

MAY 8 1978

STATE HISTORICAL
SOCIETY OF
NORTH DAKOTA

AVIATION NEWSLETTER

Vernon H. Baltzer, Editor
STATE OF NORTH DAKOTA

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AVIATION EVENTS SCHEDULED DURING NATIONAL TRANSPORTATION WEEK - MAY 14-21, 1978
April - May, 1978

National Transportation week is sponsored on a national level during the week of May 14 to 21, 1978, by all modes of transportation including air, highway and rail. In a real sense, transportation is one of the state's and nation's most important industries. It's an industry that serves all others and thus becomes a significant factor in the daily lives of all Americans.

The air mode in North Dakota alone consists of over 1,600 general aviation aircraft and helicopters. The air mode includes 335 ag aircraft servicing the farmer in North Dakota. The three airlines serving North Dakota in 1977 carried nearly 900,000 departing and inbound passengers from 7 North Dakota airports. Twenty-five air taxi operators in North Dakota carried thousands of passengers in 1977.

Supporting this air activity in North Dakota are 103 general aviation public airports and 7 air carrier airports and the services provided at such facilities.

During National Transportation Week, May 14 to May 21, 1978, the following events are scheduled:

Bismarck -- Sunday, May 14th, Commander Aviation Corp. of Bismarck and Mandan will have a static exhibit of 10 fixed-wing aircraft (both singles and twins) and one Hughes Turbo-powered helicopter on the parking ramp of the Kirkwood Shopping Center - (all day on Sunday).

Bismarck -- During National Transportation Week, fixed base aviation operators on the Bismarck Airport will offer special airplane rides to the public. Participating in this activity at the Bismarck Municipal Airport includes Capital Aviation Corp., Commander Aviation Corp., Executive Air Taxi Corp., and O.K. Aviation Corp.

Mandan --- Mandan Municipal Airport. Commander Aviation will have open house and is sponsoring an air show at the Mandan Airport on both Saturday and Sunday, May 20 and 21. The Mandan Airport will be closed both days from 1 to 3:00 p.m. during the air shows.

Highlighting the air shows on both Saturday and Sunday at the Mandan Airport will be Bob Hoover flying his Shrike Commander, also the flying grandfather and renowned distance flyer -- Max Conrad. He will be there both days. Included is a National Guard Jet fly-over at the Mandan Airport on May 20th, during the air show. Parachute jumping events are scheduled both days.

Flight Breakfast - On Sunday, May 21st, Commander Aviation is sponsoring a fly-in flight breakfast from 8 to 12 noon at the Mandan Airport followed by an air show between 1 and 3:00 p.m. Mandan Airport closed during the air show from 1 to 3 p.m.

Devils Lake --- On Sunday, May 14, 1978, Devils Lake Airport Dedication of a new runway at 1:00 p.m. Harold Vavra, Director of the Aeronautics Commission, will cut the runway ribbon on behalf of Governor Arthur A. Link.

Devils Lake Airport will have an air show from 1:45 to 4:15 p.m. The airport will be officially closed during the above time frame.

The air activities include aerobatics, National Guard Jet Fly-over, skydivers, airplane novelty act, and radio controlled model planes.

Also on display all day will be National Guard helicopters and other equipment at the Devils Lake Municipal Airport.

WORK WANTED

Experienced aerial applicator will work last of May and all of June.
Contact: Wally Kraft at Fargo, 235-2643.

GRAND FORKS RADAR APPROACH CONTROL (RAPCON) ATC TALKSHEET

By: Clifford E. Smith, Capt. USAF, Chief, Air Traffic Control Operations.

The purpose of this letter is to acquaint the general aviation community with the services available from the Grand Forks RAPCON, and to discuss some specifics about ATC from our side of the microphone.

The Grand Forks RAPCON is located on Grand Forks Air Force Base, in building 635. For those of you not familiar with the Grand Forks area, the Air Base is approximately 9 miles west of the International Airport. If you intend to visit our facility, you can't miss it once you're on the base. Just look for the Control Tower on the Northwest corner of the base - we're right beside it. The RAPCON is open 24 hours a day, 7 days a week, 365 days a year.

Our mailing address is: Air Traffic Control Operations (FFA), 2152d Communications Squadron, Grand Forks AFB, North Dakota 58205. If you care to chat with someone about anything, the phone number is (701-594-6559, Monday through Friday, 7:30 a.m. to 4:30 p.m.

The Commander of the 2152 Comm. Sq. is Lt. Col. Robert G. Smith. The Chief of Air Traffic Control Operations is Captain Clifford E. Smith. Master Sergeant Kenneth R. Newenham is the Chief Controller. (That is pronounced NEW-N-HAM). There are 5 Crew Chiefs supervising the different shifts in the RAPCON and their average ATC experience is approximately 9 years.

RAPCON AREA: Our area of control responsibility is approximately a 30nm radius of Grand Forks Air Force Base with extensions to the East to include the Crookston, Minnesota Airport, Kirkwood Municipal. We control all IFR traffic at or below 7000' MSL, within this area. Terminal ATC services are offered to the Grand Forks AFB, Grand Forks International Airport, and to Crookston, Minnesota. Radar service is also offered to all VFR flights in our area, with STAGE II service to the Air Base and Grand Forks International Airport. (There will be more on this STAGE II business, later on in this letter.) General ATC service is offered to many private and public airfields, too numerous to list here.

Now that we've covered that information, let's press on and discuss a few common interest items.

First, as of October 15, 1977, we have started offering STAGE II service to Grand Forks International Airport. Now, before you start squawking MAYDAY, we'll attempt to answer your questions about this service.

WHAT IS STAGE II SERVICE? The purpose of STAGE II is to adjust the flow of arriving VFR and IFR aircraft into the traffic pattern in a safe and orderly manner and to provide radar traffic information to departing VFR traffic.

HOW DOES IT WORK? Pilots of arriving VFR aircraft who desire this service should contact Grand Forks Approach Control on 318.1 or 118.1 when approximately 25 miles out. Approach Control will provide the wind and runway in use. After radar contact is established, you may be allowed to navigate on your own into the traffic pattern or if traffic conditions dictate, you may be given headings to fly to position you behind a preceding aircraft in the approach sequence. When you have that aircraft in sight, you will be directed to follow it. When you are told to contact the Tower, radar service is automatically cancelled.

SEPARATION STANDARDS: Standard radar separation will be provided between IFR aircraft until they are sequenced and the pilot sees the traffic he is to follow. This separation is not provided between VFR or between VFR and IFR aircraft.

TRAFFIC INFORMATION: As in STAGE II, traffic information is provided on a workload permitting basis only. In other words, if the controller has time he will give you traffic advisories. If not, you won't be hearing too much about traffic.

WHAT SHOULD I DO IF I DON'T WANT STAGE II SERVICE? For those of you who do not wish to utilize STAGE II SERVICE, simply state on initial contact "NEGATIVE STAGE II". You will then be given STAGE I SERVICE, i.e. WIND, RUNWAY, ALTIMETER, and traffic information, workload permitting. When you are approximately 5 miles from the GFK Airport, you will be instructed to contact GFK Tower for landing clearance, etc.

It is only fair to tell you that when using STAGE II SERVICE the possibility exists that you may receive radar vectors for sequencing and if you take these vectors, they may take you a little bit out of your way. Please don't wait until you receive the vector to tell us that you don't want STAGE II SERVICE. Changing ships in the middle of the stream is not the name of the game.

So far, so good, What's next? Well, let's talk about practice instrument approaches, an everyday occurrence here at Grand Forks.

Practice instrument approaches may be executed either IFR, or VFR. If you are on an IFR flight plan and request an instrument approach, the controller will use the phraseology "CLEARED FOR (type) APPROACH" and will

provide you with standard IFR separation. If you are on a VFR flight plan and request a practice instrument approach, the controller will use the phraseology "(type) APPROACH APPROVED, MAINTAIN VFR". Then you will have to provide your own separation from what ever may be up there with you (except IFR aircraft - we'll handle them).

Remember also that itinerant traffic will not normally be delayed to accommodate a practice instrument approach. That's not to say that we will terminate an approach in progress for an IFR arrival, but sometimes it simply cannot be helped. (Some of those airliners just can't fly as slow as a Cessna 172).

Speaking of practice instrument approaches, we very often hear something like this: "we'd like a VOR to runway 17 low approach, followed by vectors for the ILS to runway 35, low approach, then a VOR to 35 for a touch-and-go, followed by 15 minutes holding at Polly, then we'd like clearance for the VOR to 35, low approach, then direct to Fisher and hold. After holding for 20 minutes, we'd like the ILS to 35 full stop". Sometimes, that can cause a guy to become unglued, especially when the weather is down, UND & Company are out in full force, and RUNWAY 17 IS IN USE. Opposite direction traffic is certainly not unheard of. It can be accomplished, and effectivly, only when the weather, RABCON, GFK Tower and pilots concerned work in unison. If there's only two or three in the radar pattern trying to get as many approaches as possible to the two instrument runways, and there's not much happening in the way of IFR Arrivals or Departures, chances are you'll get what you want. But, when you're trying to do the same thing with 4 or 5 in the pattern, arrivals are arriving, departures are departing, and DENEY has proclaimed a GRADE "F" day, chances are someone's gonna get delayed or denied. Flying safety is of paramount importance. Please don't get made at us if you don't get all of the practice approaches you wanted; there's a good reason behind any delay, you can be sure.

For those of you who do not care to take your chances in the local pattern and would rather compete for airspace with the ducks and geese, do us a favor. When you make your initial call-up to approach (either inbound to land or outbound to joy-ride), please give the following information:

1. Call sign
 2. Type
 3. Departure point
 4. Direction going or destination
 5. Altitude climbing to
 6. Transponder code, if equipped.
- EXAMPLE: "GRAND FORKS APPROACH CESSNA 34343 A CESSNA 172, OFF GRAND FORKS, SOUTHWEST BOUND, CLIMBING TO FOUR THOUSAND FIVE HUNDRED, SQUAWKING ONE TWO ZERO ZERO" or "NEGATIVE TRANSPONDER"

This helps us tremendously in that we get all the information we need for planning purposes/advisory service. It saves your time, our time, and possibly some other pilot's time. Most everyone these days who does call us usually checks in with all the needed info, but there's still a few folks around who answer "four thousand five hundred" when we ask their destination airport!!! (GOOD GRIEF!!!)

We hope you have found this "TALKSHEET" interesting and informative. With your support, we are going to continue publishing it. We solicit your comments/ideas/suggestions concerning this. Call us any time, or even write - either way, we'll be communicating. (Telephone: 701-594-6559 or 35511)

EMERGENCY LOCATOR TRANSMITTER (ELT'S) NEW REGULATION TEMPORARY OPERATION WITHOUT

The Federal Register of March 16th, with a document number of 17694, Amdt. No. 91-1511 on a final rule action, which would allow temporary operation of aircraft without an ELT, has set March 16, 1978, as the effective date of the amendment. The amendment is actually being adopted without prior notice and procedure, although interested persons may comment on or before June 14, 1978, and if any comments in connection with the rule are found to be justified, the FAA will initiate further rulemaking to amend the FAR further. Mail comments to Rules Docket AGC-24, FAA, 800 Independence Ave. S.W., Washington, D.C. 20591, and reference comments to FAR 91.52 (F) (10).

The new regulation is as follows:

- (F) (10) An aircraft during any period for which the transmitter has been temporarily removed for inspection, repair, modification, or replacement, subject to the following:
- (i) No person may operate the aircraft unless the aircraft records contain an entry which includes the date of initial removal, the make, model, serial number and reason for removal of the transmitter, and a placard is located in view of the pilot to show "ELT not installed".
 - (ii) No person may operate the aircraft more than 90 days after the ELT is initially removed from the aircraft.

ALTIMETER ERROR*

A potentially hazardous condition may exist on some models of altimeters. Misplacement of the barometric knob on the barometric setting shaft may allow the barometric setting scale to disengage from the altimeter pointers when forward pressure is applied on the knob to make altimeter corrections. Pilots should observe the following, particularly before IFR flights:

- A. Rotation of the barometric pressure setting scale knob results in movement of both the barometric pressure setting scale and the altimeter pointers.
- B. Forward pressure on the knob during rotation does not disengage the pressure setting scale from the altimeter pointers.
- C. The altimeter indication is in accord with the setting on the barometric pressure setting scale, as referenced to the altitude and current barometric setting at the location of the check.

AIRCRAFT REFUELING PROBLEM - We are receiving reports that Line Service Personnel are causing cracks and separations to occur in the fuel filler necks of various general aviation aircraft. Mechanics, inspecting aircraft, suggest that this failure is caused by fuel servicing personnel failing to support the fuel filler nozzles and hoses when servicing the airplanes. Few people appreciate the load that a fuel nozzle and long fuel hose can exert when permitted to sag or hang in the fuel filler neck. In this configuration the pulsation of the hose or someone stumbling over the hose causes the damage. When using automatic shut-off nozzles, it is common practice to insert the nozzle in the fuel filler neck, turn it on and leave it. The fuel filler neck area was not designed for such abuse.

THE DAUBERS DID IT - Not only birds but insects too can choke off vital air-flow in an airplane. After a Cessna 150 in Indiana experienced a forced landing because of apparent fuel exhaustion, although there was fuel in the tanks, it was discovered that mud daubers had completely plugged the fuel vent, stopping the fuel flow to the engine. Fuel vents as well as pitot tubes should be inspected during preflight.

* - GADO #4 Newsletter

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NORTH DAKOTA PROFESSIONAL AVIATION MECHANICS ASSOCIATION ELECTS:

Frank Argenziano, Grand Forks, has been elected President of the N.D. Professional Aviation Mechanics Association (NDPAMA). He succeeds Gordon Person of Fargo, the association's first president and founder.

Also elected were Dave Carlson, Williston, Vice President; Dave Teets, Rugby, Secretary and John Hanson, Fargo, Treasurer.

The N.D. Professional Aviation Mechanics Association was formed in March, 1977 to promote and update the professional standing of aviation maintenance personnel in North Dakota by sponsoring annual seminars designed to present the latest in general aviation information and techniques in maintenance of aircraft. This year's seminar was held recently in Bismarck, N.D.

Annual seminars, sponsored by the association, are designed to cover such topics as aircraft maintenance records, magneto and ignition, aircraft de-icing and electrical systems and engine trouble shooting.

* * * * *

CESSNA ANNOUNCES "OPERATION BLUE STREAK" AND NOTIFIES SKYHAWK OWNERS OF ENGINE MODIFICATIONS.

WICHITA, KANSAS -- Citing several significant production changes by Lycoming in the engine that powers its Model 172 Skyhawk, Cessna Aircraft Company has initiated "Operation Blue Streak" to notify Skyhawk owners of mandatory modifications for the engines in their airplanes.

Affected by the program are all 3,700 Cessna Skyhawks produced in the 1977 and 1978 model years. The engine involved is Lycoming's new O-320-H2AD Blue Streak powerplant, used exclusively in the Skyhawk.

In a service letter to owners and operators of Skyhawks, Cessna said the new engine has accumulated an estimated 500,000 hours of flying time in the two years since its introduction. "The service experience accumulated during this time," Cessna said, "has resulted in production improvements by Lycoming which substantially increase the reliability and service life of the engine." The changes involve the engine's crankshaft accessory gear, the oil pump and the valve train.

In its letter to Skyhawk owners, Cessna said Operation Blue Streak will accomplish the engine modifications in the shortest possible time at minimum cost or no charge to the owners. Each owner is urged to contact his Cessna dealer immediately to arrange for scheduling of the engine modifications.

Operation Blue Streak is composed of three separate modifications:

*Operation No. 1 -- 287 of the 3,700 Skyhawks affected must have new crankshaft gear assemblies or new engines installed before they are

CESSNA _"OPERATION BLUE STREAK" - continued

Flown again. Owners of aircraft which have been flown 100 hours or less, or which are still within the six-month warranty period, will have the option of receiving a new engine or the installation of a new crankshaft assembly.

*OPERATION NO. 2 -- Two new gears must be installed in the oil pumps of all 3,700 Skyhawks as soon as possible, but no later than within the next 10 hours of operation.

*OPERATION NO. 3 -- Redesigned valve tappets should be installed as soon as they are available. Until they are installed, the original tappets are to be inspected at the next 100 hour check and after each 100 hours of operation thereafter on engines within a specified serial number range.

Cessna said parts and labor costs involved in Operation Blue Streak will be paid by the company, as well as parts and engine shipping costs.
* * * * *

INFORMATION FROM THE FISH & WILDLIFE SERVICE:

It has come to our attention, through numerous investigations, that very few pilots in North Dakota are aware of the Airborne Hunting Act, 16 USC 742j-1 CFR 19.1-19-32 or the prohibitions, requirements, or penalties under the Act.

We would appreciate it if you could bring the following information to the attention of the pilots who subscribe to your monthly Newsletter.

General prohibitions under the Act are as follows:

- (a) Except as otherwise authorized by the Fish and Wildlife Act of 1956 as amended, no person shall:
 - (1) While airborne in any aircraft shoot or attempt to shoot for the purpose of capturing or killing any wildlife;
 - (2) Use an aircraft to harass any wildlife; or
 - (3) Knowingly participate in using an aircraft whether in the aircraft or on the ground for any purpose referred to in paragraph (a) (1) or (2).
- (b) The acts prohibited in this section include, but are not limited to, any person who:
 - (1) Pilots or assists in the operation of an aircraft from which another person shoots or shoots at wildlife while airborne, or
 - (2) While on the ground takes or attempts to take any wildlife by means, aid, or use of an aircraft.

Anyone violating these provisions shall be fined not more than \$5,000 or imprisoned not more than one year or both.

In addition, any aircraft or other equipment used to aid in the shooting, attempting to shoot, capturing, or harassing of any bird, fish or other animal shall be subject to seizure and forfeiture to the United States.

If you have any questions regarding the Airborne Hunting Act, or wish to report any violations of the Act or other wildlife laws, please contact one of the following offices:

Senior Resident Agent	Special Agent
U.S. Fish & Wildlife Service	U.S. Fish & Wildlife Service
Room 362, Federal Building	Room 111, Federal Building
Bismarck, N.D. 58501	Minot, N.D. 58701
Tel: 255-4011 Ext. 206	Tel: 839-7418

* * * * *

TENERIFFE, CANARY ISLAND 747 CRASH BRINGS NEW PART 91.87 (h)

In order to clarify taxi clearance at airports with operating control towers, FAA in the Federal Register of March 10th, effective April 19th, amended Part 91.87 (h) as follows:

(h) Clearances required. No person may, at any airport with an operating control tower, operate an aircraft on a runway or taxiway, or takeoff or land an aircraft, unless an appropriate clearance is received from ATC. A clearance to "taxi to" the takeoff runway assigned to the aircraft is not a clearance to cross that assigned takeoff runway, or to taxi on that runway at any point, but is a clearance to cross other runways that intersect the taxi route to that assigned takeoff runway. A clearance to "taxi to" any point other than an assigned takeoff runway is a clearance to cross all runways that intersect the taxi route to that point.

EDITORS NOTE: Pilots in general could improve their communications with ATC with short repeats of clearances of the type instructing them to "taxi into position to hold" instead of just an acknowledgement of "Roger". Another instruction that can cause rapid heart palpitations on the part of both the controller and the landing pilot is instructing a pilot to "hold short landing traffic" and the pilot acknowledges only number and Roger and still continues to move toward the runway instead of a terse "holding short" and number and stopping.

* * * * *

OFFICIAL LIST OF RESTRICTED CHEMICALS:

Aerial applicators who have passed the restricted chemical examination and have need or desire to apply "Restricted Ag Chemicals" are required to go to your County Treasurer of your base of operations and purchase a Restricted Chemical License at a cost of \$20.00 by presenting to the County Treasurer proof of your passing the restricted chemical examination. The restricted chemical license, once purchased from your County Treasurer of residence, will be valid in all counties in North Dakota. The following is a list of Restricted Chemicals:

PESTICIDE INGREDIENT	CLASSIFICATION	EXAMPLES OF USES
acrolein	All uses restricted.	To control weeds and algae in irrigation canals, pulp and paper mills, cooling towers, sewage plants, other non-domestic bodies of water.
acrylonitrile	All uses restricted.	Fumigant for stored grain.
aldicarb	All indoor and outdoor ornamental uses restricted.	Insect, mite, and nematode control on cotton, sugar beets, potatoes, peanuts, other crops, and in commercial greenhouses.
allyl alcohol	All uses restricted.	Weed killer used in celery and tobacco seed beds and for nursery and ornamental plantings.
aluminum phosphide	All uses restricted.	Fumigant used on grain and tobacco in silos, boxcars, other storage areas.
azinphos methyl	All liquids with a concentration greater than 13.5%. (Remaining formulations/uses are under further review.)	Insecticide for wide variety of fruits, vegetables, nuts, field crops, ornamental plants, and forest and shade trees.
calcium cyanide	All uses restricted.	Rodent and ant control in fields and greenhouses; fumigant for empty railroad cars; insecticide for plant nurseries; pest control in mushroom houses.
demeton	All uses restricted.	Insecticide for various fruits, nuts, vegetables and for outdoor ornamental plants, indoor commercial greenhouses.
endrin	All uses restricted.	Insecticide for cotton, wheat, other grains; to control pine mice in orchards; seed treatment; bird repellent.
ethyl parathion	All uses restricted.	Insecticide for cotton, tobacco, sorghum, wheat, fruits, and vegetables and indoor use in commercial greenhouses.
flouroacetamide/1081	All uses restricted.	Control of sewer rats.
hydrocyanic acid	All uses restricted.	Fumigant for insect and rodent control in farm buildings and warehouses.
methomyl	All uses restricted except granular formulations, 25% wettable powders, 90% wettable powders in water soluble bags, 1.24% to 2.5% dusts as sole active ingredients, and in mixture with certain other pesticides.	Insect, nematode control on many vegetables, field crops, certain fruits, turf and ornamental plants.
methyl bromide	Restricted: formulations in containers greater than 1.5 lbs. & in smaller containers lacking chloropicrin as an indicator. Unclassified: containers with no more than 1.5 lbs. methyl bromide w/.25% to 2.0% chlorpicrin as an indicator.	Fumigant for stored grains; for soil in nurseries, orchards, vineyards and lawns; for crops such as strawberries and tomatoes; for rodent burrows and ant nests.
methyl parathion	All uses restricted.	Insecticide for cotton, tobacco, peanuts, beans, other crops, and mosquito control.
mevinphos	All uses restricted.	Insecticide for sewage treatment plants greenhouses.
paraquat	All uses restricted except 1) pressurized sprays containing .44% paraquat and 15% petroleum distillates 2) 0.4% and less paraquat combined with liquid fertilizer.	Weed killer and defoliant used on many vegetables, grains, range and pasture and weed and grass control around homes and on railroad, utility and rights-of-way areas.
picloram	All uses restricted except for treating trees by a "cut surface" method with 5.4% picloram.	Weed and brush killer around rights-of-way areas, forests including barley, wheat ran
sodium cyanide	All uses restricted.	Coyote control; rodent control greenhouses; insects in
sodium fluoroacetate	All uses restricted.	Control of rodents, especially on ships, at dumps and
strychnine	All uses restricted except where treated baits, pellets or powder are applied below ground.	and military establishments Control of rodents, gophers in building
sulfotepp	All uses restricted.	Fumigant for co
tepp	All uses restricted.	Insecticide for

FOR SALE: Helicopter F28A, Enstrom, 516 TP. Contact Jim Ziebart, Hamar, N.D. or call 701-262-4488 * * * *

FOR SALE: Bendix 360 NavCom, GS and MB. Contact Rick Burgum, Arthur, N.D. Tel: 701-967-8312 * * * *

FOR SALE OR TRADE: 1972 SkyLane, 1400 TP, 300 Nav/Com & transponder, will take trade 1974 or newer Skyhawk. Contact Rex Kelsch, Mott, N.D. 58646 or call 701-824-2030 * * * *

FOR SALE: 1963 Cessna 205, 60 hrs. short of 1500 hrs. suggested overhaul time, Mark 12, King 120, King ADF, Mark 4 head. Contact Virgil Rott, Nortonville, N.D., or call 701-685-2698

FOR SALE: 1973 Cessna 150; 1975 Cessna 150; 1978 Cessna 152; 1978 Cessna 182 RG; 1977 Cessna XP 177; 1976 Cessna 172; 1978 Cessna 172 (2); 1974 206U Cessna; 1974 Piper Pawnee Brave, 300 Lyc.; 1977 Piper Brave 300 Lyc.; 1978 Ag Cat 450 B Model; 1978 Piper Arrow 200 HP; 1974 Piper NavaJo; 1978 Piper PA-18-150; 1977 AgCat 450 B Model; 1972 Piper Arrow 200 HP; 1976 Piper Seneca II; 1976 Piper NavaJo; 1977 260 Piper Pawnee; Contact Jamestown Aviation, Inc., Box 427, Jamestown, N.D. or call 701-252-2150 * * * *

NORTH DAKOTA AERONAUTICS COMMISSION
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BULK RATE
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Margaret Rose
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Bismarck, NDak 58501

Cessna 150, 500 TP; 1978 Cessna 152 250 TP; 1978 Cessna 172 XP, W/Nav-Pac, 750 TP; 1978 Cessna 182 RG II, Cessna 210 II, 578 TP; 1975 Cessna 210 1235 TP. Bismarck, N.D. 58501 or 701-258-5610 * * * *

Lumigrip paint with matching custom
prop, float kit; 75 Golden
T, 500 SMOH; 78 Turbo
ting 3 axis; 78 SkyLane II,
SMOH full Wilcox airline equip-
manza 980 SMOH fresh license;
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arm buildings,
and crops
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ontrol in fields &
nurseries.
pecially ground squirrels,
at commercial business
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birds, squirrels and pocket
igs, orchards, lawns & fields.
mercial greenhouses.
ar apples, potatoes, peaches.

tineau's 2nd Annual Fly-In. Free
co 11 a.m. Attractions: Airplane
Performances sponsored by Oak Creek
e Operator - Mike Pfau.
* Fly-In Breakfast, Hettinger Municipal.
n starting at 7 a.m. to 11 a.m.. Gift