AVIATION NEWSLETTER

Vernon H. Baltzer, Editor

STATE OF NORTH DAKOTA

Harold G. Vavra
Director

JULY - AUGUST 1976

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, Kensal, Chairman and Donald Berge, Northwood
2. TOURS: Dan Wakefield, Devils Lake, Chairman and Lee Gensrich, Hatton
3. REGISTRATION: Elma Rambough, Braddock, Chairwoman and Pat Hoggarth, Courtenay Clariece Leichty, Jamestown and Diane Dahl, Cogswell
4. ENTERTAINMENT: Dal Anderson, Starkweather, Chairman and Ralph Heib, Medina
5. APT-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, Kensal, 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 aircraft; Square Dancing; Food and Refreshments.

Runway opens at 0830. Closed 1100 - 1230 and 1400 - 1530. GFAFB located 351 radial Red River VOR (RDR) 116.7, 7.5 NM, Field Elevation 911', Pattern altitude 1700' MSL West of Rwy 35-17 - Tower 126.2 Approach 118.1 Localizer 109.9

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 the paving 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 Dittmer, 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 UND 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, UND, Box 8216, University Station, Grand Forks, N.D. 58201

* * * * *

MAURICE E. COOK FORMERLY OF BOWMAN, N.D. APPOINTED AS NORTH DAKOTA CIVIL AIR PATROL WING COMMANDER

Maurice E. Cook an attorney who formerly had a private law practice at Bowman, N.D., was recently appointed as Wing Commander of the N.D. Civil Air Patrol. Cook, who is presently assigned to the Bank of North Dakota, Bismarck, N.D. as legal officer, has been appointed by Regional Commander Col. Cass to fill the remainder of a 4-year term of Kermit Schauer of Jamestown, who resigned.

Cook, while in Bowman, served as the attorney of the Bowman Municipal Airport Authority and the Bowman County Airport Authority.

He and his wife Heidi, who incidentally is a graduate petroleum engineer, reside at 522 North 7th, Bismarck along with two sons, Brian 13 and Brennan 10.

Col. Cook brings to CAP a wealth of organizational and managerial experience and the Civil Air Patrol is indeed fortunate in securing a man of Cook's caliber.

* * * * *

THE NINETY-NINES, INC. - NORTH DAKOTA CHAPTER MEETS

The North Dakota Chapter of the Ninety-Nines, Inc. will be holding the next meeting on September 18th at Dickinson, N.D. All planning to attend should arrive at the Dickinson Airport at 11:00 Mountain Standard Time.

On behalf of the N.D. 99's, I wish to encourage those of you ladies, who are licensed pilots, to attend and discover what our organization is about. Our purpose is to provide a close relationship among women pilots and to unite them in any movement that may be for their benefit or for that of aviation in general.

If you are interested in the 99's and/or plan to attend the September meeting, please contact Lorraine Smith, 1226 North 19th St., Bismarck, N.D. Tel: 701-255-3687. Vonne Bourgois, N.D. 99 Chapter Chairman.

* * * * *

CIVIL AIR PATROL SCHEDULES 2 FLIGHT CLINICS & GROUND SCHOOLS

Two locations; one at Fargo and the other at Bismarck, have been chosen as sites for flight clinics and ground schools sponsored by the N.D. Wing of the Civil Air Patrol. The Fargo Clinic will begin with an evening ground school session, beginning at 7:00 pm to 11:00 p.m. Friday evening October 22nd and the flying part will be the following two days, Saturday 23rd and Sunday 24th starting at 8 A.M. to 6 P.M.

The following weekend will be a repeat of the same format at Bismarck, starting with ground school Friday evening October 29th at 7:00 p.m. to 11:00 p.m. and the flying portion Saturday the 30th and Sunday the 31st starting at 8 a.m. to 6 p.m. both days.

Any pilots that wish may attend the ground schools and CAP pilots can use this opportunity to receive their biennial check if they so desire during the flight section.

Major Don Hardy, CAP of the Fargo Squadron and Major Douglas Brosveen USAF will be conducting the ground schools. Hardy is also in charge of coordinating the affairs.

Michael Beiriger, Chief of GADO #4 Accident Prevention Program will be on hand at both locations to show slides and present a short program.

Certified Flight Instructors and corporate aircraft will be on hand at both sites for the flight section. Owner aircraft can also be used. The ground school class room locations will be announced by posters and a CAP mailing at a future date.

* * * * *

EXPERIMENTAL DAYLIGHT STROBE LIGHT MARKS CONCENTRATED TURKEY FARM AREA

The Aeronautics Commission in cooperation with the North Dakota Turkey Federation and the Poultry Coordinator of the N.D. State Department of Agriculture recently installed an experimental high-powered daylight flashing strobe light on a pole on the Richard Price turkey farm located 1 mile west of Tolna, N.D. in Nelson County. The flashing white strobe light operates from daylight to sunset on a photocell as a daylight marker to warn low flying aircraft or helicopters of a high concentration of 11 turkey farms within a five-mile radius of Tolna, N.D. in Nelson County. Flocks of 15 to 20,000 turkeys on such farms are easily frightened and stampeded by low flying aircraft.

The Aeronautics Commission would like to get pilot reports as to the visibility of the flashing daylight strobe from the air. We are especially interested in reports from aerial applicator pilots who operate in Nelson County near the Tolna area. Also reports from any pilot flying in this area. The idea of the experimental daylight flashing strobe is to mark a hazard area for low flying aircraft or helicopters toward avoidance of low flight over the concentration of 11 turkey farms within a 5-mile radius of Tolna, N.D. Turkey farms in the Tolna area are located in a radius up to five miles west; 5 miles SW; 3 miles North; 2 miles East and SE of Tolna, N.D. and in between. The idea is to mark the general area to eliminate problems between turkey Farmers in the Tolna area and low flying aircraft and helicopters. The experimental strobe light was specially built by National Airport Equipment, Minneapolis, Minnesota for this use to determine if such a flashing strobe is practical for this purpose. Pilots may address their comments to: Aeronautics Commission, Box U, Bismarck, N.D. 58505.

* * * * *

NEWS FROM GADO #4

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 preceptible 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 2,900 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.

* * * * *

BISMARCK IMPROVES GENERAL AVIATION TERMINAL PARKING SITUATION (New Parking Area to be utilized).

Ray Heinemeyer, airport manager of the Bismarck Municipal Airport, has informed the Aeronautics Commission that General Aviation Pilots may now unload and load their passengers and also park their aircraft in a special designated area south of the main passenger terminal. The new area is a portion of an old east-west runway that has been closed for quite a few years and has recently been vacated by the N.D. National Guard Helicopter unit.

Heinemeyer again stressed the fact that because of the relatively small size of the air carrier ramp and safety reasons, no parking of aircraft would be allowed on the air carrier ramp. He pointed out that pilots may unload their passengers on the Northwest corner of the air carrier ramp if they wished, although he, the pilot, would be responsible that his passengers use the proper entrance and providing he then proceed on to the designated ramp area on the south side of the terminal on the old east-west runway for parking. Two walk gates have been cut into the fenced area and it actually is quite convenient, especially if baggage is to be unloaded and moved on board the airlines. Pilots intending to use the new area should inform the tower of their intentions, upon clearing the active runway. Access to the new parking intersects the parallel taxiway at the intersection of runway 35.

It presently is limited to aircraft under 10,000 lbs. Heinemeyer said, although plans are to resurface the entire area and the weight restriction moved upward to 18,000 lbs. He also added that the $11,550 grant he received from the distribution of the jet fuel and aviation gas excise tax recently, would be used to match federal funds to pave this area.

Heinemeyer at the conclusion of the interview restressed the no parking of general aviation aircraft on the air carrier ramp and said that the new arrangements and new area should be very satisfactory to all.

* * * * *

JAMESTOWN FLIGHT INSTRUCTOR, BETH LUCY, WINS INSTRUCTOR OF THE YEAR AWARD

Not only did Beth Lucy, CHIEF FLIGHT INSTRUCTOR OF COMET AVIATION, win the State Instructor of the year award, she also won the Rocky Mountain FAA Regional Award, 12 of which were awarded in the U.S. The program is devised to give recognition to Flight Instructors who have made outstanding contributions to air safety through their flight instructor practices.

Beth is a Commercial Pilot, SMEL, Instrument, CFI I - Airplane, Ground Instructor, Advanced & Instrument, Chief Flight Instructor, 141 School, Examiner, Private & Commercial.

She received her private pilot certificate on June 10, 1965 and commercial certificate November 9, 1966. In February of 1967, she became a Certified Flight Instructor, airplanes. Her quality of instruction and dedication to good solid fundamental instruction have taught many student pilots basics that have stuck with them as recreational, business and career pilots.

In April of 1968, Beth earned the instrument Rating and became an Instrument Instructor in December of 1968 with the Gold Seal. Also in 1968, she became Ground Instructor for basic, advanced and instrument ratings.

Beth became a pilot examiner in February of 1971 for private and commercial ratings. She is also chief pilot of the approved flight school at Comet Aviation and has composed each of the approved courses from scratch to give the student the most beneficial instruction for the time logged. She has tailored each course to give students as much experience as Jamestown and other area airports can offer, without depending on prepared courses for much of the planning.

A presentation award dinner was held in June and she was awarded a plaque by Lee Mills, Chief of the Fargo GADO and Harold G. Vavra, Director of the Aeronautics Commission.

* * * * *

AUGUST & SEPTEMBER BAD DENSITY ALTITUDE MONTHS OR (Does Your Aircraft Engine Seem Worn Out, No Power)

In Issue #4 of its "1975 Brief of Accidents" of synoptic reports of 894 general aviation accidents & 28 air carrier, included were 15 general aviation cases of high density situations.

One of the 15 accidents was the fatal crash of a pleasure flight on an attempted takeoff from a 3,120 foot high grass airstrip in North Carolina last August. The pilot and all three passengers died when their Piper PA-28 struck power lines and trees a quarter of a mile or more beyond the departure end of the strip.

Although exact weight could not be determined, the Safety Board found that the aircraft could have been within about 50 pounds of its maximum gross weight for takeoff. The temperature was 80 degrees. Grass on the 2,845 foot long runway was about four to five inches high. (Note: doesn't have to be very hot).

The Board concluded that the probable causes of the accident were the pilot's inadequate preflight preparation and/or planning and his having "misjudged distance, speed, altitude or clearance". Cited as causal factors were high density altitude, the high grass and the trees and power line obstructions.

"Density altitude is an insidious hazard because it involves a number of factors - principally elevation, temperature, the weight and takeoff and climb capabilities of the aircraft -- and can be worsened by other conditions which by themselves may not seem particularly menacing.

Continued

"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 causal 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".

* * * *

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.

* * * * *

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 4% excise tax of the gross purchase price of aviation gasoline and jet engine fuel. The 4% is deducted from the 7¢ per gallon refund which in the past has been refunded to the user upon application for refund.

Of interest to the average pilot is the fact that 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 $619,874.. A breakdown of 4% excise tax income is shown as follows:

	Fiscal Year Ending July 1, 75	Fiscal Year Ending July 1, 76
Aviation Gasoline - - - -	$ 20,733.00	$ 30,304.00
Jet Motor Fuel - - - -	174,952.00	170,906.00
TOTALS	$195,685.00	$201,210.00

Airports receiving grants, the amounts and projects are as follows:

	Airport	Project	State Allocation
1.	Bismarck Municipal	Construction of general Aviation apron	$11,550.- Federal Aid
2.	Fargo	Reconstruction of ramp, taxiway	50,000.- Federal Aid
3.	Grand Forks	Reconstruction & expansion of terminal bldg.	50,000.
4.	Minot International	Reconstruction & expansion of terminal bldg.	50,000.
5.	Williston International	Construction of Fire Station	14,605.- Federal Aid
6.	Rugby Airport Authority	Overlay paved runway, taxiway	20,000
7.	Mohall Airport Auth.	Pave Runway, taxiway, apron	10,750 - Federal Aid
8.	Cooperstown Airport Auth.	Pave & extend runway, apron	20,000 - Federal Aid
9.	Watford City Airport	Pave apron & taxiway	20,000
10.	Park River Airport Auth.	Pave runway, taxiway, apron - new airport	10,000 - Federal Aid
11.	Hillsboro Airport Auth.	Build & pave new airport	20,000.- Federal Aid
12.	Oakes Airport Auth.	Build & pave new airport	20,000 - Federal Aid
13.	Parshall Airport Auth.	Overlay runway	8,000
14.	Minto Airport Auth.	Build new airport	10,008
15.	Ellendale Airport Auth.	Install runway lights on new paved airport	1,500
16.	Arthur Airport Auth.	Pave apron	2,400
17.	Rolette Airport Auth.	Pave runway	13,250.
18.	Leonard Airport Auth.	Pave runway & taxiway	13,500.
19.	Drayton Airport Auth.	Build turf runway airport	2,675.
20.	Lake Williams Air. Auth.	Install runway lights	1,250.
21.	Walhalla Airport Auth.	Pave apron	6,500.
22.	Mott Airport Auth.	Pave runway, taxiway, apron	15,000.- Federal Aid
23.	McClusky Airport Auth.	Build new airport - Turf	10,000.
24.	Harvey Airport Auth.	Runway, taxiway & ramp overlay	17,500.
25.	Northwood Airport Auth.	Grade runway	5,700.
26.	Breckenridge-Wahpeton	Non-Directional Beacon Nav. Aid	3,150.

* * * * *

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.

* * * * *

CENTRAL NORTH DAKOTA AIR NATIONAL GUARD TRAINING AREA
LOW ALTITUDE INTERCEPT TRAINING (CAUTION ADVISED)

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.

M E M O

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 commanche crash because the aircraft attempted a landing with too much of a crosswind. The turf runway which was very nearly into the wind, had grass 3 ft. high on it and was in effect unusable. 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 & 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 some 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.

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 cleanup 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 tacked on a provision to the recently passed Airport-Airways 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 unknowing means Separation Assurance Program.

* * * * *

FOR SALE: One 18,000 gallon 2 compartment underground gasoline storage tank, as is, at Tioga Municipal Airport. One used surplus airport beacon for parts. No reasonable offer refused. Contact Jerry Kerbaugh, Airport Manager, Tioga, N.D. 58852, Tel: 701-664-2798

* * * *

FOR SALE: Cessna 1976 150 Commuter, 450 TT, 1 Nav Com; 1967 Cessna 188 Ag Wagon, 230 hp, 700 hrs. SMOH, 100 on new chrome cyl, TT on airframe 1800 hrs, transland combo system. Contact Merrill Pulkrabek, Box 112, Warren, Minn. 56762, Tel: 218-742-6091

* * * *

FOR SALE: 1975 Cherokee Pathfinder 235, dual VOR, ADF, X-ponder, auto pilot, 341 TT, a new airplane,; 1976 Grumman Cheetah, 60 TT, long range tanks, brand new; 2-1975 Cessna 150s, 750 TT and 350 TT, good aircraft. Comet Aviation, Jamestown, N.D. Tel: 252-4020

* * * *

FOR SALE: "Ready Soon" a completely rebuilt Aeronca Champ-For details call J. B. Lindquist, Hettinger, N.D. Tel: 701-567-2069

* * * *

FOR SALE: 1975 Skyhawk II; 2-1976 Skyhawk II's; 2-1975 Cessna 150 Commuters; 1963 Cessna 205; 1966 Cherokee six with cargo dock, O-SMOH; 1976 Piper Lance 300 hp 6-place; 1976 Cessna Cardinal 177; 1974 Cessna 180; 1955 Cessna 180; 1964 Cessna 310, O-SMOH, full IFR; 1966 Cessna 310, Full IFR; 1967 Cessna 310, O-SMOH; 1970 Cessna 310 low time. Full IFR; 1965 Aztec low time, full IFR; 1972 Pawnee 235, low time, like new; 1975 S2R Thrush 800 HP, 200 TT, O-STOH; 1976 Piper PA-18-150 Super Cub; 1975 Piper Warrior; 1963 S2R Thrush 600 hp; 2-1970 Skylane182; 1969 Skylane 182; 1968 Skylane 182; T 90-gal Sorenson Spray unit. Contact Jamestown Aviation, Inc., Box 427, Jamestown, N.D. 58401 tel: 701-252-2150

* * * *

NORTH DAKOTA AERONAUTICS COMMISSION
BOX U
BISMARCK, NORTH DAKOTA 58505

FIRST CLASS

Margaret Rose
Historical Society
Liberty Memorial Bldg.
Bismarck, NDak 58501

FOR SALE: 1975 Mooney Executive, 580 TT, King 1½, ADF Contact SerVair Accessories, Box 637, Williston, N.D. 58801 - tel: 701-572-3773

* * * *

FOR SALE: 1976 Skylane, Nav/Pac, M/B, 6/s, encoding, leather 500 TT; 1976 Cessna 150 Commuter, 485 TT; 1967 Cessna 172 Hawk 75 SMOH; 1974 Cessna 150 Commuter 480 TT. 1976 Cardinal, 200 TT, Leather Interior. Contact Bob Robinson, OK Aviation, Inc. Bismarck, N.D. 58501 - Tel: 258-5610 or 701-258-6337 Evenings

* * * * *

FOR SALE: 1968 Cessna 421, "0" SMOH FWF, Gold crown, full deice, 3 axis, recent paint & interior; 67 Navajo, 800/1000 SMOH on 1800 TBO, full deice, 3 axis, new paint 7/8 pl executive int; 69 Duke, full IFR, 690 remans, full deice; 72 P Navajo, 200 hrs on Lyc. rebuilds, Gold crown, Air, F.D. new paint; 76 Cessna 421, Radio option open, otherwise loaded; 70 Navajo 900 hr remans, complete gold crown, Alt 3 & F.D., RMI, deiced; 1969 Chaparel 350 SMOH, Mk 12A, original & nice; 76 Cessna 185 float kit, radios open to spec; 60 & 68 Deluxe Super Cubs, both units under 250 SMOH; 76 Cessna 180, FTO, radio spec open, Beautiful brown & white; 62 Skylane 1300 TT, Mk12, Original; 69 Twin Comanche 1600 TT, full IFR, 3 axis; 72 Skyhawk, the only one of its kind, super 3,000 paint desi[illegible], 76 Skyhawk II , one red & one blue, both under 80 TT; 76 Skylane II 450 TT, 300A A/P; 76 Scout & C pkg, FTO, ready for immediate delivery; 75 AG Truck 680 TT, nite lites, loaded; 76 Thrush Commander 800 hp, FTO loaded, hydromatic Prop; 1976 Turbo 280C Shark, built before price increase; 75 F-28A Demo only 80TT; 67 Bell 47-G3B1; T500T, 600 SMOH, excellent; 1972 Bell 47G5A 1060 TT, 60 SMOH, NC, ADF, heater, like new; 75 Cessna 150, 200 TT like brand new. Commander Aviation Corp, Bismarck Tel: 701-223-6862 or 223-3388

* * * *