Space and Land Use Rick Ennen, Kadrmas Lee and Jackson (KLJ) Hangars and Land Acquisitions T. Fasteen, KLJ	Pilot & Controller Issues Joe Morgan, FAA		FAA Refresher IA Renewal Credit		Contine Exhibit H 7:00 am Breakfa Dr. Bruce "UND/JD Exhibit H 7:30 am
9:00 am to 9:50 am	Airport Lights/Navaids Linda Oster, KLJ SRE Bldgs- Hangars Fueling Systems Steve Weiland, KLJ	The US Air Force-Aircraft and Base Mission in North Dakota Air Force Representative MOT & GFK AFB		FAA Refresher IA Renewal Credit		Exhibit 11:00 am Lunch S Exhibit H Noon - 1
10:00 am to 10:50 am	Ag-Loading Pads Mark Marvel KLJ AAND Business Meeting Ken Koehn, DVL, Pres	Security Issues "AOPA View" Keith Holt, AOPA		CIRRUS Aircraft Design Company (Composite Construction) Tim Timmerman	Aero Recip (Engine Cooling, Magnetos & Oil) John Morton	Spouse' Sonata I 9:00 am Tour — Plains Donald Lunch Fargo Hjemk

ental Breakfast

Hall

ast Speaker

e Smith DO & The Future..." Hall

Area Open

m - 2:00 pm

Served

Hall Area 12:30 pm

e's Program

I Rm 1 - 3:00 pm

> s Art Museum Idson Hotel h - Bonnies Cafe Theater komst Center

Luncheon Speaker: Governor John Hoeven Exhibit Hall, 12:00 Noon - 1:50 pm

I NORTH DAKOTA AVIATION QUARTERLY

	AAND Rm: Brahms	NDPA Rm: Etude	NDAAA Rm: Bach	NDPAMA Rm: Mozart I	NDPAMA Rm: Mozart II
2:00 pm to 2:50 pm	Airfield Inspections Rick King, Jamestown Airport Manager New Surface Treatment Bruce Batzer, ASTECH	Cecelia Hunziker, Regional Admin GLA		Raytheon, Inc. Dave Aukes	
	EX	HIBITOR BR	EAKDOWN 2	2:00 PM	MA ALTER
3:00 pm to 3:50 pm	Mandan Crack Repair Experience Tom Neigum, KLJ Poly & Rubber Cracks John Ronsberg, Zimmerman, Inc. Airport Roundtable Steve Johnson, GFK	NDPA ANNUAL		D/E Aerospace (De-ice Boot Mix & Installation) Dave Vega	
4:00 pm to 4:50 pm	FAA Airport Program Cecelia Hunziker (Reg. Adm.) Steve Obenauer Tom Schauer Brian Schuck	BUSINESS MEETING		PAMA BUSINESS MEETING	

NDAA Business Meeting Sonata II Rm 4:00 pm - 4:50 pm

NDAC Organizational Meeting Room

Sonata II Rm 5:00 pm - 5:30 pm

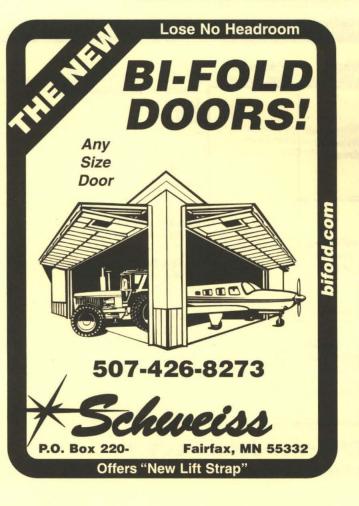
Social Hour

East and South Courtyard 6:00 pm till 7:00 am

Hospitality Areas
East and South Courtyard
9:00 pm till 1:00 am

An Evening With an "Aviation Icon" — Robert "BOB" Hoover
Organizational Awards & Aviation Hall of Fame Banquet
Crystal I Ballroom, 7:00 pm - 9:00 pm

SOCIAL HOUR - East and South Courtyard - 6:00 pm till 7:00 pm



NDAC – Aviation Elementary Educational Programs

Wednesday, March 10, 2004
Educational Program/s will be held at
the Fargo Air Museum

Marlette & Darrel Pittman, Realtors

Call us For:

Personal Attention
Professional Results



201 West Front Avenue Bismarck, ND 58504 Business (701) 223-6654 Toll Free (800) 657-8089 Residence (701) 255-6311



mpittman@century21morrison.com

Each Office is Independently Owned and Operated

NDPAMA

By: Mike DeVries

Greetings to everyone.

We are busily planning the 2004 Upper Midwest Aviation Symposium and it looks like it is going to be a fun-filled and educating experience for all that plan to attend. We will be offering the IA renewal as in the past. The committee has lined up some interesting speakers for you this year. We went back to previous years' formats and will offer industry speakers this year. So as you can see by the schedule we will be having presentations from throughout the industry on various topics relating to aircraft systems, components, technical data, non-destructive testing techniques, reciprocating aircraft engines, turbine aircraft engines, and composite aircraft. We also have enough speakers to offer some of the classes in conjunction with other topics being presented.

We have offered the required FAA 2 hours and 6 hours of IA renewal on Sunday and Monday to minimize the time away from your shop.

The North Dakota Aviation Council has arranged some very interesting speakers as well, for the breakfast meetings, General session speakers and Hall of Fame/Awards Banquet. The Spouses' Committee is also working hard to provide the spouses who attend with something fun, interesting and worth the trip to Fargo for the weekend. So bring your wife, husband

or significant other along and enjoy the weekend in Fargo. We are also trying to arrange to have the worst of the winter out of the way by then so we can enjoy some "warmer" temperatures.

Included in this edition of the Aviation Quarterly is an application form for the North Dakota Mechanic of the Year. Please take some time and fill it out for a deserving individual that you know. There are a lot of mechanics out there that put in a lot of hours to keep the aircraft in the sky and meet a multitude of duties. From flight training, crop dusting, charter, pleasure flying and air ambulance. It doesn't have to be a mechanic nominating a mechanic, anyone can fill out the application and follow the instructions at the bottom of the page for submission. It is something that any mechanic would be proud to receive and display. It only takes a minute or two, so go ahead and fill one out for a deserving individual.

I hope everyone had a very nice holiday season and is now planning your trip to Fargo for the 2004 Upper Midwest Aviation Symposium. See you in Fargo!!



- Pilot Services
 - · Aircraft Brokering
 - · Aircraft Purchases and Sales
 - · Aviation Consulting
 - Flight Instruction
 - Pilot Certification
 - Flight Department Management
 - · Aerial Photography
 - · Pilots For Hire
- Maintenance

Bob Simmers President/Pilot/DPE Mike Aarestad

Vice President 8523 Briardale Drive

Bismarck, North Dakota 58504 Office: (701) 223-4754 Fax: (701) 223-9566 Cell: (701) 220-8623 E-mail: bobs@wdata.com



All major and minor repairs 24 hour self-serve 100LL

Annual inspections

Custom painting and complete interior

PT6 hot section insp. and repair by Pratt & Whitney trained technicians

FAA-DAR services

Hangar rentals

Personalized, 24 hour service

Pilots' lounge

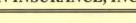
Courtesy car

Pickup and delivery available

Perry W. Ochsner - Owner A&P, IA, FAA-DAR

Casselton Regional Airport Hwy 18S., Hangar #4 Casselton, ND 58012 701-347-4680 701-347-4556 FAX aicaviation.com

NORTHSTAR AVIATION INSURANCE, INC. X



SERVICE

Prompt, Knowledgeable & Personal

UNDERWRITING AVIATION

Personal & Business Aircraft Ag Sprayers FBO's Hangars **Airports**

THOROUGH

We research all insurance markets for your best value!

EXPERIENCE

Over 40 years of service

East Side Terminal Hector International Ariport P.O. Box 5591 Fargo, ND 58105

Marc Lepage

Office: (701) 235-2041 FAX: (701) 239-4235 Home: (701) 280-9056

New Scholarships Available from Women in Aviation, International

Women in Aviation, International has added new Regional Jet training opportunities to its list of scholarship opportunities for members. Continental Express, in partnership with FlightSafety, International, is offering two scholarships to provide initial training on the Embraer 145. Upon successful completion of the training, the scholarship winner will earn a type rating in the Embraer 145.

Minimum Requirements:

Commercial Certificate, Multiengine Rating,
Instrument Rating
1000 hours total flight time
100 hours multi-engine time
100 hours instrument flying time
Current First Class medical certificate

WAI membership is required. Preference will be given to those candidates that actively participate in WAI, who can show that participation as one of their focuses in the required essay.

Women in Aviation, International is a nonprofit 501(c)(3) organization dedicated to providing networking, mentoring and scholarship opportunities for women who are striving for challenging and fulfilling careers in the aviation and aerospace industries. For more information about Women in Aviation, International, and its scholarships, go to www.wai.org or call (386) 2267996.



PITTMAN AVIATION-CONSULTING

Consultant to the Industry

Airports • Airspace • Education ATC/Pilot Rules • Management

DARREL PITTMAN

2805 Bernell Dr. Bismarck, ND 58503 701-255-6311 atcpn@myexcel.com

WORLD

Contact us at: 1-800-213-3860 www.kljeng.com www.info@kljeng.com

You wouldn't need engineers . . .



... but our world isn't perfect!

► Publishers of VisionAir

► Design & Construction ► Master Plans

► Environmental ► Management Support ► AirGIS Software

Kadrmas, Lee & Jackson, Inc. Engineers, Surveyors, and Planners

2004 Calendar of Events

South Dakota Aviation Assoc. Annual Convention & Recertification Course February 24-26, 2004 Sheraton Hotel & Convention Center Sioux Falls, SD (FSD) Contact: Andrea Barber 605-258-2199

Montana Aviation Conference March 4-6, 2004 Heritage Inn, (406-761-1990) Great Falls, MT (GTF) Contact: Patty Kautz 406-444-2506

Upper Midwest Aviation Smposium

March 7-9, 2004 Ramada Plaza Suites, (701-277-9000) Fargo, ND (FAR) Contact: Jim Lawler 701-663-0669/3690

Sun'n Fun Fly-In April 13-19: Lakeland Linder Regional Airport (LAL) Lakeland, FL, 863-644-2431 Fly-a-6th Grader April 19, 2004 EAA Young Eagles Hillsboro Rgnl (3H4) Hillsboro, ND Contact: Larry Mueller 701-636-4453

Saskatchewan Air Show June 13, 2004 Moose Jaw CFB (CYMJ), Moose Jaw, SK, CAF Snowbirds, Contact: R. Johnson 306-692-4411

Plane Fun 2004
June 24, 2004
Thursday, 5 pm
Hillsboro Rgnl (3H4)
Hillsboro, ND
Antique Cars & Motorcycles
Contact: Larry Mueller
701-636-4453

Fly-in/Open House July 31, 2004 Dickinson Muni (DIK), Dickinson, ND Contact: Charity Speich, 701-483-1062/1072(Fax)

Complete Airframe Engine Overhaul and Aircraft Service

Fargo Aero Tech

- 100 Hour
- Magnetic Particle
- Aircraft Parts
- Eddy Current
- CATS Testing Center
- Cylinder Reconditioning
- Static & Altimeter Testing

- FAA Repair #PR5R129N
- Auto Rental Reservations Available
- Engine Overhaul
- Annual
- Ultrasonic
- Liquid Penetrant



Phillips Aviation Fuel Dealer Self-Service For AVGAS

701-237-5305

1-800-435-4147 Fax 701-239-9073 17222 23rd Avenue North Fargo, ND

Use the General Aviation entrance off N. University Drive

Reauthorization Gets Approval, **But Appropriations Are On Hold**

By Warren Ferrell, FAA

The Congress has passed the 4-year Vision 100 reauthorization legislation. The Airport Improvement Program reauthorization level was approved for \$3.4 billion for fiscal year 2004, and a total of \$14 billion over 4 years. Preparing for the changes effected to the AIP, as a result of the new reauthorization, some of which are as follows:

- The question that has been most frequently asked is whether the federal share of AIP grants is really 95 percent. The answer is yes, for all but large and medium hubs.
- The second most popular question is regarding

the changes to the nonprimary entitlement. In some respects it is now similar to the primary non-hub passenger-entitlement airports. For example, airports may transfer these funds to other airports in the same state or geographic area. In addition, these funds may be used to reimburse eligible work done prior to a grant, and may be used at commercial-service and reliever airports for terminal development. The non-primary entitlement is different from the primary non-hub passenger entitlement in that the funds may be used for limited revenue-producing aeronautical facilities, if the airside needs of the airport have been met, such as fueling systems and hangars.

 Other interesting provisions pertaining to AIP include a new requirement that any project receiving discretionary funds must begin with in 6 months.

As interesting as these topics may be, we have to wait for the appropriations legislation to find out how much AIP the FAA has available to spend. Think of the reauthorization as the amount of money in the bank. The appropriation is how much of that

money can be spent, and should be acted upon by the Congress early next

As you can see, there are many new changes to the AIP and PFC programs, and too many to mention here. However, for additional information, check out our website at http:/ /www.faa.gov/arp/anm/ Q index.cfm?nav=anm. If you need assistance regarding the nuances associated with any particular provision, please contact your local Airports District Office.



UND Flying Team Defends Its Regional Flying Team Competition Title

The UND Flying Team captured the overall team championship in Region V

National Intercollegiate Flying Association's (NIFA) Safety and Flight Evaluation Conference (SAFECON) was held in Grand Forks the weekend of October 18-19, 2003. UND soared in both ground and flight event scores, defeating the other three participating flying teams with an overall score of 289. St. Cloud State University placed second with a score of 133; the University of Dubuque placed third with a score of 130; and Minnesota State University-Mankato took fourth with a score of 102.

"I'm very proud of the team's performance," said Jim Higgins, Faculty Advisor of the Flying Team. "It's a step closer to our ultimate goal — the national championship." The national NIFA competition will be held at Middle Tennessee State University in Murfreesboro, TN in May 2004.

The competition consisted of 11 events —four flying events and seven ground events — which tested a variety of piloting skills. The 14 UND Flying Team members who competed were: Shawn Bailey, Zach Cromley, Kirk Dalebroux, Adam Erdmann, James Forst, Adam Jackson, Seth Johnson, Jered Lease (safety officer), Jared Moore, Nick Peacock, Graham Peterson (Co-captain), Andrew Pierce, Mark Thompson (Co-captain), and Nick Weiss. James Higgins is the Team's Faculty Advisor, and Matt Baroni is the Head Coach. Ryan Harvey and Kevin Hansen are Assistant Coaches.

The UND Flying Team is a member of the National Intercollegiate Flying Association (NIAF), the sanctioning body for the regional and national SAFECON competitions. SAFECON places a special emphasis on safety of flight operations.



AVIONICS • FUEL • AIR CHARTER
MAINTENANCE • FLIGHT INSTRUCTION
AIRCRAFT SALES & MANAGEMENT

800·7700·JET (538)







www.waypointavionics.com 1-800-7700 JET (Fargo office) 1-800-333-4064 (Bismarck office)

www.fargopilot.com



We're in the business of fueling dreams



ALYSSA'S PLASTIC WINGS

By Maurice E. Cook, Bismarck, ND

The voice over the intercom advised me that the call was for me. I said, "hello," and was greeted by, "Hi, this is Missy, (a former paralegal of the firm), do you still have your airplane?" I said, "yes, I still have an airplane," and asked her what she needed. She serves as a Den Mother for a group of first grade boys (Tiger Scouts). She has an activities book of suggested field trips that includes airports and airplanes and remembered that I was a pilot. We arranged for a Sunday afternoon "Tiger Scout" ground school at Bob Simmer's aircraft repair and hangar facility in Bismarck.

The "Tigers" arrived with their parents, assorted other wee ones under six years old and Alyssa, the seven-year-old sister of one of the "Tigers." Bob had a C-152 in the otherwise empty shop with the cowl off and proceeded to do a walk-around briefing. Alyssa was standing back. I told her that flying wasn't just for boys, but that a lot of girls learn to fly and become pilots. She didn't say anything, but I knew she heard me.

The briefing continued in the adjacent hangar that housed a variety of aircraft including both tricycle gear, tail draggers, my old Seneca and my TR 182. At the end of the session, Bob handed out the AOPA plastic wings we got from the

Aeronautics Commission. The wings have "Future Pilot" printed on them in gold letters. When he gave a pair to Alyssa her smile lit up the hangar. She unzipped her jacket and proceeded, without being told, to pin the wings to her shirt on the left side where wings are customarily worn. A tiny seed had been planted. Who knows, maybe some day because of the "Future Pilot" wings, she will be motivated to take at least one flying lesson. She might get hooked like the rest of us and become one of the next generation of pilots and fly a Mach 5+ Aero Space Plane.

A. Scott Crossfield, of X-15 fame, has long been an active supporter of Civil Air Patrol's aerospace education program for grade school teachers. I asked him once if we shouldn't try to extend the program into high school. He said, "No." He was of the opinion that we need to get to them when they are little and are not preempted by the distractions that beset teenagers. I'm not about to question such an eminent authority. My favorite Crossfield quote regarding our youth is, "What is still left to do is boundless, unlimited, infinite, and there for them to do. There is no divine assignment to those who do things. The opportunity is for all and probably within the grasp of most. We must unburden

our young folks of the idea of special people."

Gary Ness advises me that the average age of a pilot in North Dakota is around 40 and getting older. Like everything else in life, the continued success of any enterprise, including general aviation, depends on what we do today. General aviation will continue or be abandoned by the youth of today, like those with whom we had the privilege of spending some time. We had the chance to give them a first hand exposure to flying machines and to a little bit about what makes them fly. Did we make a positive impression for aviation? Only time will tell.

I'm sure the schools and youth groups in your area all look for programs of interest for their young people. Please consider inviting them to your airport where they can get the chance to experience the fascination for airplanes you know and feel the sense of accomplishment that learning to fly and becoming a pilot can bring. An annual youth event wouldn't be a bad idea. Anyway, you are not only the best people I know to keep the general aviation tradition alive with our young folks, you are the only ones.

Dakota Territory Air Museum

The Dakota Territory Air Museum in Minot was founded in June of 1986 with the incorporators' dream and desire to provide the most comprehensive aviation facility in the state and region.

The Founder's Dream

Plans were laid early that the museum would not only be a place to display famous military vintage aircraft, but would be a place in every way dedicated to telling and showing the rich, varied story of our region's aviation history. In the short time since the museum's dedication, the members have built a solid foundation, establishing a working museum with aircraft, restoration projects and a role in the region's promotion of aviation activities and air shows.

Forged and Looking Ahead

The Dakota Territory Air Museum has already forged a place where the aviation country and imaginations probe the depths of travel into space; we realize the speed with which changes are coming in aviation. Many of us remember, so short a time ago, when flying itself pushed the boundaries of daring. It's a memory to be preserved.

The history of these changes not only signifies the giant strides that have been so quickly made over the years, but also points out the very special opportunity we have now show our children and grandchildren what it was like, and point to what was done. The Dakota Territory Air Museum is dedicated to providing that opportunity.

NORTH DAKOTA AVIATION QUARTERLY

"Exploring the Second Century of Flight"

UPPER MIDWEST AVIATION SYMPOSIUM

MARCH 7-9, 2004 Ramada Plaza Suites, Fargo, ND (701-277-9000)

Pre-registration Form

Please print or type

Name of Participant	Spouse Name					
to be printed on name tag						
Address	City	State	Zip			
Phone	E-Mail Address					
*Pre-Registration Fee:		The state of the s				
You must be a member of one organization and registe	er for the Symposium					
Member		\$75	.00*			
Spouse						
Awards/Hall of Fame Banquet						
Organizational Dues: (circle amounts)						
AAND — Airport Association of North Dako	ta					
General Aviation Airport		\$2	5.00			
Regional Commercial Service Airports		\$10	0.00			
Primary Commercial Service Airports		\$20	0.00			
Associate Membership (Non-Voting)		\$5	0.00			
NDAAA — North Dakota Agricultural Aviati						
Operator Member (chief pilot/owner)		\$10	0.00			
Pilot/Associate Member		\$2	0.00			
PAASS Program for NDAAA members		\$5	0.00			
PAASS Program for non-NDAAA member	'S	\$15	0.00			
NDAA - North Dakota Aviation Association	1					
Membership (voting)		\$2	5.00			
Associate Member (non-voting)		\$1	0.00			
NDFF — North Dakota Flying Farmers		\$6	5.00			
NDPA — North Dakota Pilot's Association						
Membership (voting)		\$1	2.00			
Associate Member (non-voting)		\$1	0.00			
NDPAMA — North Dakota Professional Avi	ation Mechanics Ass	sociation				
Membership (voting)		\$2	0.00			
Associate Member (non-voting)		\$1	0.00			
NDSAA — North Dakota Sports Aviation As	sociation & Experim	ental Aviation Associa	ation			
(Includes national and Local Dues)						
NDAAM — North Dakota Association of Air	rcraft Museums	\$3	5.00			
		GRAND TOTAL	\$			
Do not mail registrat	ion form after Fe	after February 27, 2004				
Mail to: Jim Lawler, 4492	Hwy 6, Mandan, No	orth Dakota 58554				
Make checks payable to NDAC. For further information call, (701) 663-0669/391-1394 - Jim Lawler						
Mastercard/VISA Name on Card						
		gnature				
	fter February 27, 200					



Buckshot Hoffner (left) graciously accepts a gift from Todd Schwarz (center) and Darrel Pittman (right), both members of the Experimental Aircraft Association, during a ceremony celebrating 100 Years of Powered Flight recently at Buckstop Junction. The photograph of the old plane will eventually hang in the Capital Aviation hangar which was donated by Bob and Lois Watts.

We're Taking Advertising!

The *Quarterly* is now accepting advertising from its subscribers. Rates listed are for a minimum of 1 year (4 issues). Sorry, no classifieds!

SIZE RATE

 1/8 page
 \$136.00

 1/4 page
 \$255.00

 1/2 page
 \$476.00

 Full page
 \$816.00

Send your photo or scanned ready copy to:

North Dakota
Aviation Quarterly
Advertising
P.O. Box 5020
Bismarck, ND 58502
Make checks payable to:
NDAC - Advertising

North Dakota Aviation Quarterly P.O. Box 5020 Bismarck, North Dakota 58502-5020

PRSRT STD U.S. POSTAGE

PAID

BISMARCK, ND PERMIT NO. 433