

NORTH DAKOTA AVIATION NEWSLETTER

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NORTH DAKOTA
AERONAUTICS COMMISSION
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PIETSCH ELECTRONICS BUILDS AIRCRAFT RADIO SWITCHING DEVICE

Pilots and Aircraft owners interested in reliable control systems for their multi-radio installations will be interested in the Pietsch AP-10 and AP-20 units being produced by Pietsch Electronics of Minot, North Dakota.

More than 5,000 hours have been logged with the AP-10 unit - without any type of mal function or equipment breakdown, according to Gerhard Pietsch. Pietsch, owner of the firm, won the 1964 N.D. Aviation Safety Mechanics Award from the FAA for designing and producing the compact radio control system.

Advertised as the most compact, full function avionics control center on the market, the Pietsch AP-10 offers orderly precision in your cockpit for only \$95.00 complete, Pietsch said. He enumerated the functions as follows:

- *Electronic muting of all receivers when your transmitter is operated.
- *Automatic sidetone provided for your monitoring convenience.
- *Automatic built-in fail safe devices for your "in air" protection.

*Allows use of either of two transmitters.

*Individual speaker or earphone selection for dual nav and comm receivers.

*Speaker or earphone selection for ADF or Marker Beacon receiver.

*Exclusive independence built-in to allow other equipment to function in the case of a transceiver malfunction.

*Compact size allows mounting in a standard instrument hole - along with your emergency transmitter.

*Actual size of this unit is only 2.5 by 5 by 1 inches.

Available now, this North Dakota product has proven itself as the most rugged, compact, functional and price sensible control system available for aircraft electronics. Truly "Tomorrow's Equipment Today!"

Pietsch said that the AP-10 unit is available directly or through Van Dusen Aircraft Supply dealers. The 10 watt isolation-audio amplifier AP-20 unit will retail for \$140.00 he said, and is presently being evaluated by Mooney Aircraft Company for use as standard equipment.

FAA REVISES FLIGHT INSTRUCTOR'S HANDBOOK AND ISSUES NEW FLIGHT INSTRUCTOR PRACTICAL TEST GUIDE

The FAA has announced a revised "Flight Instructor's Handbook" for the use of flight instructors and prospective applicants for flight instructor certificates, and a new "Flight Instructor Practical Test Guide" which describes the new flight instructor practical test.

The recently issued "Flight Instructor's Handbook," AC 61-16, contains study and reference material on the principles of teaching and flight training procedures, which will be the basis of the new flight instructor practical test.

These advisory circulars may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

"Flight Instructor Practical Test Guide," FAA Advisory Circular No. 61-14, 10¢

"Flight Instructor's Handbook," FAA Advisory Circular No. 61-16, 60¢.

The test outlined in AC NO: 61-14 will be required of all applicants for flight instructor certificates on and after April 1, 1965.

ANNUAL MEETING OF THE N.D. AVIATION OPERATORS ASSN. FRIDAY AND SATURDAY, FEBRUARY 5 and 6, 1965

Appearing on the program to be held the 5th and 6th of February at the Grand Pacific Hotel, beginning at 1:00 p.m. Friday, will be the following:

Wayne Colberg, Entomologist NDSU, Fargo, "Safe Use of Pesticide Chemicals"; Dr. H.W. Bissonnette, Pathologist NDSU, Fargo, "Leaf Spot Disease on Sugar Beets"; M.S. Buckley, AGSCO Chemical, Grand Forks, "Chemicals for Leaf Spot Control and their application"; Rohn and Haas, DuPont Chemical Supplier, Tennessee Corporation and Ed Keller, Peavey Co., Bismarck, "Methods of Application near Vermillion, S.D. area last year"; John Zaylskie, Extension Forester, NDSU, Fargo, "Aerial Spraying and Trees with additional information on the value of Shelterbelts"; Harold G. Vavra, director of N.D. Aeronautics Commission, "Report on Part 55 Hearing at Oklahoma City" and "Bills in the North Dakota Legislature affecting aviation"; Owen T. Owen, Bismarck, "The "Why" of present Workmen's Compensation Rates for air operations and aerial spraying" and Insurance comments by Harold R. Hanson, Farwest Agency, Seattle, Washington. Refreshments and a Banquet will be served Friday evening in the "Hospitality House" Room at the Grand Pacific Hotel.

Principle speakers for the Saturday meeting are: Everett Dunkin, FAA, Fargo, "Part 8 - Aerial Spraying Aircraft"; Dan Wakefield, Devils Lake, "Review of the newly organized Wakefield Aerial Applicator's School"; James Montgomery, Grand Forks and Tom Nord, Pembina, "Aerial Applicator's Problems in the Red River Valley"; and Harvey Ferguson, McAllen, Texas, "Safety of Aircraft in Agriculture".

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INCOME TAX DEDUCTIONS

SOURCE: Revenue Ruling 58-279, page 145 in IRS Cumulative Bulletin 1958-1, interpretation of Section 170 (c) of Internal Revenue Code of 1954.

A taxpayer who performs various services gratuitously to an organization, contributions to which are deductible, and uses his personally owned aircraft and automobile in performing such volunteer services, may deduct the nonreimbursed out-of-pocket expenses directly attributable to the performance of such volunteer services.

"Only those expenditures incurred for operation, maintenance and repair, which are directly attributable to the use of such aircraft or automobile in performing gratuitous services for such organization are deductible."

No deduction is allowed for a proportionate share of general maintenance or general repairs to the aircraft or automobile. Similarly excluded is any share of such items as depreciation and the cost of liability or property damage insurance carried on the aircraft or automobile."

"Therefore, if an individual rents an aircraft, the actual non-reimbursed out-of-pocket expenses incurred by him that are directly attributable to the use of such aircraft in performing the gratuitous services, are deductible.

If an aircraft is owned jointly by several members of a flying club with each member paying a pre-established fee per hour to the flying club treasury for the flight time when the member operates the aircraft, then only that portion of the pre-established fee paid which is directly attributable to the use of such aircraft in performing the gratuitous services, is deductible."

NOTE: The "out-of-pocket" expenses referred to above, include transportation to and from airports; aviation fuel and oil consumed during flights related to the exercise; food and lodging while away from home; airport landing fees; aircraft tie-down or hangar storage away from home.

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WAKEFIELD FLIGHT SERVICE TO OFFER EARLY SPRING AERIAL APPLICATOR COURSE

Wakefield Flight Service of Devils Lake, N.D. will offer an Agricultural Pilot Training Course consisting of 100 hours of classroom instruction, together with two Flight Training Courses, consisting of 20 and 30 flight hours respectively, according to Dan Wakefield, owner.

Wakefield stated that sixty four classroom hours will be given by Instructors from the North Dakota State University covering the following subjects: Agronomy, Weed Control, Entomology, Plant Pathology, Engineering, Business Management and Safe Use of Chemicals.

Eleven Hours Classroom Instruction will be given by the Federal Aviation Agency Representatives. Four Hours Classroom Instruction will be given by Representatives of the N.D. State Aeronautics Commission.

Twenty one hours of Classroom Instruction will be given by members of the Flight Instructors Staff.

He further stated that the primary objective will be to direct all of the training insofar as possible, toward actual situations which confront the Ag Pilot in day to day Aerial Application Work. A Brochure in detail will be mailed to interested parties on request.

LAKE REGION FLYING CLUB TO EXPAND

Lake Region Flying Club, Inc. of Devils Lake, which has been active a little more than a year, presently has a membership of over twenty members. The Club owns two aircraft and are purchasing an interest in a third plane. This will enable them to increase the Membership to thirty members. Officers of the Club are: Harry Kosieraki, Pres.; Gene Bergstrom, Vice Pres.; David Garcia, Sec. and David Lund, Treas.

NEW FEE SCHEDULE

To avoid delays in registration and recordation or mortgages of aircraft, the proper fees should be submitted when application is made to the Aircraft Registration Branch, Federal Aviation Agency, 5300 South Portland Avenue, Oklahoma City, Oklahoma.

New Fees Are:

1. Registration of individual aircraft - \$ 5.00
2. Dealer's aircraft reg. certificate - 10.00
3. Additional dealer's aircraft reg. certificate issued to same dealer - 2.00

registration - - - - - 2.00

Each application must be accompanied by the proper fee that may be paid by check or money order to the Federal Aviation Agency.

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FOR SALE: Skis - Only 3 sets left - 1500A's at \$105.00 per set, misc. rigging included. Call Capital Aviation Corp., Bismarck, N.D. Tel: 223-0260

AERONAUTICS COMMISSION To Sponsor 1 Week (CFI) Certified Flight Instructors Refresher and Standardization Course.

The dates of March 29th through April 3rd, 1965 have been chosen as the most advantageous to a majority to attend and conduct a CFI Refresher and Standardization Course to be held at the Bismarck Municipal Airport.

Sponsors and Course Managers will be the North Dakota Aeronautics Commission. The Course will consist of approximately 25 hours of ground school and present plans, subject to revision, of approximately 2 hours flight time per day. This flight time will consist of 2 instructors flying with a FAA General Aviation District Office tutor or other tutor, for an hour and then each going solo for an $\frac{1}{2}$ hour with a buddy pilot.

Subjects to be covered in the ground school course are Flight Maneuvers, Instruments, Air Traffic Control, Meteorology and the Psychology of Training Flight Students

Instructors participating in the ground school will be personnel from the FAA Air Academy of Oklahoma City; General Aviation District Office (GADOO) of Fargo; Weather Bureau of Bismarck; Air Route Traffic Control Center of Great Falls, and representatives of both terminal facilities and Flight Service Stations of Bismarck and Grand Forks will be on hand. Mr. Lester Severance and Ray Clement of the Fargo GADOO will be in charge of the Flight Training portion of the Course.

Of necessity, the Course will be limited to 15 certified Flight Instructors. Even this limited number will involve 96 hours of aircraft flight time, wherein lies our greatest problem.

It is the intent of the Aeronautics Commission to circularize all Flight Instructors in North Dakota via this Newsletter, to ascertain how many would attend and would also supply aircraft, if possible. Gas and oil will be supplied by the North Dakota Aeronautics Commission. It is urged that all instructors who would like to attend, complete the attached form below and return to the Aeronautics Commission before the 15th of February, 1965.

Since the Course is limited to 15 CFI'S, selections will be made on the basis of the most active and whose attendance would be of value to the aviation industry and aviation safety in North Dakota.

----- APPLICATION -----

North Dakota Aeronautics Commission
FLIGHT INSTRUCTORS REFRESHER AND STANDARDIZATION COURSE
March 29 to April 3, 1965
Bismarck, North Dakota

Name _____	Address _____
Telephone: Resident _____	Business _____
License Type _____	No. _____ Date _____
Ratings _____	Date _____
Medical Class _____	Date _____
North Dakota Aeronautics Airmen Registration Number _____	Other _____ Total _____
Flight Hours as Instructor _____	Instrument _____
Commercial _____	ATR _____
Ground School Ratings _____	N.D. Registration # _____
I have an Aircraft that I can use for the Course - Yes _____ No _____	Signature _____
Make _____ Model _____ Year _____	

Complete and return to the North Dakota Aeronautics Commission, Box U, Bismarck, N.D. by February 15, 1965.

SAFETY FIRST = WINTER FLYING

The wintery months present added problems to the flier. Unless additional maintenance and operational care is taken to prepare for winter hazards, serious injuries may result.

Some of the best guides for winter aircraft operations are the aircraft and/or engine handbooks provided by aircraft manufacturers who recommend proper oil and fuel, and the best methods to protect the aircraft.

The best recommendation that can be given to the pilot is: Be winter wise! Winterize! Certain practices, if followed by the pilot during the winter season, will contribute to safer and troubleless flying. Keep these safety checks in mind:

Help prevent condensation in airplane fuel tanks by filling the tanks after each flight. Water in fuel lines can affect engine performance or even result in a frozen fuel line. It is advisable to drain a substantial amount of fuel from the lowest point, where condensation gathers, before each day's flight and after each refueling.

Check engine manufacturer's instructions and change to the proper oil for winter operations.

Check cabin heaters for safe operation. Cracks or holes in a heater can cause deadly carbon monoxide to seep into the cabin. While small amounts of carbon monoxide affect a pilot's judgment and flying ability, larger amounts over a period of time can cause serious illness, unconsciousness or death.

Remove snow and ice from the wings and control surfaces of the aircraft before take-off. An airfoil produces lift because of its shape--ice, frost, snow, etc., can change its shape. Blowing and drifting snow frequently enters openings in the aircraft.

The additional weight may affect the center of gravity of the plane. Preheat both the engine and oil, if possible, to prevent oil sluggishness and possible congealing. When preheating the engine, use safe, accepted methods. Never use an open flame device.

Use carburetor heat at all times on the ground until the throttle is opened for take-off. (Consult your aircraft engine manual for winter operation procedures.)

Engines will run too lean when the temperature gets very low. Carburetor heat will richen the mixture and help vaporize the fuel.

Check carburetor heat or alternate air control to determine whether it is working properly throughout its entire range. Also, check the carburetor or induction air temperature gauge for proper indications. It is the pilot's ice warning device.

Careful attention must be given to retractable landing gears and wheels equipped with "wheel pants." Clogging of mechanisms by ice and slush and collection of ice, mud, etc., thrown onto surfaces from spinning wheels can create a serious problem.

Because winter days are short, pilots not checked out for night operations should plan their flights accordingly.

Plan on longer landings because of increased stopping distances on icy, snow-covered or wet runways.

Icing problems are the pilot's greatest hazard during winter flying. The effects of icing can be remedied with proper de-icing equipment and procedures.

Ice formations on wings and other external surfaces may form slowly or at a dangerously high rate, depending upon the temperature and the form of moisture present. Icing is most probable when flying in air with visible moisture (clouds, drizzle, rain or wet snow) and at temperatures from approximately 20°F to 34°F. Flying through freezing rain can spell immediate trouble.

Types of icing conditions a pilot is apt to encounter during winter months are: Ice on outside pitot and static pressure sources and venturi units. This results in erroneous airspeed, altimeter and rate-of-climb indications. On airplanes using an outside venturi unit to provide power for vacuum driven instruments, ice can cause faulty turn and altitude indications.

Accumulation of ice on propeller surfaces. This creates a serious vibration problem and loss of propeller effectiveness.

Accumulation of dangerous ice loads on the wing and tail surfaces. This changes the airflow and reduces the available lift while increasing the load the wing has to carry.

Carburetor icing and air intake clogging. Both result in loss of power. When snow or sleet form on the intake screen, the buildup starves the engine of air and causes loss of power. Remember, air intake clogging cannot be eliminated with carburetor heat.

Windshield icing. Obscuring vision, this condition is particularly dangerous when a pilot is attempting to make an approach and landing. It may be necessary to open a window or de-ice the windshield to make a safe landing.

If a pilot finds himself in icing conditions without full de-icing equipment, his primary concern should be to make the best possible use of the equipment available and to get to non-icing air as quickly as is safe. Descending below the icing level to warmer air should melt the ice that has formed. In some areas, the icing level can be at the surface.

To avoid the icing hazard, a pilot should (1) check weather conditions before flight, (2) check weather conditions enroute and (3) watch the outside air temperature gauge carefully to note temperatures favorable for external icing. Be safe and remember. Be winter wise! Winterize!

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ACCIDENTS

PILOT: Jim Severson - 806-7th Ave. South, East Grand Forks, Minnesota

TIME & PLACE: October 13, 1964 - 1:39 p.m., Langdon, N. Dak.

PILOT TIME: 10,000 hrs. TT - Commercial ASEL, Age 37

AIRCRAFT & DAMAGE: Cessna 180 - Gear box, fuselage skin and door post bent.

INJURIES: None

PILOT STATEMENT: While landing at Langdon, N.D. my passenger had his knees in the way of the control column and I could not get the stick back. I hit a log at the end of the field with the wheels. I let my passenger out and returned to Grand Forks to change it, as it was running hot because of light oil. I then found damage to the gear box.

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PILOT: Laurie D. Hartwig, Edgeley, North Dakota

TIME & PLACE: October 16, 1964 - 10:30 a.m., Edgeley Airport

PILOT TIME: 2100 hrs. TT - Commercial, ASEL, Age 40

AIRCRAFT & DAMAGE: Cessna 140 - Damage to right wing, right landing gear and some damage to fuselage.

INJURIES: None

PILOT STATEMENT: In landing at Edgeley Airport at about 10:30 a.m. on October 16, 64 we encountered a stiff cross wind. The east-west runway being the only strip at the airport, we landed east. After landing and making our way to hangar, a gust picked up one wing and pushed aircraft over on side, breaking off landing gear and damaging one wing.

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PILOT: John P. Jenson - 2421 University Ave., Grand Forks, N. Dak.

TIME & PLACE: October 31, 1964 - 10:30 a.m., Grand Forks, N. Dak.

PILOT TIME: 7800 hrs. TT - Commercial ASEL, Age 32

AIRCRAFT & DAMAGE: Champion - Left landing gear, wings, windshield damaged.

INJURIES: None

PILOT STATEMENT: I was towing a banner and had just unhooked it at the south end of the Grand Forks Airport and reduced power to land and touched down in a tail low wheel landing, the tail started to come up and I applied power with the stick back, but the tail would not come down and the airplane ended up on its back.

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PILOT: Jerome Johnson, Fosston, Minnesota

TIME & PLACE: November 16, 1964 - 9:15 a.m., Four miles north of Michigan, N.D.

PILOT TIME: 5000 hrs. TT - Commercial, ASEL, Age 36

AIRCRAFT & DAMAGE: Cessna 180 - Damaged right and left wing, vertical fin and rudder, prop, cowl, and under carriage.

PILOT STATEMENT: While landing on a road in a southerly direction, I corrected for a slight cross wind with the left brake which blew out the left tire and pulled us sharply to the left side of the road and turned over in the ditch.

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BUSINESS OPPORTUNITY -- "AIRPORT OPERATOR WANTED"

Excellent opportunity for Commercial Pilot-Instructor - A & E & I - Large spraying territory - 12 Private planes based on field, Good Hangar-shop, low rent, small investment will handle. Write or phone Cecil Melby, Hettinger, N.D. 567-3521 or 567-2456 or T.G. Barclay, Hettinger, N.D. 567-2522.

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POSITION WANTED: Experienced AG Pilot wants North Dakota 2-4D work coming season.

14 years experience, 450's on down, prefer PA-18 or Pawnee, etc., 51 years old, but not bold, 12000 hours total time. Absolutely no booze. Contact Herb Eichner, 1214-8th Ave., Helena, Montana

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FOR SALE: 1965 Cessna Skyhawk, TT 20, King 150A - Fire Extinguisher, 35 Amp Gen. Headrest (two), Heated Pitot, Rotating Beacon, Rear View Mirror, Rear Seat Vents, Delivered at \$14,172.71; 1962 Cessna 210B, TT 625 - 278 since new cylinders, Full Panel - MkV - Mk 10 - Dual Omni - Auto Pilot - dual controls - Vertical and reclining seats - Rear Seat Vents - Rotating Beacon - Ground service plug- Long range tanks - Courtesy lights - very clean and ready to go for only \$18,500. Will trade and finance; 1964 Cessna 172 - TT 223 - Mk IV - 35 Amp Gen. Rear seat vents - dual contro primary panel - a good buy at \$9,300; 1964 Cessna Skylane - TT220 - Nav/Comm 300 - Dual controls - Rotating Beacon, Rear seat Vents - Full flow oil filter - Head rests (two) - Ground service plug. A beautiful white and yellow, list price \$19,958.75 Now \$15,700.00; 1959 Champ - Full electrical Supercharger. Contact Ahmann's Flying Service, 1904 - 3rd St. N.W., Minot, North Dakota Tel: TE8-4873 or TE3-3191

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FOR SALE: 2 Sets Federal Hyd. wheel Skis for Super Cub and Cessna 180; 1 Set Federal A1500; 1 Set Federal 1500; 1 Set Cal Air Clamps for Cub. Contact Air Mart, Box 239, Minot, N. Dak. Telephone 834-0280

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FOR SALE: Stinson 150 - 450 hrs since Major - Fabric Hi-Green - Hi & Low frequency, Receiver & Transmitter, fresh license on delivery. Call Atlantic 6-5563, Regan, N.D.

Rev. Roy K. Reed.

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FOR SALE: 2-1963 Pawnee's 235 hp - 1964 205 Cessna; 1956 PA18 complete with 90 gal. Spray Unit; 1957 PA18 complete with 90 gal. Sprayer; 1954 PA18A - 135 HP, new fabric in 1965; 1957 Tri Pacer fully equipped; 1946 J-3 with a new 90 hp engine with a

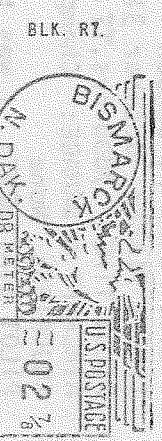
60 gal. Sorenson unit. Contact Foss & Meier Flight Service, Devil's Lake, N.D.

Telephone 662-3221

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FOR SALE: 1957 Cessna 180 - Full Panel, 2TR-6, Meter, 690 Hrs on Factory Engine; 1956 Cessna 172 - Full Panel, MK-11, Bird Dog, Cylinder Head Gauge, Carb. Temp Gauge, Manifold Pressure, 90 Hrs. since Major; 1946 Cessna 140 - 200 SMOH, VHT-3 Radio, Wing Fabric 2 yrs. old; 1963 Cessna 172 - 750 TT, MK-4, Full Panel; 1963 Piper Cherokee 160 B - VHT-3, Full Panel, Fresh Periodic; 1960 Piper PA-24-250 Comanche - Auto Flite, this plane repo, take over payments; 1961 Piper PA-24-250 - 0, SMOH, Fresh Annual, 1965 paint, in shop now ready to go in about 2 weeks; 1964 Champion Challenger - 69 Hrs TT since New, Ready to go to work; 1947 Aeronca 7AC Champ - Fresh Annual, 60 gal Sprayer, 200 SMOH on Cont. 90; 1947 Aeronca 7AC Champ - Fresh Annual, 700 hrs on new Cont. 95, 60 gal. Sorenson Sprayer; 1957 Cessna 182 - 650 SMOH, MK-2, ADF, Sept. annual with or without Sprayer; 1955 PA18A Sprayer and Duster, cover 2 yrs old, 200 SMOH, Sold with fresh annual. Contact Mid-State Aviation, Mandan, ND, Tel: 663-3059

North Dakota Aeronautics Commission
Municipal Airport
P.O. Box U
Bismarck, North Dakota



Margaret Rose
Historical Society
Liberty Memorial Bldg.
Bismarck, N. Dak.

FOR SALE: 1943 B-75 Stearman and Sprayer; 1956 PA-18A - 90 Gal Sorenson Sprayer, 190 SMOH, Fresh Annual; 1947 PA-11 - C-85, 0-SMOH, Fresh Annual date of Sale; 1947 Piper J-3 - Fresh Annual date of Sale, 300 SMOH; 1950 PA-18 - 95, New Cover 1961, 300 SMOH; 1963 Piper Colt - 600 TT since new, Full Panel, VHT-3; 1964 Piper Pawnee 235 - 260 since new, Fresh Annual date of sale; 1947 PA-11-C-90 - 60 Gal Sorenson Sprayer, new cover 1962, 700 hrs on new cont., 90; 1964 Mu4-Maul - 149 TT since new, a large bundle of performance for a small price; 1947 Aeronca Champ C-85, new cover, 200 SMOH, Electrical system, VHT-3, Super Homer, Cheap; 1947 Air Coupe, 570 TT since new, new wing cover, SHARP; 1964 Pawnee 235, 91 hrs. TT since new; 1964 Pawnee 235, 100 hrs. since new; PTR-I Piper Radio Complete; KX 150A Radio Complete; 60 Gal Sorenson Sprayers complete; 48 gal Metal Belly Units for J-3 and PA-11's; 60 gal Inside Unit for Champ; also have a couple 150 Pawnees coming in. Check with us for all your Sprayer needs. Contact Mid-State Aviation, Box 517, Mandan, N.D. Tel: 663-3059 or Evenings call 663-8941.

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FOR SALE: Wakefield Flight Service is a Distributor for Sorenson Sprayers. We have available both New and Used Units. Parts for these Units are stocked in Devil's Lake. INSTRUMENT GROUND SCHOOL COURSE will be offered beginning Thursday, Feb. 4th. Anyone interested in this Course, please contact Wakefield Flight Service. All Courses are guaranteed, thus, assuring the Student that upon paying his Tuition Fee, he will succeed in passing the FAA Written Examination. Call 662-2827 or 662-3238 at Devils Lake - Dan Wakefield, Owner

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