

N.D. aviation grew in the 80s

General aviation aircraft in North Dakòta in 1982 totaled 1,815 which were registered by the State Aeronautics Commission compared with a total of 1.254 aircraft in 1972, an increase of 561 or 45 percent in the past decade, according to Harold G. Vavra, director of the North Dakota Aeronautics Commission

General aviation aircraft includes fixed wing aircraft, helicopters, specialized aircraft and helicopters used for aerial crop spraying and air ambulance ser-. vice.

In 1982, there were a total of 1,503 aircraft and helicopters in North Dakota owned and operated by corporate and professional businesses, air taxi and fixed base airport operators, which are used for transportation of persons and property and for air ambulance, flight training and weather modification flights. سيسودي ومشاري مردا يستعسوني وتتراد وتجتهد ترييسه مرا

In 1982, the North Dakota Aeronautics Commission licensed a total of 312 aircraft and helicopters for specialized use in aerial agriculture, which treated 3,100,146 acres of crops for control of weeds and insects. This compares with 1972, when 267 aircraft were used for aerial agriculture and treated 2,750,000 acres in that year.

In the decade of the seventies, the 1981 year was the highest when 325 aircraft and helicopters aerial sprayed 4,001;000 acres of crop land. Aerial agriculture is a great economic assistance to agriculture in North Dakota because of the short growing season and the need to apply agricultural chemicals to control weeds and insects as rapidly as possible. This is specially true when farm fields are wet and ground equipment is impractical under such conditions. Also aircraft do not physically damage crops compared with ground equipment, which knock down crops under the equipment tires.

In the United States at the end of calendar year 1982, there were 213,226 airworthy general aviation aircraft and helicopters operated by corporate and professional business, air taxi and fixed base aviation operators; private persons, most of which were used for transportation of persons and property, flight training, aerial agriculture and air ambulance services.

hours, while business and executive use craft and helicopters; of aircraft for transportation of persons accounted for 35 percent of the use and 31 percent was the use of aircraft and helicopters for specialized services including commercial air taxi, for air ambulance flights. In North energy business, Vavra said. Dakota the percentage use of aircraft and helicopters pretty well parallels na- . In North Dakota using an average antional trends, Vavra said.

Despite a national growth rate of only one percent during 1982, the nationwide fleet of 213,226 general aviation aircraft is forecasted to grow at an average annual rate of 3.8 percent in the decade starting January 1, 1983 and ending December 31, 1992, to over 300,00 air-

In-North Dakota, the growth rate of general aviation aircraft and helicopters between 1981 and 1982 was over 5 percent, much greater than the agricultural use for crop spraying and inational rate because of an expanding

> nual growth rate of 3.8 percent, the general aviation fleet of 1,815 aircraft and helicopters is forecasted to grow to 2,600 in number in the decade between January 1, 1983 and ending December 31, 1992, Vavra said.

> Utilization of aircraft and helicopters in the United States will grow in the next

decade from about 41,000,000 logged flight hours in 1982 at the rate of 3.8 percent per year to 62,000,000 flight hours by the year ending December 1992, which is the equivalent of 11.2 billion air miles, Vavra said.

Turbine Powered Aircraft and Helicopters.

In the United States, the Federal Aviation Administration has forecasted a much greater growth rate in the next decade for general aviation turbine powered aircraft and helicopters and aslow growth rate for piston powered aircraft, Vavra said.

In the United States, the present inventory of airworthy general aviation aircraft includes:

168,500 Single engine piston			
powered aircraft			
30,000 Multi-engine piston		•	
powered-aircraft	-		
5,000 Turbo-prop aircraft			
2,900 Turbo-jet aircraft			
3,800 Turbine powered		۰.	
helicopters		÷	
3,026 Piston powered helico	pter	s	
	-		

213,226 Total"

While the number of piston powered aircraft, both single and multi-engine, will grow slowly at 3.2 percent-per year in the next decade, turbo-prop and turbo-jet aircraft will more than double from the present total of 7,900 in this category to 16,600 in the next decade, according to a federal forecast.

The growth rate of the number of helicopters in the U.S. in the next decade will average 5 percent per year, a growth rate of 50 percent greater than piston powered aircraft, Vavra said.

FAA Control Tower Activity to Greatly Expand

Aviation activity at the Federal Aviation Administration's air traffic control tower airports are forecasted to reverse a decline that set in during the recession and resulting from the air traffic controllers' strike. Airports in North Dakota with FAA air traffic con-

constitution and by laws

Gordon Person - Chairman

The Aviation Council has now accepted and approved the Proposed Constitution and By Laws at the April 1 meeting in Bismarck. We have three officially formed organizations as members at the present time. The new NDAA Group - "FBO's," NDAAA Group "AG," and NDPAMA group "Mechanics." Several other aviation groups have expressed a desire to join NDAC when they become organized or vote to achieve membership on the council.

I have received a letter of application from the newly formed NDPA - "Pilots Assn." I attended one of their meetings at Grand Forks and they are organizing a statewide membership drive. This application will be on the agenda at the next council meeting.

The Council "NDAC" consists of two representatives elected from each member organization. The

Council will strive to gain strength through the combined memberships for legislative purposes. Also the Council will handle the logistics for the annual Aviation Convention which will be held in Bismarck, March 12-15, 1984 at The Kirkwood Motor Inn. It is a desire of the Council to gain enough strength to be able to produce a monthly paper with information and news for all of general aviation in North Dakota.

Each organization still retains their own identify and plans their convention program, sets dues, elects officers and representatives to the Council.

The long range outlook for aviation in North Dakota will greatly improve with combined cooperation of all aviation entities, rather than each organization trying to do their own thing.

The next Council meeting will be held on August 19, 1983 at The State Aeronautics Office at 10:00 a.m.

Council approves proposed

users in 1982 logged about 41,000,000 flight hours in the United States which is equivalent to 7.4 billion air miles utilizing 213,226 airworthy aircraft and helicopters, Vavra said.

The general aviation fleet of 1,815 aircraft and helicopters in North Dakota is a part of the national air transportation system.

In 1982, in the United States, flight training and personal use of aircraft accounted for 34 percent of the total flight June 1983 👘

The council's minutes

Relative Wind

chairman Gordon Person., Present at the meeting were: Kaye Vogel and Jan Kelleher, representing the 99's; Bill Thompson, NDAAA; Arnie Widmer, Flying Farmers; Duwayne Ostlund, Industrial Members; Bill Kuehn, Airport Authorities: Gary Johnson and Larry Buller, NDPAMA; Harold Vavra, **Aeronautics Commission.**

The minutes of the March 9, 1983 meeting were read by Secretary Larry Buller. Lyn Thompson moved that the

General aviation aircraft owners and The meeting was brought to order by minutes be approved as read, Gary Johnson seconded, motion carried.

> A report was heard from Jan Kelleher Pace, NDAA; Lynn Larson and Lyn stating that while the 99's organization cannot become officially involved with NDAC because of its tax exempt status, it would be interpreted in becoming involved in an ex officio or individual basis. Possibly helping with a ladies program or pinch hitter course.

> > A letter dated 3-28-83 from Bill Pace to See "representation" page 2

trol towers are located at Bismarck, Fargo, Grand Forks, and Minot.

Aircraft operations at FAA air traffic control tower airports in the U.S. are forecasted to increase from a total of 50,600,000 landings and take-offs in 1982 to 99,700,000 by the end of the next decade, an increase of 97 percent.

The increase of 49,100,000 aircraft landings and take-offs at FAA air traffic control tower airports by the end of the decade will result from the following increased activities:

125 percent increase in general aviation landings and take-offs.

78 percent increase in commuter airlines landings and take-offs.

Page 1

24 percent increase in large air carrier landings and take-offs.

Pesticides absorbed into body mean trouble

Pesticides absorbed through skin, consumed or inhaled can mean trouble. They an blister skin, blur vision, weaken muscles. They can cause headache, diarrhea and convulsions. They can kill-though relatively few farm fatalities result from pesticide poisoning.

The last such fatality in North Dakota occurred three years ago. A farm worker took a mouthful of pesticide believing it was water. He immediately spit it out, but too late.

Most pesticide accidents involve spills on the skin, and these usually are more uncomfortable than life-threatening, according to Bob Fanning, extension farm safety specialist at North Dakota State University.

To work safely when handling pesticides, says Fanning, take three basic precautions.

"First, read the pesticide label to learn how toxic the substance is, what

Person is chairman In the May 1983 issue of Relative

Wind Dennis Rohlfs, general manager of Executive Air Taxi Corp., Bismarck, N.D.; was listed as being elected chairman of the board of the North Dakota Aviation Association.

Gordon Person is actually the chairman of that board. Person is associated with Dakota Aero Tech, Fargo, N.D.

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precautions to take when handling it, and what first aid to apply in case of poisoning.

"Second, take special care when pouring, mixing and loading pesticides. Most pesticide accidents in North Dakota occur during these operations.

"Third, wear protective clothing. Poisoning by swallowing and inhalation are far less.

A waterproof apron or lightweight raincoat should also be worn when handling very toxic or concentrated substances.

When wearing these clothes, says Ruth Gulbrandson, clothing & design specialist at NDSU, pesticide handlers should button collars snugly, and should wear sleeves outside of gloves, pant legs outside of boots.

Gloves should reach at least halfway to the elbow and should not be lined with fabric. Gloves or cotton or leather should not be worn, as these materials are difficult or impossible to decon-

Representation was discussed at meeting

From page 1

all council members regarding concerns of representation of groups and actions taken at the March 9th meeting. was discussed. A copy of that letter is filed with these minutes as exhibit #1.

Constitution & Bylaws-A copy of proposed constitution and bylaws dated March 1, 1983 was reviewed and discussed on a line by line basis with corrections and deletions recommended by this council. A copy of the revised constitution and bylaws is attached to these minutes as exhibit #2. A motion was made by Bill Kuehn to accept the constitution and bylaws as amended subject to approval by member organizations. Lyn Thompson seconded, motion carried.

Dues and fees-

Gordon Person detailed convention costs of approximately \$10,000. He suggested exhibit fees to be set at \$125 each with individual convention fees at about \$15. Those rates would raise about \$18,000 in revenue. Discussion was tabled.

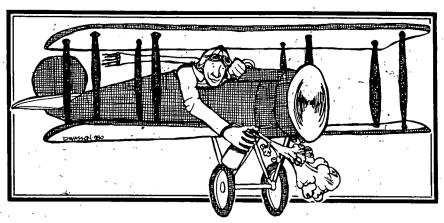
Publication-

Relative Wind.

1984 convention plans were discussed. Dates will be March 12th through the 15th, 1984 at the Kirkwood Motor Inn.

Gordon Person made a suggestion to call the convention "10th Annual Upper Midwest Aviation Symposium, sponsored by NDAC". There was no opposition to the suggestion. Exhibitor contracts were discussed, a proposed form was passed around.

The next meeting will be held in August at a date and time to be determined



taminate.

Wear neoprene gloves when handling highly toxic pesticide, says Gulbrandson, but not when handling certain fumigants that are readily absorbed by neoprene: check label:

Unlined waterproof boots should be worn over other footgear and should reach at least halfway to the knee. Painful lesions on the feet can result from spilling pesticide on leather boots and later walking through wet grass which activates the pesticide in the boots. Pesticide cannot be removed from leather boots.

Hats are important. The head absorbs pesticide faster than any other part of the body except the genital area. A plastic hard hat with a plastic sweatband, not a sweatband of leather or cloth, is a good hat choice, says Gulbrandson.

For additional protection, Gulbrandson suggests goggles or a face-shield. She notes that a respirator should be worn when there is a risk of inhaling toxic pesticide.

Clothing worn by people working with pesticide should be laundered daily. If clothing gets soaked with highly toxic pesticide, it should be destroyed.

For instructions on special washing procedures for pesticide-contaminated clothing, Gulbrandson recommends extension Circular HE-382 "Tips for Laundering Pesticide-Contaminated Clothing," available at county extension offices.

'If, despite all precautions," says Fanning, "a person gets pesticide on the skin, the first thing to do is wash the area with soap and water and change clothes.

'If the accident seems serious, call the North Dakota Poison Center toll-free number for advice on how to treat the injury. The call is free to anyone in North Dakota.'

The toll-free poison information number for North Dakota: 1-800-732-2200:

See "poisoned" page 4

Pilots' association searching for members

By Don Dubuque, President N.D. Pilots' Assn.

After two organizational meetings, the newly formed North Dakota Pilots' Association is looking forward to working for all types of pilots throughout the state.

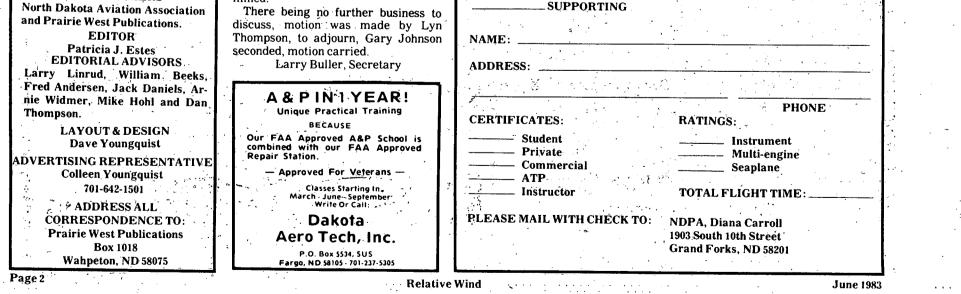
Our goals for members are varied, including biennial flight review clinics and a state-wide network of job placement opportunities and eventually a publication of aviation news in North Dakota. We want to keep pilots informed of current and pending federal and state legislation and how new laws will affect pilots and general aviation. The NDPA plans to promote safe flying by sponsoring local safety seminars and examining the benefits and problems encountered by the pleasure. pilot. We will need to establish direct lines of communication between NDPA and (ithe state FSDO and the area Flight Service Stations.

Consensus was held to continue research into a replacement for The main event of the year for NDPA will be the annual convention to be held in Bismarck in March. Our tentative schedule includes presentations by the FAA, a program on aviation law and insurance, and an introduction to ultra-light flying. The exhibits will display the latest in simulation technology, ultralight aircraft, hot air balloons, and major aircraft and equipment manufacturers. Members are welcome to suggest other areas of interest.

NORTH DAKOTA PILOTS' ASSOCIATION **MEMBERSHIP APPLICATION**

ACTIVE: \$10

ASSOCIATE (Non-pilot, Student Pilot): \$5





Around the State

ROLETTE . . . is planning to seal cracks on the runway with a rubberized crack filling material. For more details on this type of crack filler, contact the North Dakota Aeronautics Commission.

VALLEY CITY . . . has completed an airport fencing project and will be constructing the NDB antenna structure. This will allow for an IFR approach when completed.

KENMARE . . . will pave an apron south of the hangars. They also sealed the cracks and repaired some runway lights. The airport authority expects two or three new hangars to be built this year.

GLEN ULLIN . . . has applied with the Energy Impact Office for a grant to help construct a hard surface runway. Any airport in the energy impacted area may pursue this avenue for additional financial aid.

STANLEY . . . is planning to overlay and do a minor runway extension to preserve the existing pavement and create better drainage. Negotiations with a highway asphalt contractor nearby have been undertaken.

KILLDEER . . . The Dunn Co. Airport Authority will explore the possibility of hard surfacing their dirt-grass runway in conjunction with a highway job to be let in mid-June.

LANGDON . . . has coordinated a county seal project to include the airport's runway, taxiway, apron and entrance road. They will fill the cracks first before the seal coat is applied as recommended during the summer hot period.

Announcement! WAY-POINT AVIONICS HAS MOVED!

Thank you for the tremendous support you have shown us over the last seven years at Mandan.

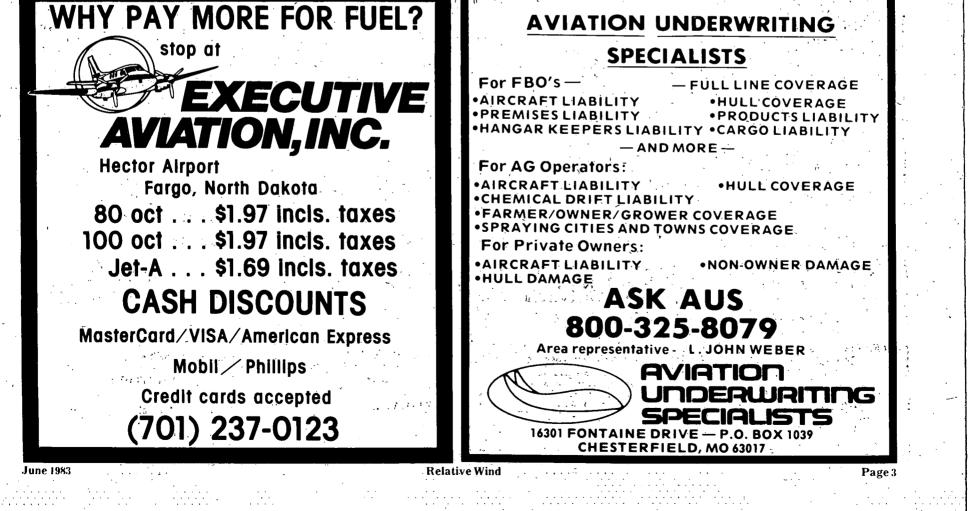
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Fly-In Pancake Breakfast

Northern Airways, Inc., Grand Forks Trophies will be awarded to the International Airport, invites the public youngest pilot, oldest aircraft, and airto their Fly-In Pancake Breakfast and open House beginning at 7 a.m. Sunday, June 5.

The Cessna Citation jet and another air- Northern Airways will also present a craft will be on display during the open house as well as a hot air balloon by Dakota Balloon Adventure.

craft flown in from the longest distance for the event and airplane rides will be available all day.

display on their Medavac Air Ambulance Program and Pilot Training Program.





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P_sticides ar_n't like a toy

How many times have you started to put something together — a toy for the label directions? Reluctantly, you usually end up reading the directions.

This isn't the way it works with pesticides. Reading the label directions before buying or applying pesticides is essential. "In fact, it is illegal to use any pesticide in a way inconsistent with Pesticide selection should never be the label directions," says Richard A. Meronuck, plant pathologist and pesticide applicator training coordinator with the University of Minnesota's Agricultural Extension Service. (Information here applies to pesticides and includes insecticides. fungicides and herbicides.)

Don't think of giving any leftover

pesticide to a neighbor without supplying the label directions. They are more kids, for instance -- without reading the " important than the product in the bag ment 'Keep out of the reach of children' or container; pesticides are worthless unless the label is there to tell you what you are dealing with. Better yet, buy only the amount you need to do a job and you will have no leftovers to be con-

cerned about.

label or the familiarity of the manufacturer. The label will tell whether the safely under the application conditions. the doctor."

If the label says 'Danger-Poison' and The label will, list hazards to the en-

pesticide. 'Caution' means a pesticide Herbicides applied to roadside brush with low or slight toxicity. The stateis required on each pesticide label.

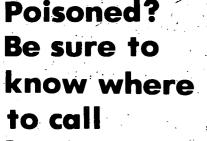
Labels for all highly toxic pesticides must give instructions for first aid treatment if accidental poisoning occurs. Many of the labels for less toxic pesticides will also list first aid treatment. "If you see a physician for treatmade on the basis of the color of the ment of pesticide poisoning, take the label from that pesticide container with you to the doctor or the hospital," pesticide is too hazardous to be used Meronuck says. "This will be helpful to

includes a skull and crossbones symbol; vironment as well as to humans. Bees this indicates a highly toxic pesticide. can be killed if a crop is treated while 'Warning' indicates a moderately toxic they are nectar gathering in that field.

can drift out of the spray area and kill nontarget crops or ornamentals. Runoff from a recently spraved field can kill fish in streams or ponds below a field. Aquatic life in streams can be wiped out by careless tank filling and poor container disposal: These kills can result in poor publicity, lawsuits, fines and loss of certification to apply pesticides.

Information on where and how to store the pesticide is also provided on labels. There are also instructions on how to decontaminate and dispose of the pesticide container and where to dispose of surplus pesticides.

The label needs to be read several times: before purchase, before mixing and before applying pesticides.



From page 2

People in surrounding states and Canada can call 701/280-5575, though this number is not toll-free.

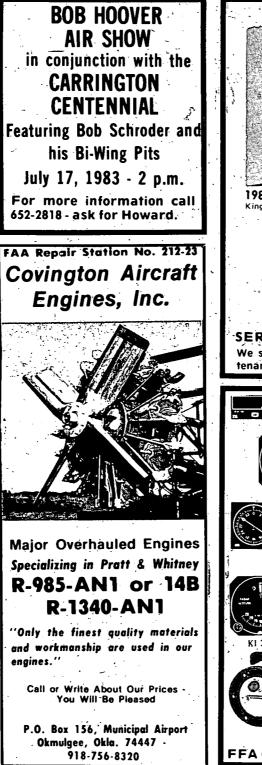
Staff at the North Dakota Poison Center, located at St. Luke's Hospital in Fargo, are on duty 24 hours a day to give medical instructions. If professional treatment is required, they will direct the injured person to the nearest hospital and will contact that hospital to alert staff that a patient will be arriving

How much **Hoelon 3EC** is enough?

SOMERVILLE, N.J. - A new method which allows a wheat producer to accurately determine if the applied rate of Hoelon^a 3EC Herbicide for foxtail control can be reduced, has been developed by American Hoechst Corporation, Agricultural Division. These guidelines are the first such to be developed for use with a postemergence selective herbicide.

Technical service representatives at American Hoechst have developed a new point-system analysis based on several different production factors. A wheat producer will be able to use this unique point-system to evaluate his foxtail problem and determine if he can use the lower 2 pint rate per acre for Hoelon, reducing herbicide cost by up to 25 percent.

For best control with this economical 2 pint per acre rate, proper conditions be present T is a simple method which allows a producer to easily determine if conditions are right for the lower 2 pint rate and savings.





For more information about this unique system, producers should contact their Hoelon dealer to obtain a copy of Technical Information Sheet No. 102 and discuss this new option. Ten minutes with a dealer could save a grower up to 25 percent of his Hoelon application cost. 7

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June 1983