EVENTS & SPEAKERS

"Back to the Islands" Luau

Mechanics' IA Renewal

Awards Banquet
ND Aviation Hall of Fame
Inductions

Ag Applicator Recertification

Display Aircraft

Pilot Ground Training Safety Briefing & Informational Seminars

ND Aeronautics Commission "Listening Session"

FAA Open Forum

For more information call 701/328-9650 or www.ndac.org Exhibitors Welcome

Preregistration	\$50.00
Registration (after Feb. 18)	\$60.00
Spouse	\$20.00
Awards/Hall of Fame Banquet	\$20.00
One Day Pass	\$30.00
Food Ticket	S15.00
For registration information call 701/6	



Phil Boyer
President AOPA

Pilot's Town Hall Meeting Sunday, 7:00 PM



Gil Rud Boeing F-18 Marketing

General Session Speaker Monday, 5:00 PM



Bill Sweetman
Pilot's Association
Speaker

Aerospace Technology Update



the NORTH DAKOTA AVIATION COUNCIL presents

LANDING:

THE UPPER MIDWEST AVIATION SYMPOSIUM



















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Pilots Town Hall Meeting Sunday, 7:00 PM



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One Day Pass	\$30.00
Food Ticket	\$15.00
For registration information call 701/663-0669	

Chairman's Corner

Rod Brekken, Chairman, North Dakota Aviation Council

Are you ready? I have heard that question asked many times within the last few months. Most of the time the question was in regards to the coming of the new millennium. Some people were very apprehensive about it and some were not. I fell into the latter category. There were some glitches, but I believe for the most part, they were minor. Most things were planned for in advance and people were prepared to handle most problems that did crop up. They experienced similar problems at previous times and the only reason they were apprehensive of the event is that it had never happened before.

I know you thought I was still talking about January 1, 2000, but actually I am talking about the "Upper Midwest Aviation Symposium" which will be in Fargo this coming March 5-8, in the year 2000. We want you all to come and have a good time. Talk to all your aviation friends and tell them they need to come to the "Landing 2000" symposium. Tell them we are planning to have airplanes there! Tell them there will be door prizes at most events, even the training seminars. Tell them new and informative training sessions that will interest all ages. Tell them the Ladies' program will be of a (Continued on page 4)

Pilot's Town Hall Meeting, IA Renewals, PAASS Program, State's Own "Blue Angel" and Hawaiian Luau Highlight "Landing: 2000"



AOPA President, Phil Boyer will host the Pilot's Town Hall Meeting, Sunday evening, March 5.

Aircraft Owners and Pilots Association (AOPA) President Phil Boyer will help kickoff the 2000 Upper Midwest Aviation Symposium "Landing: 2000" on Sunday evening, March 5th in Fargo when he hosts a "Pilots Town Hall Meeting" at the Ramada Plaza Suites and Conference Center. The highly successful meetings have been a fixture of AOPA presentations throughout the country in recent years. Boyer has appeared at several previous Symposiums in Bismarck in past years. This year he will serve as host, moderator and keynote speaker for the 7:00 p.m. Town Hall meeting, which will be held in the

Ramada's Symphony Hall.

The meeting will follow the traditional "Ice Breaker" food and beverage get together at the Ramada's facilities. The Ice Breaker comes on the heels of several North Dakota Pilots Association (NDPA) lecturers and presentations, including the always very popular author, Mr. Bill Sweetman, who will again impart an update on the very latest in aerospace technologies and developments Sunday at 4:00 p.m. Prior to that professors UND Leon Osborne and Dr. Warren Jensen will present, in-depth talks on hazardous weather and human factors in high altitude operations.

Well-known North Dakota native and former three-season leader of the U.S. Navy's Flight Demonstration Squadron, "The Blue Angels", Captain Gil Rud, USN, Retired will be the General Session speaker Monday afternoon in the Exhibit Hall. The former commanding officer of the super carrier USS Constellation is now heavily involved in the development and marketing of the latest aircraft to join the U.S. fleet, the Boeing FA-18E and FA-18F Super Hornet strike fighter. He will bring in a presentation that



Captain Gil Rud, US (Ret.) Marketing Director FA-18 Program, The Boeing Company.

will thrill each and every attendee.

This year will also see the return of the joint North Dakota Professional Aircraft Mechanics Association (NDPAMA) and FAA Inspection and Authorization (IA) renewal program. Like the NDPA series, NDPAMA will also begin their program on Sunday afternoon. Topics for the IA Renewal syllabus will include propeller care, turbine engine maintenance, fuel, engine, electrical and hydraulic systems as well as additional presenters from the Fargo FAA office.

The North Dakota Agricultural Applicators Association (NDAAA) again sponsor

(Continued on page 12)

From the Editor:

Andrew Niemyer, Editor-in-Chief

As you can plainly see from other articles in this issue, "Landing: 2000", the Upper Midwest Aviation Symposium for 2000 will enter in the new century with a bang. North Dakota Aviation Council members have been working hard since shortly after last year's event to make this year's Symposium the benchmark for the second 25 years of Symposiums.

Planning is what makes every Symposium work. Members did their homework, and that kind of preparation shows. We recently celebrated the New Year and new century with a major corporate player in the entertainment industry. Their four day "Millennium Celebration" went off without an obvious glitch. How did they do it for two groups totally nearly 8,000? By hard work, prior planning, a methodical attention to detail and rehearsal. The Council would love to host a group of 8,000, and they didn't have the opportunity to do a full-scale rehearsal of this year's event, but they too have planned in great detail all the excellent events due to come your way.

Not only have they lined up a terrific series of speakers, they've also worked very hard to find financial sponsors to help defray the enormous costs of putting on this year's gathering. The Quarterly salutes both the Sponsorship Committee and the Site Committee for their fine work. When you see members of the Council with their "Sponsor" or "Host" badges on, give them thanks for the work they've done, along with all the members of the Council. Without the works of such groups as the Banquet, Exhibitor, Ladies Activities and other committees, the Symposium simply can never happen. Plan on attending your group's annual meeting and volunteer to help. Then you too can help make the 2001 meeting even better than the outstanding event planned for this year!

NDPAMA

Trent Teets, Vice President

Hi, everyone! It's time again for our annual symposium. We are looking forward to having it in Fargo this year. We have a very good selection of presenters and exhibitors for this years symposium. Once again, this year we are working with the Fargo FSDO and are going to have the IA renewal. To renew your IA you will have to attend a total of 8 hours of qualified sessions. This will also include the two hours of the required FM sessions, which will be held on Monday, March 6 from 2:00 to 4:00. Last year we had an attendance of about 75 mechanics. Without you we cannot continue to attract good speakers and exhibitors to our symposium. I hope to see you there and bring a friend to this year's convention. We are looking for a new logo for NDPAMA. Bring your ideas in the form of drawings or artwork in both black and white and color, to the first NDPAMA business meeting and we will vote for the best one. The winner will receive

\$50.00. I hope we can get a very good selection of drawings for this contest. Also we need a good assortment of Mechanic of the Year award entries. Please pick up your entry form at any of the FBO's and mail it to the North Dakota Aeronautics Commission by Friday, February 25th or hand-deliver it at the first NDPAMA business meeting. If you have any questions or comments for NDPAMA, we can be reached by e-mail at ndpama@hotmail.com.

Airport Inspection Program

Mark J. Holzer, Aviation Planner

The Aeronautics Commission staff completed its recent inspection of general aviation airports on January 7th, 2000. Only 29 airports were allocated for inspection out of a total 86 possible due to federal budget constraints.

Eleven airports recently visited were last inspected 3 to 4 years ago. The aviation data collected is used for aeronautical charts, airport facility directory and flight service briefings. Since federal contracts are delayed, we are not able to visit your airport as frequently as in the past. Therefore, it is important as airport manager authority members for as airfield tenant to call our office to report safety or critical phone numbers or airport service changes.

Things we noticed this past year that many airports can improve or investigate are:

- Cleaning or improving pilot lounge furniture, welcoming signs, phone number, etc.
- Airport lighting outages, missing lenses and bent over fixtures.
- Locating fire extinguisher and proper signage by fueling areas.

- Repair of pavement potholes or large cracks.
- Runway end safety areas need grass mowed 200' outbound from pavement ends and 50' outside the lights.
- · Faded or torn wind-socks.
- Checking State Surplus for movers, snow removal equipment, terminal furniture, heaters, extra coats, etc. If you do not get their newsletter, call them at 328-9665 or www.state.nd.us/ centserv/surplus.html.
- Painting of segmented
- Eradicating gopher holes in turf runways.
- Keeping heavy truck vehicles off lightweight asphalt pavements especially in the spring.

Our goal for this year's inspection was to challenge airport authorities to implement or update their airport zoning to protect approaches to the facility. Chapter 17 - page 60 of your 1997 Airport Managers Handbook is the resource to protect your community's investment as an accessible, safe airport into the future. Check it out!

North Dakota Aviation Quarterly Official Publication of the North Dakota Aviation Council Editor/Publisher: Andrew Niemyer Phone (701) 328-9650 North Dakota Aviation Council Board Members 99/00

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COPY DEADLINES

April 15 issue: March 15 E-mail: aniemyer@btigate.com

FROM THE DIRECTOR'S CHAIR

Gary R. Ness

As we enter the year 2000, what are your expectations?

Personally, I have entered this year with about the same expectations as always. I am going to find the pony in that room full of mud this year.

The year 2000 is a political year, mainly promises to aviation will be made, but many positive things that

could be done for aviation will be "put off" for a nonpolitical year. Your influence can be brought to bear from you and your local organizations.

If you belong to AOPA, EAA, NATA, or AAAE, pay close attention to your bulletins and letters. There are many issues that these organizations work on, on a daily basis that affect us, even out in the prairie land. Your positive actions towards our legislative representatives will help affect national policy. Remember, Governor Schafer has made transportation an important issue on the National Governor's Association agenda with highways and aviation. Senator Dorgan and Senator Conrad, along with Representative Pomeroy, have all given their full attention to aviation issues when called upon. There are very few states where the tip four policy effectors are as easy to communicate with as North Dakota's elected officials. Use your ability to affect changes, contact the leaders with your concerns.

I want to personally and publicly thank the group of pilots that gathered at the Garrison Dam Recreational Airport for a work day. (See last *Quarterly* issue). The effort and sharing was enjoyable. We are planning to make it a yearly event if all involved want to continue. Don't believe a word about Vigesaa's chef work. The food came from packages and cans, no imagination was needed.

Under the "Did you know?" category: The EAA Young Eagle Program is progressing well nationwide. But did you know that Jay B. Lindquist of Hettinger, this year, completed 14 years of giving the 1st Grade Class at Hettinger their first plane ride!

"On Approach 2000" is on the books for the great city of Fargo. The local coordinating committee is doing a super job of finding support for the symposium. The facility is top notch and the Councils scheduled speakers are of the highest caliber. Here is the perfect time and place for aviation to join together and share our 2000 expectations.

NDAA

By Bob Simmers

The North Dakota Aviation Association has scheduled presentations for air-taxi operators that my meet some of the requirements for recurrent training. Mr. Ray Heyde of Executive Air Taxi will make two 2-hour presentations regarding Hazardous Material. This class is scheduled to meet the 2 year recurrent requirements. There are also scheduled sessions by the FAA GADO to update aviators on regulations.



AIRPORT ENVIRONMENTAL COMPLIANCE

Mark J. Holzer, Aviation Planner

An upcoming challenge for airports in this new century is environmental compliance to federal and state rules. As you manage or serve on a board or operate a business from an airport, it is important to understand these issues. We may not like more rules but all indications are that more emphasis is placed on compliance.

What are the environmental compliance issues for an airport?

- STORM WATER RUNOFF will address rainfall and snow-melt runoff as being free of pollutants such as fuels, oils, agri-chemicals and de-icing fluids. The State Health Department along with our agencies assistance is helping airports understand and fill out airfield inspection forms. Tenants are asked to co-sign the permit.
- FUEL TANK REGISTRA-TION considers aviation fuel tanks based on airports. The airport must pay a fee to annually register tanks; funds go to help reimburse a cleanup program. Fuel leaks are to be monitored in underground tanks.
- WILDLIFE AND BIRD HAZARDS are a federal concern that balances the wetlands preservation issues versus animal/bird damage concerns. Recent high numbers of migratory waterfowl and deer movement has caused concerns for airport management as new federal advisories are being distributed.
- HISTORICAL/ARCHAE-OLOGY has surfaced as a clearance requirement prior to airfield improvements. Both highway and airport projects will require "pedestrian walk survey" (\$1,500) to insure construction will not overturn as historical find of significance. Any airport building

in excess of 50 years will have significance determined by state historical staff prior to removal.

Greater emphasis on completing an environmental assessment two years prior to the federal project start is necessary. Runway extensions or major airport expansions into new property or unearthing new soils may dictate the environmental review. The local FAA airport expertise and engineering consultants have beefed up training and staff to assist airports in assuring the environmental concerns are being adequately addressed. So plan ahead and keep an eye open at your airport to insure the environment is not being compromised.

(Chairman's Corner continued from page 1)

special interest this year with some new, exciting and informative activities for you to attend and participate in. Tell them they need to bring their summer clothes and maybe even their beachwear for the surprise on Monday night. I hope you all know how to do the limbo? The only thing I am afraid we can't promise are the mosquitoes. I know some of you were looking forward to that, but I am sorry, they refuse to attend. Their excuse was something about "wind chill outside".

We hope all of you will be able to attend the "Upper Midwest Aviation Symposium - Landing 2000" in Fargo this year. Come win a set of round trip airline ticket from the fours sets we have to give away. Win a night's stay at the Ramada Plaza Suites from the two we have to give away. Win...I guess I had better quit! See you all in Fargo and I hope your New Year came with as few glitches as we plan to have for your symposium.

AAND NEWS

Steve Johnson, President AAND

The "aviation year" is slipping away from us and before long we'll be back at the Upper Midwest Aviation Symposium having fun, getting smarter (maybe we could use two symposiums a year), and electing a few good men or women to lead the organization.

As part of this swan song I want to arm twist each of you into attending the 2000 Symposium. . . especially if you haven't for several years. The venue is changed this year to the eastern side of the state to make things easier on the valley guys and gals. We'll be gathering at the Ramada in Fargo. From my perspective, the only downsides of the Fargo location are the demise of the chili cooking contest and the lack of popovers at the banquet.

The ND Aviation Council has been hard at work putting together the usual outstanding lineup of program activities, exhibitors, and speakers. As always, the ADO folks will be there to make up. . . er . . I mean give us the "straight scoop" on funding and other federal issues (so much for Grand Forks getting anything in 2000). One of the highlights will undoubtedly be Jamestown's Joe Neims and me (two "big airport" guys) leading a round-table discussion on small airport issues. Now that's gotta make you want to be there. For those of you without 20-20 foresight, make sure you attend the presentation on Aviation Visioning 2000 to see where state aviation leaders are aiming us for the next twenty years.

One of the issues for the AAND annual meeting will be dues. It's been suggested that we "scale" the annual dues relative to

the size of airport, perhaps asking the larger members to contribute more than the standard \$25 fee. Be there and voice your opinion.

We're hopeful, given the Fargo site, to be able to attract new exhibitors and attendees from northern South Dakota, western Minnesota, and southern Manitoba. If you have friends or associates who haven't attended the Symposium before, be sure to extend them a personal invitation. I hear a number of students from the Odegard School at UND are planning to be there. See you in March.



So, just where do you park a blimp? An answer may be waiting at the AAND presentations at this year's "Landing: 2000"!

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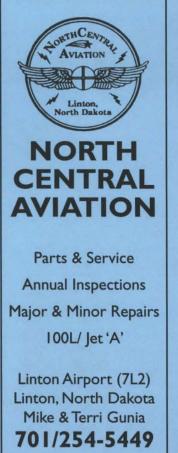
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But Who Are These Guys, Really?

We goofed last issue! The real identity of the folks who posed for this picture after their hard work at the State Airpark in Garrison are, from left to right, Roger Pfeiffer, Tim Reimers, Jesse McMurtry, Ron Saeger, Darrel Pittman, Dan Vigesaa and Gordon Valgren. (Thanks Darrel!)

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Landing: 2000 Daily Schedule

Sunday, March 5, 2000 - Afternoon * AMT Awards Credit

**Wings Award Credit

	AAND-Room: Bach	NDPA-Room: Etude	NDAAA Room: Brahms	BDPAMA Room: Mozart I	NDPMA Room: Mozart II
2:00 PM to 2:50 PM		Hazardous Weather Leon Osborne, UND		*Propeller Care and Maintenance Butch Maxwell Maxwell Aircraft	NDAA Hazardous Materials Training Ray Hyde
3:00 PM to 3:50 PM		Human Factors in High Altitude Operations Warren Jensen, MD UND	NDAAA Board Meeting Following meeting: Section 18 & 24 updates Andrew Thostenson	*PT6 Maintenance Dallas Airmotive	NDAA Hazardous Materials Training Ray Hyde
4:00 PM to 4:50 PM		Stealth & Hypersonic Technology Bill Sweetman	Section 18 & 24 updates Andrew Thostenson Tape Presentation follows Three successive one-hour programs: 5:00 6:00 7:00 PM	*Fuel Systems (Precision Airmotive Corporation)	

Additional Rooms

Crystal Court East Lobby: Registration

Signature I: Spouses

Signature II: Organizational Sign-Up (key & sign-up list at registration)

Sonata II: NDAC Meetings

Overture: Tuesday NDAAA Initial Certification, other days Organizational Sign-up (key & sign-up list at registration)

Ice Breaker - 5:00pm to 9:00 pm in South Courtyard Speaker: Phil Boyer (AOPA) Pilot's Town Hall Meeting: Symphony Hall 7:00 - 8:30 pm Hospitality Areas East and South Courtyard, open 9:00 pm - 1:00 am



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Monday, March 6, 2000 - Morning

	AAND-Room: Bach	NDPA-Room: Etude	NDAAA Room: Brahms	BDPAMA Room: Mozart I	NDPMA Room: Mozart II
8:00 AM to 8:50 AM	AAND Fargo Airport Tour Meet at 8:30 am at Registration Desk (Estimated 2 hours)	**Medical Warren Jensen, MD, AME, from UND	Initial & Recertification Training Registration 7:00 AM Starts 7:30 AM PAASS Program presenting	* Lamar Electrical Systems (Precision Airmotive Corp)	* Exhaust System Care & Maintenance Aerospace Welders Inc.
9:00 AM to 9:50 AM		Oshkosh Fly-in Procedures Mark Ringham	Mr. John O'Connell Mr. Neal Usery Mr. Randy Hardy 7:30 AM Improving Client Relationships 8:50 AM	*AD Research Procedures Aircraft Technical Publishers	*Non-Destructive Testing Aircraft Technical Publishers
10:00 AM to 10:50 AM		** Topic TBD Bill Hamilton, AOPA	Managing Fatigue & Outside Pressures 10:10 AM Drift Minimization	*Starter Generator Care & Maintenance B&S Aircraft	*Bonanza & King Air Maintenance Raytheon Aircraft

11:00 - 2:00 Exhibit Area Open 12:00 - 1:50 Exhibit Hall Lunch

Monday, March 6, 2000 - Afternoon

	AAND-Room: Bach	NDPA-Room: Etude	NDAAA Room: Brahms	BDPAMA Room: Mozart I	NDPMA Room: Mozart II
2:00 PM to 2:50 PM	Historical Site Survey ND Historical Office Speaker: Michael Simonson Controlling Your Wildlife Speaker: Phil Mastrongelo	** NOAA NOS Charts	Initial & Recertification Training 2:00 pm - 4:50 pm 2:00 PM "Spray Coverage Issue" Spray Task Force Vern Hofman	Fargo FSDO: Airworthiness Issues 2 hours	NDAA 135 Hazardous Materials Training Ray Hyde
2:00 PM to 2:50 PM	Airport Rates & Charges Riaz Aziz Aviation Impact on the Community Julie Rodriquez	** Navigation Dr. Dale DeRemer	2:45 PM National/State Pest. Issues Andrew Thostenson NDSU Ext. Service 3:00 PM		NDAA 135 Hazardous Materials Training Ray Hyde
4:00 PM to 4:50 PM	Airport Round-table Moderator: Steve Johnson	** Navigation-II Dr. Dale DeRemer	4:30 PM Enforcement Issues, ND Department of Agriculture Ends at 5:30 PM	PAMA Business Meeting	

Exhibit Hall: General Session-Gil Rud, Manager, Boeing F/A-18E/F Development at 5:00 PM
Hawaiian Night/Exhibits - 6:00 PM - 10:00 PM
Hospitality Area East & South Courtyard open 10:00 PM - 1:00 AM

7:00 AM Continental Breakfast in South Courtyard 7:30 AM Welcome in South Courtyard

	AAND-Room: Bach	NDPA-Room: Etude	NDAAA Room: Brahms	BDPAMA Room: Mozart I	NDPMA Room: Mozart II
8:00 AM to 8:50 AM	Pavement Preventative Maintenance Techniques Panel Panel Moderator: Tim Thorsen	**Seaplanes Dr. Dale DeRemer	By invitation only: Ag Pilot Recurrent Training Discussion Initial Certification in Overture Room	*Propeller Balancing Chadwick Helmuth	*Avantext Inc. AD CD-ROM Research
9:00 AM to 9:50 AM	Financing with Bonds Myron Knutson Evanson Dodge State Aviation Programs Speaker: Mark Holzer	**Grand Forks AFSS Joe Morgan, FAA	FAA Update-Part 137 Les Ellingson, FSDO Initial Certification Continues in Overture Room	*Fuel Injection Systems B&S Aircraft Parts & Accessories	*Engine Care & Maintenance Aero Recip.
10:00 AM to 10:50 AM	Federal Legislation Speaker: Senator Dorgan or Staff	**Cockpit Resource Management-Panel Moderator: Darrel Pittman	Accident Prevention Safety Panel: Robert Odegaard, JB Lunquist, Bob Simmers, Moderator TBNA/Initial Certification: Overture	*Engine Care & Maintenance Teledyne Continental Motors	*Aircraft Electrical Systems Waypoint Avionics

11:00 - 2:00 Exhibit Area Open 12:00 - 1:50 Exhibit Hall Lunch

Tuesday March 7, 2000 - Afternoon

		AAND-Room: Bach	NDPA-Room: Etude	NDAAA Room: Brahms	BDPAMA Room: Mozart I	NDPMA Room: Mozart II
	2:00 PM to 2:50 PM	FAA Airport Update Speaker: Irene Porter, Bismarck Airports District Office, FAA	**Air Traffic Control Procedures Fargo ATC Tower Controllers	NDAAA Open to Attend Aero Recip Presentation Initial Certification continues in Overture Room	*Engine Parts Superior Air Parts	Vacuum System Maintenance RAPCO
•	2:00 PM to 2:50 PM	AAND Business Meeting Steve Johnson, President Airport Self Inspection Speaker: John Lott, FAA	NDPA Annual Meeting	NDAA Business Meeting NDAAA: Open to attend Covington Presentation Initial Certification: Overture	*Ignition Systems Unison Industries	*PT6 Maintenance Covington Aircraft Engines Inc.
	4:00 PM to 4:50 PM	Getting a GPS Approach Speaker Mike Ebecs, FAA	NDPA Annual Meeting Continued	Year 2000 Coverage Test Pilot Planning Initial Certification Overture Room	PAMA Business Meeting	NDAA FAA Part 135 Fargo FSDO

NDAC Organizational Meeting Room Sonata II 5:00 PM - 5:30 PM Social Hour South & East Courtyard 6:00 PM - 7:00 PM Banquet Crystal I Ballroom 7:00 PM - 9:00 PM Hospitality Areas East & South Courtyard 9:00 PM - 1:00 PM

Wednesday March 8, 2000 - Morning

8:00 AM	NDPA Room: Etude Aviation Accident Recap, speaker, Les Ellingson, FAA or Intro to Thunderstorms, speaker, TBA, Weather Modifications Theater Seating	Career Day Activities Sponsored by NDPA:
8:50 AM	*NDAAA Room: Brahms NDAAA Testing, Andrew Tostnson, NDSU, Classroom seating 8:00 am - Write Exams until completion. Approximately 5:00 pm	Booths in Crystal III Ballroom 8:00 am - 11:30 am
9:00 AM to 9:50 AM	Room: Bach Open Forum Topics Including but not limited to Aviation Vision Statement GA Forum Briefing, Joe Morgan Topic #3 Topic #4	Career Day Activities Sponsored by NDPA: Booths in Crystal III Ballroom
	Room: Bach ND Aeronautics Commission	8:00 am - 11:30 am Career Day Activities Sponsored by NDPA:
10:00 AM to 10:50 AM	Listening Session	Booths in Crystal III Ballroom Ends 11:30 am



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ASY	Ashley	Ashley Municipal Airport	D55	Langdon	Robertson Field Airport
20U	Beach	Beach Airport	2L1	Larimore	Larimore Municipal Airport
95D	Beulah	Beulah Airport	D31	Leeds	Leeds Municipal Airport
BIS	Bismarck	Bismarck Municipal Airport	90Y	Leonard	Leonard Municipal Airport
DO9	Bottineau	Bottineau Municipal Airport	4N4	Lidgerwood	Lidgerwood Municipal Airport
5B4	Bowbells	Bowbells Municipal Airport	7L2	Linton	Linton Municipal Airport
BPP	Bowman	Bowman Municipal Airport	5L3	Lisbon	Lisbon Municipal Airport
9D7	Cando	Cando Municipal Airport	7G2	McClusky	McClusky Municipal Airport
46D	Carrington	Carrington Municipal Airport	8M6	McVille	McVille Municipal Airport
SN8	Casselton	Casselton Regional Airport	6D3	Maddock	Maddock Municipal Airport
2C8	Cavalier	Cavalier Municipal Airport	Y19	Mandan	Mandan Municipal Airport
D49	Columbus	Columbus Municipal Airport	D56	Mayville	Mayville Municipal Airport
S32	Cooperstown	Cooperstown Municipal Airport	4R6	Milnor	Milnor Municipal Airport
D50	Crosby	Crosby Municipal Airport	MOT	Minot	Minot International Airport
DVL	Devils Lake	Devils Lake Municipal Airport	D06	Minto	Minto Municipal Airport
DIK	Dickinson	Dickinson Municipal Airport	HBC	Mohall	Mohall Municipal Airport
D29	Drayton	Drayton Municipal Airport	3P3	Mott	Mott Municipal Airport
S28	Dunseith	International Peace Garden Airport	SB5	Napoleon	Napoleon Municipal Airport
S1D	Edgeley	Edgeley Municipal Airport	8]7	New Rockford	Tomlinson Field Airport
Y71	Elgin	Elgin Municipal Airport	05D	New Town	New Town Municipal Airport
4E7	Ellendale	Ellendale Municipal Airport	4V4	Northwood	Northwood Municipal-Vince Field Airport
5N4	Enderlin	Sky Haven Airport	2D5	Oakes	Oakes Municipal Airport
FAR	Fargo	Hector International Airport	64G	Page	Page Regional Airport
D54	Fargo	West Fargo Utility Airport	Y37	Park River	Park River - W C Skjerven Field Airport
D24	Fessenden	Fessenden Municipal Airport	Y74	Parshall	Parshall-Hankins Airport
Y27	Fort Yates	Standing Rock Airport	PMB	Pembina	Pembina Municipal Airport
9G9	Gackle	Gackle Municipal Airport	Y99	Plaza	Trulson Field Airport
D05	Garrison	Garrison Municipal Airport	4E8	Richardton	Richardton Airport
D57	Glen Ullin	Glen Ullin Municipal Airport	37N	Riverdale	Garrison Dam Recreational Airpark Airport
GAF	Grafton	Grafton Municipal Airport	2H9	Rolette	Rolette Airport
GFK	Grand Forks	Grand Forks International Airport	06D	Rolla	Rolla Municipal Airport
7N6	Grenora	Grenora Centennial Airport	RUG	Rugby	Rugby Municipal Airport
GWR	Gwinner	Gwinner-Roger Melroe Field Airport	4S5	St Thomas	St Thomas Municipal Airport
SH4	Harvey	Harvey Municipal Airport	08D	Stanley	Stanley Municipal Airport
6H8	Hazelton	Hazelton Municipal Airport	D60	Tioga	Tioga Municipal Airport
HZE	Hazen	Mercer County Regional Airport	D61	Towner	Towner Municipal Airport
2H3	Hebron	Hebron Municipal Airport	91N	Turtle Lake	Turtle Lake Municipal Airport
HEI	Hettinger	Hettinger Municipal Airport	6D8	Valley City	Barnes County Municipal Airport
3H4	Hillsboro	Hillsboro Municipal Airport	BWP	Wahpeton	Harry Stern Airport
IMS	Jamestown	Jamestown Municipal Airport	96D	Walhalla	Walhalla Municipal Airport
7K5	Kenmare	Kenmare Municipal Airport	5C8	Washburn	Washburn Municipal Airport
9Y1	Killdeer	Weydahl Field Airport	S25	Watford City	Watford City Municipal Airport
K74	Kindred	Hamry Field Airport	D64	Westhope	Westhope Municipal Airport
5K9	Kulm	Pruetz Municipal Airport	ISN	Williston	Sioulin Field International Airport
SLO	Lakota	Lakota Municipal Airport	6L5	Wishek	Wishek Municipal Airport

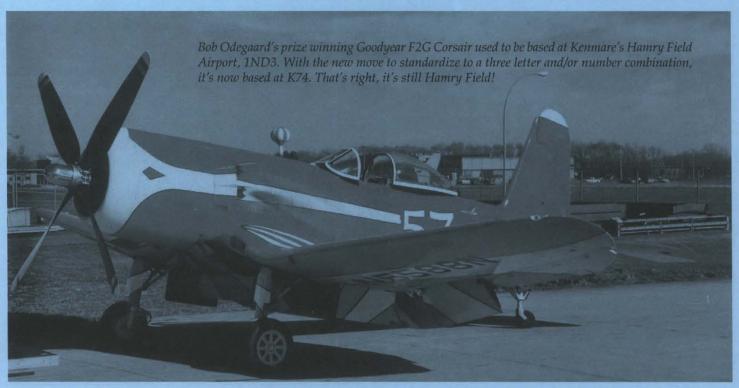




Photo Captions #3 Winner

Our winner comes from a certain unnamed state agency. In order to protect the guilty, we'll keep his name confidential in order to avoid embarrassing his parents (Mr & Mrs. Ness).

"These can't possibly be pilots; not a single one is talking with his hands!"



Photo Captions #4

See the picture? You know what to do! Send us your captions by March 15th. Caption Contest #4, NDAQ, P.O. Box 5020, Bismarck, ND 58502-5020

(Landing: 2000 Highlights, continued from page 1)

with their comprehensive initial and recertification training program. The PAASS program will include coverage of drift minimization, client relationships, spray coverage and enforcement issues as well as a panel presentation on accident prevention and a number of other topics.

A tour of the Fargo tower will be among the highlights for members of the Airport Association of North Dakota (AAND) for this year. Other events scheduled include an airport round-table led by Steve Johnson, a discussion of airport rates and charges and coverage of financial and upkeep issues. Late Tuesday morning is currently sched-

uled to feature the appearance of U.S. Senator Byron Dorgan who will address the group about pending issues of federal legislation and their effects on the state's public airports.

Three Federal Aviation Administration units will be very active at Landing: 2000. The Fargo Flight Standards District Office will be a major presence at this year's meeting. Airport updates, accident reviews, FAR Part 137 updates and other topics will be presented to virtually every participating group throughout the Symposium. The Grand Forks Automated Flight Service Station (AFSS) will speak to the NDPA Tues-

day morning, March 7th, and Fargo Air Traffic Control Tower will discuss ATC procedures with NDPA attendees at 2:00 p.m. that same afternoon.

Festivities scheduled for this year's meeting include a new addition, a "Hawaiian Night Luau" on Monday night in the exhibit hall. Attendees are encouraged to break out their aloha shirts, flip flops and cut-offs for the event which surfs on in starting at 6:00 p.m. in the Crystal Ballroom. Tuesday night's Awards Banquet will feature recognition of the induction of this year's selectees for the North Dakota Aviation Hall of Fame. Individual groups

will also take the opportunity to recognize individual achievement with their own awards presentation.

Those interested in attending this year's meeting can fill out the enclosed form or call either Aviation Council Treasurer Jim Lawler at 701-663-0669 or the North Dakota Aeronautics Commission at 701-328-9650. Internet surfers can get more information at http:\\www.ndac.org. The Ramada Inn Plaza and Suites is offering a very special convention rate on all room types. For room reservations, call 800-2-RAMADA or see website http://www.ramadafargo.com.

NORTH DAKOTA PILOTS ASSOCIATION

By Darrel Pittman

Your Aviation Council met in Fargo on Friday December 10th. That planning session centered on the schedule for the "Upper Midwest Aviation Symposium" and it is near completion. The Pilots Association has some great topics and guest speakers lined up. Bill Sweetman will be here again to tell us about innovations in Hypersonic and Stealth technology. Bill is always interesting to listen to. Dr. Warren Jensen, MD from UND will talk on the medical aspects of aviation. We are also trying to set up an altitude chamber session with Dr. Jensen (this is not yet finalized). For those interested in flying to Oshkosh, we will have Mark Ringham (a veteran controller/supervisor of the OSH fly-in) from Fargo tower to talk to us about what to do and what not to do. In addition, some Fargo tower controllers will talk on FAR procedures. Dr. Dale DeRemer, PHD from UND will be talking to us about navigation and seaplane operation. Joe Morgan will attend with a presentation from Grand Automated Flight Service Station. Les Ellingson from Fargo Flight Standards District Office will give us a recap on aviation accidents.

We are trying to get a speaker from the Weather Modification group in Fargo. And, of course, if the schedule will permit I'll have an ATC presentation. Boyer and Phil Hamilton from AOPA will be here to talk to us also. As most of you know, the symposium is in Fargo this time, at the Ramada Plaza. This is a really nice facility and our hope is to draw more attendees from the eastern part of the state and maybe some Minnesota. This will be my last article for the "Aviation Quarterly" before the Symposium. I want to thank the members of the Pilots Association for the opportunity to represent them on the "North Dakota Aviation Council". consider it an honor for a group of pilots to let an air traffic controller represent them for the last two years. It has been a challenging and rewarding experience that will remain in my memory always. Remember the Aviation Symposium is sponsored in part by you the pilots, so I urge you to attend, support your group and the council. Without your support, it might cease

Happy Flyin', Darrel

"I don't know about you, but I'm heading for the Fargo Ramada Suites and Convention Center for UMAS 2000, March 5-8!



NDAAA NEWS TALKING SHOP WITH YOUR CUSTOMERS

The following is a letter written by Tim McPherson addressing the coverage issues that have become increasingly distorted over the past two years. You have Tim's permission to share all or parts of the letter with your customers. Also plan to attend the Tuesday convention session "Year 2000 Coverage Test Pilot Planning" to discuss this further. Our helmets off to Tim for attempting to clarify the issue.

Many members of our State Association (ND Agricultural Aviation Association) have been wanting to do field trials with yield results of ground versus aerial application, although many applicators have done their own trial for literature for the next year's publications.

We finally were able to get a couple trials this year with results that do not really favor one way over the other. What we're really comparing is the 1-20 g.p.a. by ground versus 5 g.p.a. by air. Up until this year the college did not have any scientific data or results to support this. Here are the results of one trail near Erie, ND.

Fungicide Trail, Scott Mitchell Farm, Erie 1999

			FHB	Flag				
		% Head	% Field	Leaf	Leaf	Head		
Treatment	Incidence	Severity	Severity	Rust	Spx	Coverage	Yield	Twt
	%	%	%	%	%	%	bu/A	lbs./bu.
Check	10.0	7.6	0.8	3.2	47.6	0.3	51.1	58.5
Aerial	7.5	8.3	0.9	0	13.3	5.8	56.1	58.8
Rocator	5.9	6.0	0.3	0	12.1	4.4	57.9	57.4
F+B	0.8	0.8	<0.1	0	4.5	35.5	62.4	57.3
LDS	7.7	5.6	NS	6.4	13.8	8.1	8.7	NS
C.V.%	79	63	127	28	45	44	10	2

- a. Fungicide treatments with Folicur at 4 fl. oz/acre + 0.2% Activator 90 $\,$
- b. Leaf spots a mix of tan spot and Sepioria nodorm and Sepioria
- c. Application by Tall Towers Ag Service, Page, ND, Tim McPherson, applicator (5 g.p.a.)
- d. Application by Tall Towers Ag Service, Page, ND (10 g.p.a.)

The other trial was done at Casselton with essentially the same type of results, although the disease pressure was not as high. The big sales pitch has been more water (20 g.p.a.) to get better yields. The past 3-4 years with the increasing number of ground application machines, most of these guys having only been in the business a few years (3-5 years), this has been a good marketing ploy for them, saying 20 g.p.a. does a better job than 5 g.p.a. All without any data to support their claim. That's why we wanted these trials and we want to continue to have them. You need three years of consecutive data to get scientific results that can be used.

The trials the college have done have been just pattern coverage testing. They have never carried out the whole trial to end yield results. The initial coverage of the 20 g.p.a. versus 5 g.p.a. looks better on the top leaves. So it was assumed this led to better yield. Its like playing football game on paper, they should win. That is where these trials come in. The end result is what pays the bills, not the assumed result. The airplane has more even distribution of spray coverage throughout the plant canopy. The ground guys have tried to make high pressure sprayers to try and do what the airplane has been doing forever.

With the past 5-6 years being so wet throughout tour area, the airplane has had to do much of the herbicide work. The results have been as good as any. Just about all of the chemical labels have 5 gals. per acre by air on them. If 5 gallons didn't work, these big companies (Zeneca, Monsanto, AGrevo, AM-Cy, Novartis, etc.) wouldn't stand behind their products put on by air.

One thing that is never mentioned in all these ground trails its the yield loss due to wheel tracks and compaction. There is data of sugar beet loss due to these factors, by moving rows, weeds in wheel tracks and disease spread. We hear compaction isn't a factor because of freezing and thawing. The ground only freezes and thaws once a year, not enough to disturb the compaction factor.

We can ague back and forth as to which is better, but the end result is what we need to look at. You need to know your local applicator and work with him and maybe have a plot of your own, so you can compare the results. The college can help you on the plots.

These chemical labels not only specify the gallonage but more importantly the timing of their product. If the chemical is not put on in the window stated, it's not going to do the best job. This is another area you can call on your applicator to get it done on time. The price spent on application more than offsets the probable increase in chemical, having to increase rates or changing chemical to do the job. Timing is where you get your best results. If you can't get it done, call your applicator. Support him not only in the wet years, but rely on him to get it done on time when it gets dry again.

The bottom line on all this testing is to do the best job for you the farmer. Most of the aerial applicators in our state have been in business for many years (20 plus). With this experience, let's work together on getting more proven results. A saying that has been common in the aerial world has been: We measure our results by yours. There are may good varieties out there. We're selling Novartis, Mycogen, Asgro and Stine. Give us a call with your needs. We are getting more chemicals in bulk for the 2000 season.

Thanks for your support in 1999!



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"LANDING 2000"

UPPER MIDWEST AVIATION SYMPOSIUM

MARCH 5-8, 2000

Ramada Suites, Fargo, ND 701/277-9000

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\$20.00			Spouse
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\$15.00		fessional Aviation Mechanics Association	North Dakota Prof
\$10.00		mbership (Non-Voting)	Associate Men
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			4492 Hwy 6
		form after February 18, 2000	Mandan, North Dakota 58

What is the North Dakota Aviation Council?

Many of you are receiving this complementary issue of the *North Dakota Aviation Quarterly* for the first time.

Even if you do not plan on visiting us at the Symposium, we'd like to acquaint you with our organization: the North Dakota Aviation Council, "United We Stand."

The North Dakota Aviation Council was founded in 1983 by six state aviation organizations interested in promoting aviation in the state and in presenting their concerns before government and the general public. NDAC was founded with the notion that solutions to problems facing aviation in this state can be best served by consolidating and working together rather than struggling as independent special interest groups.

NDAC seeks to serve aviation professionals by provid-

ing a forum for the exchange of information, ideas, and experience among their peerpilots, agricultural operators, airport manager, FBO's, mechanics and educators. Advancing their goal is an important function of the Upper Midwest Aviation Symposium (our annual convention). Over the years, NDAC has become and influential voice for the flying public and aviation services in North Dakota. By combining our talents and resources, we are set to explore answers to the most pressing issues of today and ready ourselves for the exciting challenges of tomor-

Organizations making up NDAC: NDPAMA, North Dakota Professional Aviation Mechanics Association NDAA, North Dakota Aviation Association AAND, Airport Association of North Dakota NDFF, North Dakota Flying **Farmers** NDAAA, North Dakota Agricultural Aviation Association NDPA, North Dakota Pilot's Association DTAM, Dakota Territory Air Museum **Affiliated Organizations** Associate With NDAC: North Dakota **Aeronautics Commission** North Dakota Aviation Quarterly, 99's For further information on joining a member organization contact: ND Aeronautics Commission P.O. Box 5020 Bismarck, ND 58502 701/328-9650 With you we can make a difference. Call now!

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