N.D. FLYING FARMERS ANNUAL CONVENTION AT DEVILS LAKE ON SEPTEMBER 24-26, 1976

Fred Gage, Oriska, President announced that the annual convention of the North Dakota Flying Farmers Association will be held at Devils Lake, N.D. at the Art Clair Motel, September 24, 25 and 26th.

The 1976 Devils Lake Convention Committee includes: Bill Grieve, Buffalo, Convention Chairman and the following convention activity Chairmen:

1. TRANSPORTATION: Duane Hoggarth, Kenaal, Chairman and Donald Berge, Northwood
2. TOURS: Dan Wakefield, Devils Lake, Chairman and Lee Gemrich, Hatton
3. REGISTRATION: Elma Rambough, Braddock, Chairwoman and Pat Hoggarth, Courtenay
4. ENTERTAINMENT: Dal Anderson, Starkweather, Chairman and Ralph Helb, Medina
5. AFT-BIENNIAL RIDE: Rom Hoggarth, Courtenay, Chairman and Duane Rau, Medina
6. DOOR PRIZES: Arlyn Kraft, Mapleton, Chairman and James Miller, Mapleton
7. HOSPITALITY ROOM: Beverly Grieve, Buffalo, Chairwoman and Cheryl Hoggarth, Kenaal,
   Jeanne Rau, Medina and Betty Dahl, Cogswell
8. PHOTOGRAPHER: Alfred Dahl, Cogswell

President Gage announced that there will be a meeting of all Committee members and directors on Sunday, August 29th at the Art Clair Motel at Devils Lake. Dinner will be on your own. The meeting will begin at 2:00 p.m.

GRAND FORKS AIR FORCE BASE OPEN HOUSE FLY-IN — HERE IS YOUR CHANCE TO LAND AT AN AIR BASE

Billed as "Friends and Neighbor's Day", a open house fly-in has been scheduled for Saturday, August 28, 1976.

Aircraft displays on hand will be C-5 Galaxy; B-52 Stratofortress; KC-135 Stratotanker; C-141 Starlifter; General Aviation Fleet and Others.

Events scheduled are: Pilot Safety Clinic; USAF Academy Parachute Team; Strategic Air Command Band; K-9 (military dog) Demonstrations; Minuteman Missile facility tours; Radio Controlled model aircrafts; Square Dancing; Food and Refreshments.


All pilots will be required to complete Air Force Form 180 "Hold Harmless Agreement" immediately upon landing.

BREAKFAST FLY-IN AT LEONARD, N.D. SEPTEMBER 12TH

With breakfast scheduled from 7:00 a.m. to 10:00 a.m. and followed by parachute jumpers, many other activities and a N.D. National Guard fly-over, Leonard, N.D. welcomes all of you to join them in celebrating the completion of their new runway.

Leonard is an example of what a small city population (221) can do if it has the determination in upgrading its airport. A asphalt hardsurfaced 2000 X 40' runway and a small ramp are the results of an airport authority spear-headed by Chairman John Heuer and hard working Gary Ditter, Vice Chairman, Earl Roesler, C. N. Richards and Darrol Schroeder comprise the balance of the Authority.

Force account methods were used in matching a N.D. Aeronautics Commission grant of $13,500 for a total of 27,000 costs.

NINTH ANNUAL FLIGHT INSTRUCTOR REFRESHER COURSE NOVEMBER 30 - DECEMBER 2ND, 1976

To be the last of the FAA Air Academy presented Flight Instructor Courses presented in North Dakota, dates have been set as November 30 to December 2, 1976 at the University of North Dakota. Hereafter FAA will certificate by an Air Agency Certificate schools and Fixed Base Operators to conduct Refresher Courses. The UMD Department of Aviation presently has plans to acquire a certificate and may also conduct training schools for operators who may wish to certificate. If more information is needed, send your name to Department of Aviation, UMD, Box 8216, University Station, Grand Forks, N.D. 58201

N. V. BOLSTEB, Editor

STATE OF NORTH DAKOTA

JULY - AUGUST 1976
The notion of a "right to education" is explicitly mentioned in the United Nations' Declaration of Human Rights, which states that education is a fundamental right of every child. This right is further reinforced in various international agreements, such as the International Covenant on Economic, Social, and Cultural Rights, which came into force in 1976.

In many countries, the government is responsible for providing education to its citizens. However, in some cases, private organizations and individuals play a significant role in providing education. For example, in the United States, private schools are a common alternative to public schools, offering various programs and teaching methods.

Moreover, education is not just a right but also a tool for personal development and social progress. It enables individuals to access opportunities, improve their livelihoods, and contribute to their communities. In this regard, education is a key component of sustainable development and global prosperity.

In conclusion, the right to education is a fundamental right enshrined in international law. It is essential for the development and well-being of individuals and societies alike. Therefore, efforts should be made to ensure that every child has access to quality education, regardless of their background or circumstances.
Michael G. Beiriger, formerly in the flight section, has been appointed as Chief of the Accident Prevention Program. As such, Mike will be seen at meetings of pilot groups and others, whereby he will be reminding us of the importance of being ever safety conscious. The following article of his on Prop Blade Nicks is especially appropriate in that all of us can recollect fatal accidents or near fatal accidents as the result of damaged propellers.

An uneventful pleasure flight can suddenly be turned into a serious accident by the failure of a propeller blade tip. These failures can frequently be traced to nicks and scratches that were ignored. Any significant disturbance of the propeller surface may increase stress on that blade to a point of failure in a very short time.

The ordinary preflight inspection tends to scant the propeller. The pilot may do nothing more than run his eye down the leading edge of the blade and, if nothing catches his attention, move on. What he should do, realizing the consequences of an inflight propeller failure, is to scrutinize and feel — with clean, dry hands — the entire surface of the blade. Nicks or cuts that escape the eye are often easily perceptible to the fingers. Inspection is easier and more accurate if the blade is kept clean. This is facilitated by occasional waxing with a paste wax, which helps prevent corrosion. Decals on a prop, incidentally, have been known to permit the accumulation of hidden corrosion.

The removal of small nicks or defects is not "preventive maintenance" which may be performed by the pilot, but must be referred to a qualified mechanic for corrective action. Remember, one little nick can knock you out of the sky.

VORTEX TURBULENCE AGAIN REARS ITS UGLY HEAD

The National Transportation Safety Board recently released Issue No. 5 of "Aircraft Accident Reports — 1975", which contains the synoptic computer-printed reports of 509 general aviation accidents and 15 air carrier accidents.

One of the accidents reported in Issue No. 5 involved a Cessna 150, flown by a commercial pilot with instrument and instructor ratings, which occurred during a local instructional flight while approaching to land on runway 5R at McGee-Tyson Airport at Knoxville, Tennessee on December 16, 1975. The measured ceiling was 2,300 feet overcast, visibility 10 miles, wind 030 degrees at 08 knots; weather was not considered a factor in this accident.

The Cessna 150 was proceeding downwind to runway 5R, with the student pilot flying, when the instructor observed a Boeing KC-97 on a short final, and another KC-97 about six or seven miles out on final approach. At this time, the instructor pilot reported "I initiated a call to the Tower requesting to be routed between the two KC-97's — the one landing and the one on final approach. The tower gave me an affirmative for a short approach and cautioned me about wake turbulence."

"I took the controls and initiated a turn to base leg and to final. On final I added full flaps and retarded the throttle to idle position. The carburetor heat was in the 'on' position.

"At about 200 feet above the ground, the aircraft encountered wake turbulence and began to roll -- to the left first and then to the right. I then added left aileron control and full power. The next thing I recall the plane was wing-rocking uncontrollably and was very near the ground in a left wing low attitude and was drifting swiftly to the right in spite of my actions to correct it. The stall warning never sounded. Before impact I pulled out the throttle. At that point, the plane's left wing tip and left main gear struck the ground... the aircraft continued sliding to the left and forward... and the nose wheel became detached from the aircraft. The occupants were uninjured; the aircraft was damaged substantially."

Encounters with vortex turbulence generated by preceding aircraft, particularly large multi-engine prop or jet types, can cause involuntary loss of control in smaller and lighter following aircraft. The Safety Board, the Federal Aviation Administration, and the industry have issued repeated warnings to pilots, particularly general aviation pilots, on the "potential dangers" inherent in such situations — and which was so graphically demonstrated in the Cessna 150 crash at Knoxville.

A review of Safety Board records over the most recent five-year period, 1971 through 1975, reveals that vortex turbulence was found to be a causal factor in 76 accidents. Sixty-five of these accidents were non-fatal; eleven were fatal and took the lives of 19 people. One of the fatal accidents even involved a DC-9 training flight on a landing approach; when it crossed the runway threshold it encountered the trailing vortex of a departing DC-10 and crashed out of control.

Most of these accidents would never of happened, the Board said, if the pilots of the "following aircraft" had "understood and respected the "conditions and circumstances" where the presence of vortex turbulence could be expected to be encountered — especially during takeoff and landing.

The 1975 Issue No. 5 volume may be purchased from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22151.

* * * * *

IT PAYS TO WRITE TO CITY HALL AND LET YOUR VIEWS BE KNOWN

VFR Flight plans will not be discontinued as originally planned by FAA. Apparently voluminous protest in answer to a Notice of Proposed Rule Making (NPRM) changed minds.

* * * * *


"In this case, the density altitude for that airport elevation and temperature was 5,400 feet, or more than 2,000 feet higher than actual elevation. The high grass made an already bad situation worse.

This pilot did get a weather briefing before he tried to take off, but he almost certainly did not heed a cardinal rule for any takeoff in mountainous terrain: or in hot weather. Make careful preflight calculations of density altitude and then refer to your aircraft manual to determine its effect on takeoff distance and climb performance."

The Board added that although density altitude had been cited as a causual factor in only 87 of 4,125 accidents reported to date for 1975, its potential for fatal accidents is high. Of the 4,125 total accidents, 647 were fatal - roughly one in every six. Of the 87 density altitude accidents, 20 were fatal - about one in every four.

"Against those odds," the Board urged, "never forget - or over-estimate - your aircraft's performance capability when you're high, hot and heavy."

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**RON DECK OF HILLSBORO HAS NEW MAINTENANCE SHOP**

Ron Deck of Hillsboro has informed the N.D. Aeronautics Commission that he has opened a Airframe & Powerplant repair facility at his private airstrip 5 miles north of Hillsboro, N.D. Pilots are welcome to drop in and look over the facility at any time. Richard Altendorf is the A&P.

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**AIRPORT CONSTRUCTION GRANTS ALLOCATED BY N.D. AERONAUTICS COMMISSION DURING FISCAL 76**

TOTAL $407,838 - ASSISTS 26 AIRPORTS

With construction grants to airports that break down to 6 air carrier airports receiving $176,155 and 21 general aviation airports receiving $231,683 for a grand total of $407,838, the North Dakota Aeronautics Commission has made the largest disbursement of user taxes in its history. State airport grants are funded by user taxes that consist of a 42 excise tax of the gross purchase price of aviation gasoline and jet engine fuel. The 42 is deducted from the 1c per gallon refund which in the past has been refunded to the user upon application for refund.

One of the interests to the average pilot is the fact the a substantial portion of the grants were made to small airports that do not qualify for any type of federal-aid. This type of bootstrap aid has resulted in quite a few new airports that normally would never have been built. The funds are strictly user funds, generated by the user and dedicated for airport improvements as contrast to funds obtained from a general fund.

Since the State aid project began, 94 airports in 37 counties have received a total of $619,824. A breakdown of 42 excise tax income is shown as follows:

Fiscal Year Ending July 1, 75  Fiscal Year Ending July 1, 76

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>Gasoline</th>
<th>Jet Motor Fuel</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aviation</td>
<td>$20,733.00</td>
<td>$174,952.00</td>
<td>$195,685.00</td>
</tr>
<tr>
<td>Motor Fuel</td>
<td>$30,304.00</td>
<td>$170,966.00</td>
<td>$201,210.00</td>
</tr>
</tbody>
</table>

**AIRPORTS RECEIVING GRANTS, THE AMOUNTS AND PROJECTS ARE AS FOLLOWS:**

<table>
<thead>
<tr>
<th>Airport</th>
<th>Project</th>
<th>State Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bismarck Municipal</td>
<td>Construction of general Aviation apron</td>
<td>$11,550.00 - Federal Aid</td>
</tr>
<tr>
<td>2. Fargo</td>
<td>Reconstruction of ramp, taxiway</td>
<td>50,000.00 - Federal Aid</td>
</tr>
<tr>
<td>3. Grand Forks</td>
<td>Reconstruction &amp; expansion of terminal bldg.</td>
<td>50,000.00 - Federal Aid</td>
</tr>
<tr>
<td>4. Minot International</td>
<td>Construction of Fire Station</td>
<td>14,650.00 - Federal Aid</td>
</tr>
<tr>
<td>5. Williston International</td>
<td>Overlay paved runway, taxiway</td>
<td>20,000.00 - Federal Aid</td>
</tr>
<tr>
<td>6. Ruby Airport Authority</td>
<td>Pave runway, taxiway, apron</td>
<td>10,750.00 - Federal Aid</td>
</tr>
<tr>
<td>7. Mohall Airport Auth.</td>
<td>Pave runways, airport apron</td>
<td>20,000.00 - Federal Aid</td>
</tr>
<tr>
<td>8. Cooperstown Airport Auth.</td>
<td>Pave and extend runway, apron</td>
<td>20,000.00 - Federal Aid</td>
</tr>
<tr>
<td>9. Watford City Airport</td>
<td>Pave aprons &amp; taxiway</td>
<td>20,000.00 - Federal Aid</td>
</tr>
<tr>
<td>10. Park River Airport Auth.</td>
<td>Pave runway, taxiway, apron - new airport</td>
<td>20,000.00 - Federal Aid</td>
</tr>
<tr>
<td>11. Hillsboro Airport</td>
<td>Build &amp; pave new airport</td>
<td>20,000.00 - Federal Aid</td>
</tr>
<tr>
<td>12. Oakes Airport Auth.</td>
<td>Build &amp; pave new airport</td>
<td>20,000.00 - Federal Aid</td>
</tr>
<tr>
<td>13. Parshall Airport Auth.</td>
<td>Overlay runway</td>
<td>8,000.00 - Federal Aid</td>
</tr>
<tr>
<td>14. Minto Airport Auth.</td>
<td>Build new airport</td>
<td>10,000.00 - Federal Aid</td>
</tr>
<tr>
<td>15. Ellendale Airport Auth.</td>
<td>Install runway lights on new paved airport</td>
<td>1,500.00 - Federal Aid</td>
</tr>
<tr>
<td>16. Arthur Airport Auth.</td>
<td>Pave apron</td>
<td>2,400.00 - Federal Aid</td>
</tr>
<tr>
<td>17. Rolette Airport Auth.</td>
<td>Pave runway</td>
<td>13,250.00 - Federal Aid</td>
</tr>
<tr>
<td>18. Leonard Airport Auth.</td>
<td>Pave runway &amp; taxiway</td>
<td>13,500.00 - Federal Aid</td>
</tr>
<tr>
<td>19. Dayton Airport Auth.</td>
<td>Build turf runway airport</td>
<td>2,679.00 - Federal Aid</td>
</tr>
<tr>
<td>20. Lake Williams Air. Auth.</td>
<td>Install runway lights</td>
<td>1,250.00 - Federal Aid</td>
</tr>
<tr>
<td>21. Wahalla Air. Auth.</td>
<td>Pave apron</td>
<td>6,500.00 - Federal Aid</td>
</tr>
<tr>
<td>22. Hott Airport Auth.</td>
<td>Pave runway, taxiway, apron</td>
<td>15,000.00 - Federal Aid</td>
</tr>
<tr>
<td>23. Mcclusky Airport Auth.</td>
<td>Build new airport - Turf</td>
<td>10,000.00 - Federal Aid</td>
</tr>
<tr>
<td>24. Harvey Airport Auth.</td>
<td>Runway, taxiway &amp; ramp overlay</td>
<td>17,500.00 - Federal Aid</td>
</tr>
<tr>
<td>25. Northwood Airport Auth.</td>
<td>Grade runway</td>
<td>5,700.00 - Federal Aid</td>
</tr>
<tr>
<td>26. Breckenridge-Wahpeton</td>
<td>Non-Directional Beacon Nav. Aid</td>
<td>3,150.00 - Federal Aid</td>
</tr>
</tbody>
</table>

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**AIRPORT TRUST FUND BALANCE**

As of last May 31st, the balance was $2,415,506,160.95, but the new ADAP bill takes out 250 million this year for FAA operational costs. To put the whole thing in perspective, the money to be used for airports is only 437.5 million and a paltry 56 million for general aviation airports.
The North Dakota Air National Guard at Fargo uses a low altitude intercept training area called Devils Lake East and West. It can be in use between 9:30 am and 8:30 pm weekdays and Saturdays from 10:00 am to 2:30 pm. The altitude limits are 4000' MSL to 10,000' MSL.

While the fighters are always under radar control, light aircraft may not be seen because of their size. For this reason, it is paramount that all pilots use the "see and avoid" principle while flying.

It should also be mentioned that the jets go to and from the Devils Lake area at 10,000 or 11,000', and while operating at Hector Field usually operate between 2500' and 4,000' in the traffic pattern. If you are planning a trip to Fargo or operate out of Fargo, ATIS will give you this information on 126.6 anytime the military jets are operating.
FROM: The N.D. Aeronautics Commission
TO: Airport Managers, Airport Authority Chairmen, Maintenance Personnel
SUBJECT: Airport Maintenance - "Rather Deplorable"

From complaints received at the Aeronautics Commission and from our own observations, much is left to be desired in the day to day operation of many of our North Dakota airports.

Growing hay and snow removal are the main problem areas. Growing hay of course should be, mowing only, and the problem at many airports is that the farmer that has the contract to cut the hay, sees no reason to mow the runways until such a time as he gets a good stand of grass. This in effect is farming the runways and has been the direct cause of several bad accidents. This past season saw a twin commande crash because the aircraft attempted a landing with too much of a crosswind. The turf runway was grown nearly into the wind, had grass 3 ft. high on it and was in effect unuseable. Had the turf runway been mowed at the proper time, instead of being used to grow hay, a very valuable aircraft could have been saved and more important, no lives placed in jeopardy.

Snow removal of course is a serious problem as it takes specialized machinery and a completely different approach from the ordinary street or highway snow removal. If the runway has lights, the problem is compounded. Remember lights are used in the dark and the pilot has no way of knowing that in between him and the lights, which he has a right to expect to be cleared of snow, four 6 five foot snowbanks may exist.

Lights should be no further than 15' from the edge of the pavement and snow should be preferably cleared off completely to the lights or if snow is left, that it be no higher than the lights. Airports that have lights or for that matter, any airport that plans on snow removal, should be thinking of a blower to supplement their ordinary plows.

If your Authority has the city crews do the snow removal, be sure they understand what to do and how to do it. The operator may not be the same one that did a fair job for you last year. Be especially certain to caution him not to leave any snow ridges over one inch high on the runway, taxiway or ramp that can harden after a few warm days and subject nose wheels and propellers to damage.

Caution the operator that he has to move the snow out beyond the edges of the runway because subsequent plowing will result in a trench and while your local pilots may not be too concerned about landing with snow bank a few feet from his wing tips, transients become very nervous.

Be very careful about letting heavy snowplows on the pavement during spring break-up, as severe damage can result. Most general aviation airports are built for approximately 6,000 lbs single wheel loading and many snow plows exceed this weight. Of course during the winter with frozen ground, it would support a locomotive.

On the problem of crack sealing, as costly as asphalt pavement is, many airports neglect proper maintenance in crack sealing. Sealing should be done very carefully. Too often, crews will slap hot asphalt along the cracks not filling them at all. This type of work should be done in the early part of spring before the pavement section has a chance to absorb heat from the sun and the cracks are still open wide. The runway lights should be checked once a week at the very minimum, oftener would be better. Again, the transient needs all the breaks he can get to effect a safe landing and departure. Turf runways should be inspected at the same time for gopher mounds, which in themselves are bad enough, but they in turn lead to the big mounds and holes that are cast out when a badger or coyote looks for a meal.

A good general clean up about the hangar area plus keeping the grass and weeds cut about the whole area would not be amiss and would reflect pride about your airport.

Remember your airport is the first impression that strangers flying in receive of your city.

NEW CUSTOMS LAW TO GO INTO EFFECT 1 JANUARY, 1977

Congress tackled on a provision to the recently passed Airway Development Act of 1970 as amended that provides that:

"The managers intend that aircraft entering the United States on Sundays and holidays, during hours which would be considered normal daytime work hours on weekdays, such as 8 a.m. to 5 p.m. or 9 a.m. to 6 p.m., which hours may vary from port of entry to port of entry, not be assessed any charges or fees which are not assessed for inspections services during normal daytime working hours on weekdays. The managers further intend that the quality of the inspection services on Sundays and holidays, following enactment of this provision, shall not be diminished."

This is from a conference report in layman's language that is to accompany H.R. 9771.

SAP IS STALLED

Mandatory carriage of beacon transponders and reporting altimeters by aircraft in (all) controlled airspace is temporarily stalled inside of FAA. (SAP) for the un-knowing means Separation Assurance Program.