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JANUARY, 1949

20c



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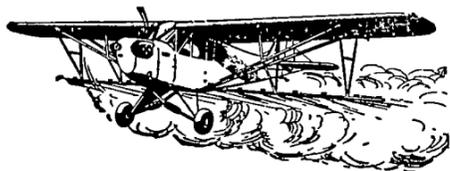
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CENTRAL FLYER

DICKINSON, NORTH DAKOTA

Vol. IV

JANUARY, 1949

No. 1

PURPOSE: "To give information with exactness of truth; not to omit anything that the public has a right to know; to use always an impersonal, yet proper, style without prejudice to rigorous and forceful critical thought"

Editor CARL THOMPSON
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CIVIL AERONAUTICS ADMINISTRATION

Third Region

ITINERARY FOR JANUARY, 1949

- Jan. 11—Tues.....Municipal Airport
Jamestown, N. D..... Aircraft, Flight & Written Exam
- Jan. 12—Wed.....Municipal Airport
Bismarck, N. D. Aircraft, Flight & Written Exam.
- Jan. 13—Thurs..Worth Field
Dickinson, N. D. Aircraft, Flight & Written Exam.
- Jan. 20—Thurs.....Municipal Airport
Grand Forks, N. D. Flight Tests
- Jan. 25—Tues.....Municipal Airport
Williston, N. D. Aircraft, Flight & Written Exam
- Jan. 26—Wed....Port O' Minot
Minot, N. D. Aircraft, Flight & Written Exam.
- Jan. 27—Thurs . . Bell Airport
Devils Lake, N. D. . . . Aircraft, Flight & Written Exam

Written Examinations may be taken Monday through Friday of any week at 209 Walker Bldg, Fargo, N. Dak. Aircraft Inspections and Flight Tests at Hector Field, Fargo, N. D., may be secured by appointment only.

Fifth Region

AVIATION SAFETY DISTRICT OFFICE No. 8

- Jan. 3—Mon .Municipal Airport
Huron, S. Dak. Aircraft, Flight and Written Exam
- Jan. 6—Thurs Rickenbacker Field
Stevens, S. Dak Aircraft, Flight and Written Exam
- Jan. 10—Mon .Municipal Airport
Huron, S. Dak Aircraft, Flight and Written Exam
- Jan. 13—Thurs Municipal Airport
Watertown, S. Dak . . . Aircraft, Flight and Written Exam
- Jan. 17—Mon...Municipal Airport
Huron, S. Dak Aircraft, Flight and Written Exam
- Jan. 20—Thurs Rushmore Field
Rapid City, S. Dak. .Aircraft, Flight and Written Exam.
- Jan. 24—Mon. .Municipal Airport
Huron, S. DakAircraft, Flight and Written Exam.
- Jan. 31—Tues .Municipal Airport
Huron, S. Dak Aircraft, Flight and Written Exam

FOR JANUARY, 1949

Gentlemen's Corner



When a charming blond of twenty summers with brown eyes starts working at an airport its difficult to say what all might happen. In the first place, business picks up considerably, and in some cases wedding bells start ringing. At any rate that was the fate of the now, Mrs Irene Meston. Irene began working for Rushmore Flying Service in the summer of 1947. Two months later she made her first solo flight and has been actively engaged in flying ever since.

Her first instructor was Robert Laier, he has since joined the Army Air Forces and is now serving as a Cadet Lieutenant, flying F-80's.

Irene and her husband Bill are active in the Rapid City Aircraft Owners and Pilots Asso and the Civil Air Patrol. Bill is now a flight instructor and their hobbies are limited as a great deal of time and interest is spent at Rushmore Flying Service in Rapid City, South Dakota.

Join the **MARCH OF DIMES** **Fight INFANTILE PARALYSIS**
NATIONAL FOUNDATION FOR INFANTILE PARALYSIS

PAGE THREE

Official Publication
STATE AERONAUTICAL NEWS
For North Dakota

Dakota Aviation Sets New High in '48

North Dakota aviation forged ahead in 1948 to set new highs in the number of privately owned and operated aircraft, new airports established and the development of the new science of aerial agriculture, (aerial crop spraying) The North Dakota Flying Farmer and Rancher accounted, to a great degree, for the ever increasing number of small utility aircraft owned and operated within the state

Private Aircraft Gain 68%

The state has experienced a 68% growth in the number of privately owned and operated aircraft from January 1, 1947 to July 1, 1948. In actual numbers show an increase from 579 airplanes to the present 972. This compares with a national increase of privately owned aircraft of a little over 20% during the same period of time. North Dakota's flying farmers and ranchers are the largest single group represented in the use of personal planes. Accord-

ing to the Aeronautics Commission's figures at least 75% of the total number of private planes are owned by farmers and ranchers. The flying farmer and rancher has found more practical utility in the personal airplane than any other group. He is beginning to use the airplane as a tool in agriculture and for everyday farm activity. With the flying farmer the personal airplane figures in emergencies such as flying a necessary part for the tractor, combine or other farm machinery. The plane figures as basic transportation since the airways are generally the shortest distance between two communities. The farmer with a ski equipped plane has found the answer to winter transportation.

The next largest group of flyers consists of businessmen, doctors, lawyers and professional people who use personal type aircraft for transportation because of the speed and the saving of valuable time

ing over one million dollars investment per facility. In addition there are 33 municipal airports which represent community investments ranging from twenty to two hundred thousand dollars per facility. Airport zoning not only serves as a safety measure for aircraft using the facility but it also protects the monetary investment of community funds in the airport. All forty North Dakota municipal airports should be zoned.

Three Airport Zones Established

The model airport zoning ordinance establishes three major zones with appropriate height standards within the two mile radius of the airport. The three zones are:

1. Approach zones to instrument or non-instrument runways
2. Transition zone or inner zone of the airport
3. Turning zone which includes all areas between the runway approach zone up to the two mile limit

The CAA and State standards for obstruction heights located within the runway approach zones are rigid since an airplane must land or take off at a gradual rate of descent or climb. The permissible obstruction heights within an airport turning zone are not nearly as rigid and are allowed up to 150 feet.

Permits

The model zoning ordinance sets up a system of permits. After the zoning ordinance has been enacted by the community no material change may be made in the use of the land, or no structure replaced or built without first obtaining a permit from the community. The model ordinance will not require the removal of any non-conforming structure already existing at the time the ordinance is enacted. Permits are required for the area within the two mile radius of the airport.

Board of Adjustment

The model zoning ordinance provides for a "Board of Adjustment" which will have the power to hear

Airport Zoning Ordinance

The Aeronautics Commission has completed the design of a model airport zoning ordinance for the zoning of public airports by North Dakota Municipalities, according to Harold G. Vavra, Acting Director of the North Dakota Aeronautics Commission. The model zoning ordinance may be used to zone any public airport regardless of size. The model ordinance is designed in accordance with North Dakota statutes which specifically enables a North Dakota community to zone its airport and is now available to all North Dakota communities.

Need for Airport Zoning

The need for zoning an airport is daily becoming of greater importance. The steady expansion and development of North Dakota communities has brought about considerable industrial and business building on the out-skirts of each community. Buildings of un-regula-

ted height within the immediate vicinity of an airport may result in very serious obstruction hazards to aircraft. Generally the airport is conveniently located at or near a major highway to the community. The identical highway may provide locations for business and industrial building on the outskirts of the community. Obstructions of excessive height, in form of buildings, may be inadvertently erected within the approach or turning zones of an airport. This may result in serious hazards to aircraft landing and taking off of the airport. The only effective solution is the comprehensive zoning of the airport within a two mile radius to prohibit excessive obstruction hazards.

Protection of Community Investment

In the state there are seven class four municipal airports represent-

appeals from any person aggrieved or taxpayer adversely affected by any decision of the administrative officer

Vavra Selected

Harold G Vavra, acting director of the North Dakota Aeronautics Commission has received notice of appointment to the "Airport and Airways Committee" of the National Association of State Aviation Officials, Washington, D C. The appointment was announced by Edward F Knapp, President of NASAO. Appointed to the same committee are C H Gartrell, Chairman, Kentucky Aeronautics Commission, Col H H Clark, West Virginia Aeronautics Commission and R Hilliard, New Hampshire Aeronautics Commission. The committee will study newly proposed aviation legislation on a national level affecting airports and new airways and make recommendations to the NASAO legislative committee.

Aerial Agriculture

Use of the airplane as a tool in North Dakota agriculture today is the focal point of interest of the entire state aviation industry. During 1948 aerial crop spraying made great strides. Out of 1,500,000 acres of North Dakota potato, sugar beet and small grain crops sprayed this year 300,000 acres or 20% was sprayed by air. With 25,000,000 acres of tillable land in North Dakota, the possibilities of aerial agriculture seem unlimited. 1948 witnessed considerable progress in aerial spraying technique and application of new chemicals in this field. New and more effective weedicides, insecticides and even fertilizers were made available for aerial application.

New Airports

The utility of the personal type airplane has been enhanced by an increase in number of airports in the state. During 1948 the number of municipal or publicly owned airports increased 30% over 1947 to a total of 44. The number of privately owned airports open to the public increased 25% over 1947 to a grand total of 104. The state now has some 148 airports of which 30% are municipal and 70% are privately owned airports open to the public.

1948 Awards

1948 NAA Awards for "Good Airport Operating Practice" Jerome Lederer, Vice-President Air Safety Division of the National Aeronautics Association, Washington, D C in cooperation with the Aeronautics Commission announced recently the awarding of the NAA—1948 "Good Airport Operating Certificates" North Dakota class four airports receiving the award are Hector Field, Fargo, Port O'Minot and Jamestown Municipal Airport; Jamestown, North Dakota Class one airports receiving the award are Sax Airport, Dickinson, North Dakota; Mohr Field, Fessenden, North Dakota, Towner, Municipal Airport, Towner, and Lite Field, Noonan, North Dakota.

Safety Standards and qualification requirements were higher this year as compared with 1947. Airports receiving the NAA award had to meet all the basic airport safety requirements along with a minimum of 20 "desirable service" requirements. In last year's National Airport safety campaign 493 airports qualified throughout the United States.

The National Aeronautics Association Award certifies that the airport named has fulfilled all conditions required by the safety advisory council and is therefore brevetted as an approved landing facility.

Low flying waivers are required by all armen hunting predatory animals by aircraft. An airman who has qualified with the State Game and Fish Department and who has received a permit designation number to hunt predatory animals from aircraft will be issued the appropriate low flying waiver by the Aeronautics Commission.

1949 aircraft application forms for registration of aircraft have been mailed to all resident owners of aircraft, to all airports and to all Commercial operators. North Dakota aircraft owners who failed to receive 1949 blanks may secure them from their nearest airport, operator or from the Aeronautics Commission, State Capitol, Bismarck, North Dakota.

Tailwind Tattler

BONANZA & SEABEE BOMBERS

THE ISRAELI AIR FORCE is using Beech Bonanzas and Republic Seabees in its bombing operations against the Arabs, according to Aviation Week. The Bonanzas carry two men with Sten guns in the rear seats as defensive armament and a home-made bomb release that cuts loose 100 lb. bombs carried under the wings. The Seabee is used without a door with 100 lb bombs thrown through the open hatch.

HELICOPTER INSURANCE currently costs about 20% of the total cost of the ship per year. Obvious reason: high accident rate, so high that some insurance companies won't even insure them at those rates. That's \$7,900 a year for a small Bell helicopter, for example.

WEATHER FACILITIES MAP AVAILABLE

A MAP, 2'x3', featuring the locations and types of airways, synoptic and supplemental weather reporting stations operated by the Weather Bureau, CAA, Army, Navy, Coast Guard and other agencies is available from the U S Weather Bureau, Washington 25, D C. Also shown are international, state and airway forecast centers, flight advisory weather service units, W B regional headquarters, airport stations and city offices.

President may get new plane to replace the DC-6 "Independence"—perhaps a Lockheed Constellation.

At Memphis the Southern Air Service company is doing a lot of business delivering cotton gin parts to operators when they have a breakdown. Landing in plantation fields, this work is done in a Bonanza.

Dozens of teachers were flown to the East Central Oklahoma Educational association meeting at Ada on October 22. During the afternoon those who hadn't come by plane were offered a flight. State plane owners and operators used this means of interesting teachers in aviation education.

FLYING HIGH

with

MARIE

FIRST SOLO

Details bore me and I usually forget them quickly, but the details surrounding my first solo in an airplane are different. I remember them all.

Ollie, my instructor, and I had been shooting landings that day and he seemed especially impatient with my "sloppy" flying. I was becoming extremely unhappy with his lamentations of my ability as a pilot, and his constant 'nagging' affected my landings more than anything. After bouncing down the runway for approximately the tenth time, I decided that I was not a born pilot as I had previously believed.

The bumpy landings seemed to be too much for Ollie, and as he determinedly climbed out of the plane he mumbled something about the poor tail wheel. He fastened the safety belt of the seat usually occupied by him, gave me an apologetic grin, and said, "Well Marie, you don't need me anymore. Take her up, go through the pattern, and come in for your landing. Any questions?"

There were hundreds of questions, but I was in a dazed state of mind and merely shook my head "no."

"Well, good luck then."

Somehow I regained the power of speech again and replied, "Thanks."

Slowly, I opened the throttle and rolled down the runway. I remembered all the times Ollie and I had done it before and, with a sudden surge of confidence, I knew I was capable of doing it alone. I think I pretended I was Ollie, as I said to myself, "All right Marie, get the tail off and hold her straight with the rudders. Now get the stick back just a little to get the nose off."

I was off. I was in a stuffy, noisy cockpit—alone. I prayed for a moment but most people wouldn't even consider it a prayer.

"Oh God, why isn't Ollie here with me. I'm all alone." My prayer was over and I had reached 400 feet safely. "That's it Marie, now

level off and look around for other aircraft. All clear. Make a 90 degree turn to the left, level off again, and climb to 600 feet."

It was here that I started singing! I sang as loud as I could, trying to drown out the drone of the engine, and soon the cockpit was filled with my screechy version of "Cigarettes and Whisky and Wild, Wild Women." Why I sang that particular song I'll never know, but, I sang it with all my heart.

I glanced at the altimeter. "Six hundred feet. Make a 45 degree turn to the left, level off, climb to 800 feet, and turn in toward the runway. Pull on your carburetor heat and find the 'spot' on the runway where you think you'll land."

I looked down to where I thought I would land and saw Ollie standing there. It suddenly dawned on me that an instructor is very close to his students. I had given myself orders, just as Ollie would have done had he been with me.

I cut the throttle and started down in a normal glide. "Careful Marie, don't stall her out—steady don't dive. Watch your airspeed. The altimeter reads 600 feet, so make a 90 degree turn to the left. Now it's 400 feet and another 90 degree turn to the left. Straighten out and point your nose down the runway." I was 200 feet above the ground.

"Steady your airspeed. This is it Marie—this one will have to be good since Ollie isn't along to straighten your bumpy course. Forty feet—thirty and twenty. Start leveling off—but gradually. Fifteen, ten, and five feet. Back harder on the stick. You're floating. Set her down Marie—now! Back on the stick—all the way back and hold it there."

I didn't hit very hard. Didn't bounce at all. I thought perhaps Ollie would be proud of me, and I was proud of Ollie. I realized that it was mostly his success I taxied down the runway and stopped to give Ollie a 'lift' back to the han-

gar. He slapped me on the back and congratulated me, but I knew it should have been the other way around. It was a great victory for him.

When we reached the hanger Ollie took down my little black log book and entered the following in small neat print:

SOLOED—AUGUST 18, 1947—4 p m "NICE" DUAL TIME—8 hrs 10 mins. SOLO 20 minutes

Those words totaled 4 weeks of study for me. I know now that "SOLO" means the beginning of a pilot's work and not THE END.

120 New Air Markers

PIERRE, S. D. — The South Dakota aeronautics commission established 120 air markers in the state during the last fiscal year, making a total of 138 now in use. South Dakota is among the states having one of the best air marking programs and it is anticipated that the state will have more air markers per capita by 1949 than any other state. L. V. Hanson, secretary of the commission said there will be more than 260 by July 1, 1949, according to Hanson.

Of the 120 markers painted this year, five were installed by CAA and 13 were painted by communities or individuals. Approximately one-fourth of the paint was furnished by CAA. In the future, Hanson expects the CAA to continue furnishing some of the costs.

A big share of the marking has been done in the eastern and southern part of the state but will soon be done in the northern and western part. In the west fewer markers than desired will be painted because there are not so many towns in that area.

The Utility-Liaison plane which the Air Force will purchase will be the Cessna Model 195, a 4-5 place plane.

**THIS IS YOUR
NEWSPAPER—WE
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GRAPHS**

CENTRAL FLYER

"Aviation Information"

Prepared for you by F. Trumbauer
Assistant to Regional Administrator
For Personal Flying Development

Starting and Warm-up

Careful starting is effective insurance against power failure in flight. This is especially true in winter when aircraft may sit idle for days. Radial engines accumulate oil in the lower cylinders, and should be pulled through by hand on the first start of the day, in order to distribute the oil. If the plane has been idle for more than a day or two, it is advisable to remove the plugs and drain the oil from the lower cylinders.

Primer operation should be handled with some care and not be done in a hap-hazard manner. The plunger should be withdrawn slowly and held out for a moment in order to allow the cylinder to fill with fuel. Then it should be pushed in sharply so the fuel will be sprayed into the engine cylinder and vaporized.

The throttle should not be pumped to assist priming unless you know that the carburetor is a type where throttle priming is all right. Using the throttle for priming creates a fire hazard with most up-

draft carburetors.

Oil pressure and temperature are the best indications of proper warm-up. Oil should start to flow and indicate pressure on the gage within 30 seconds after the engine starts. If the needle does not move in that time, the engine should be stopped immediately and the reason determined. A couple of minutes operation without lubrication may do permanent harm to the engine.

The engine should not be run up beyond half the permission ground rpm until oil pressure is steady and at least two-thirds of the minimum full power pressure. High engine speed for checking purposes should not be maintained more than 20 or 30 seconds at a time.

Warm-up time need not be wasted. Engine instruments need testing, fuel supply should be given a last minute check, the fuel valves should be examined to see that they are on, and a good look around the field will reveal traffic and airport conditions preparatory to taxiing out for the take off.

Farmyard Airports

Most Farmers Could Build a Good Landing Strip at Little Cost—Backyard landing strips and cornfield airports will permit farmers to make convenient use of an aerial service such as crop dusters. Steps in making a farm airport are:

1. **Selecting the site.** Obviously the ground should be as level as the farm will permit, and it should also be selected with drainage in mind. Low, flat meadows make good landing areas in late summer when everything is dry, but they are likely to be mudholed in the spring. Direction of the prevailing winds will affect the desirability of the location. Single trees can be removed from an otherwise clear space, but hills and buildings will rule out many spots. Length of the

field should be checked with the requirements of typical planes for takeoffs and landings at the altitude of the farm.

2. **Clearing and grading.** Light planes will roll over gentle swells in a field, but stones, hummocks and ditches throw them for a loss every time. Almost every farm will have

a site which does not require any extensive grading of the land, but it is essential that all stones be removed and that humps and gulleys be smoothed out. Fences are desirable in order to keep livestock from wandering onto the airfield.

3. **Surface.** The only practical surface is grass, and a hayfield which is mowed fairly often is the best. A low growing hay grass is good because it can be allowed to seed itself.

4. **Inexpensive refinements.** The farmer who has his own plane or is preparing for frequent visits by relatives or business services may also want to add some convenience for the pilot. Painting the boundary fence posts white will help to outline the field, and a windsock on the top of the nearest building will be a great aid to pilots. Mooring facilities are a "must" and detailed directions are found in a special pamphlet on the subject which is available from the Mutual Aircraft Conference.

Not only farmers, but power line, pipe line, and forest fire patrols will be using improvised landing strips. Intelligent design with a view to safe and comfortable operation will save many a broken landing gear and smashed propeller.

* * *

"Wings-over-Appetite" said to "Lew Screwbird" I'm so burned up I'm smoking, I'm telling you now, I've just been reported for diving and stunting. For a few curvesome cuties—I'll get even I yow.

Said "Screwbird to Wings," Its one of these things, You'll find CAA narrow-minded as hell. They once grounded me for just buzzing a tree. Near a well-stacked blonde, who said she'd never tell.



NORTH EAST WEST SOUTH

CRUISING AROUND OUR AIRPORTS



A FARGO YOUTH who has flown an airplane solo just after reaching his 16th birthday is Edward Skroch, Jr., son of Mr and Mrs E A Skroch, 1529 Broadway. His birthday was Nov 21 but inclement weather kept him grounded until a day or so later. Since then he has flown about five hours solo.

Young Skroch had his first airplane ride with his father when he was three weeks old. When he was five he flew with his parents in his father's air show for two years in North Dakota, South Dakota, Montana, Nebraska, Wyoming and Canada. He has flown in 11 states.

He began handling the controls with the elder Skroch beside him in 1939, and was ready to solo in 1945, but CAA regulations forced him to wait until he was 16. He has had more than 300 hours of cross-country flying, 156 hours of which he was at the controls, taking all instruction from his father, who has piled up more than 10,000 hours.

Last winter the younger Skroch accompanied his father on an airplane fox hunting trip. He did the

shooting from the plane, bagging 22 foxes the first day. During his Christmas vacation he shot 142 foxes and two coyotes. Edward is a junior at Sacred Heart academy and plays basketball. (Fargo Forum Photo)

SIOUX FALLS, S D Frank Praether reports he has solved his automobile dealer-distribution problems with his new Ryan Navion. Frank has only been flying a couple years but finds his Ryan is quite adequate for his frequent trips to Detroit, and servicing his organization of far flung dealers in South Dakota, Minnesota and Iowa.

TRAVERSE CITY, MICH For the pilot looking for an aircraft with an extended glide, we recommend the F-80. Recently an air force pilot's jet quit. He glided 70 miles for a perfect spot landing at Traverse City airport.

Ten lightplane companies produced 559 planes in September. Cessna led the field.

"DON'T WRITE—FLY"

"If you are a businessman in the Northwest, don't take the name of the Rapid Transfer and Storage Company lightly. They mean it! A query to them about your moving or storage problem may send them literally flying to your side. Harry C Goble, owner-manager of the company, first thought of using his plane for business purposes back in 1938. Sitting in his office in Portland, Oregon, one morning, he received an inquiry from a large firm in Los Angeles. Perhaps it was a particularly nice day for flying, anyway, instead of replying in the usual manner, he hopped in his plane, headed south, and the next day the Los Angeles inquirer received an in-person response to his letter. Terms were arranged on the spot, with none of the delays inherent in correspondence, the deal was closed, and everybody was happy (if a trifle dizzy).

"This was the first of a series of successful trips, and now this "rapid" way of doing business is routine with Mr Goble.

"Mr Goble's plane is a four-place Fairchild 24. His Fairchild has carried this roving businessman as far afield as Canada, Mexico, and the East Coast, but most of the 500 hours he piles up annually are flown around Washington, Oregon, Idaho, and Montana.

"Costs for hangar, periodic checks, tires, washing, polishing, and other services average about \$50 monthly. Mr Goble has been using air transportation for business purposes continually during the past ten years, and his reasons for doing so make good, sound sense. "Piloting of my own airplane in behalf of this business is a means of economy, convenience and prestige, being faster, more direct and less hazardous than surface travel."

THE PEGASUS

The New York City Police Aviation Bureau is now using a Bell helicopter for harbor patrol, rescue work on land and sea, traffic surveys, dusting mosquito-infested areas, and enforcement of air traffic regulations. The department also has two Grumman amphibians and one Stinson.

Official

STATE AERONAUTICAL NEWS For Montana

MONTANA PASSES NEW REGULATIONS

Minimum Altitude

Except during takeoff or landing, aircraft shall not be flown over the land or water in the State of Montana at an altitude of less than 500 feet from any obstacle except in such cases as may be specifically authorized by the Montana Aeronautics Commission. Any such waiver shall be under such conditions as may be prescribed therein.

Careless or Reckless Operation

No person shall operate an aircraft in a careless or reckless manner so as to endanger the life or property of others.

The need for the above regulations again stems from continuous flight rule violations. However, the past year has seen a marked reduction in the number of incidents reported in the state. This is a decidedly good sign. The trend can be credited to two things—more action taken by the State Aeronautics Commission, and increased attention given to violations by airports and fixed base operators.

Public reaction to flagrant violations and accidents, which more often than not are direct results of such violations, is hard for the growing business of aviation to stand. Expedient prosecution of pilots who don't observe flight rules as well as stern reprimands from airport operators will definitely help to save lives and equipment and further the growth of the industry.

NEW DRAFT OUT OF ELIMINATION OF SPIN REQUIREMENTS

CAB draft release 48-5 is being circulated to provide the industry with an opportunity to comment on the proposed changes in Parts 20 and 43 of CAR relating to the requirements for spin tests for student and private pilots. The new regulation would provide for recovery from power-off and power-on stalls in lieu of the spin requirements. CAB indicates that in promoting this proposal the safety of private flying is being advanced and the design of spin-proof airplanes stimulated.

World's Smallest Plane Is Tested

(UP)—The world's smallest airplane, the 170-pound "Pee-Bee," Saturday made its first test flight, staying in the air several minutes.

Ken Coward, engineer at Consolidated Vultee Aircraft corporation, and designer of the plane, said it was hoped the "Pee-Bee" would develop into the "motor scooter of the air." It is flown by a man lying in a prone position and is reported to cruise above 100 miles per hour. It was built by Ken Coward and associates.

Test Pilot Bill Bouck said the plane flew "very well" and displayed normal characteristics of light aircraft.

HARVEY FLYING CLUB

One of the best rounded out flying clubs in the state is located at Harvey, North Dakota. It is represented by such vocations as Supt of Schools, jeweler, grocery store owner, machine dealer, elevator manager, farmer, plumber, automobile dealer, dragline operator and a high school student.

The Harvey Flying Club has purchased a new Cessna 140 and at present, members include Bob Nesbit, Allan Nelson, L. M. Delameter, M. McCrea, R. Nelson, T. Lees-Meister, C. H. Moser, O. Selvedt, F. Hintz and R. Freitag.

CALCULATED RISK

The Public Wants Dependability and Control, Not Thrills, in The Operation of Aircraft.

A recent issue of the Civil Aeronautics Journal listed 31 cases where pilots' licenses had been revoked or suspended for low flying or for student carrying of passengers. These pilots deliberately violated the regulations and endangered their own lives and the lives of others.

Dakota AVN Named World Distributors

Dakota Aviation at Huron, South Dakota has been named world distributor for the Svedy-Sorenson aerial crop spraying unit. The Svedy-Sorenson sprayer was proved to be one of the best units available for light planes in aerial spraying in 1948. The new unit has 21 improvements over the previous model which incorporates a unique trigger finger shut off valve and other advantages such as simplification of installation and removal,

light weight, constant pressure valve, and proven operation from past experience.

Mr. Walt Ball of Dakota Aviation and Eldon Sorenson of Svedy-Sorenson, Inc. just recently returned from the NATA convention at Cleveland, Ohio, where they made a study of potential sales for 1949. The Svedy-Sorenson sprayer won very favorable consideration.

The Svedy-Sorenson factory is located at Worthington, Minnesota.

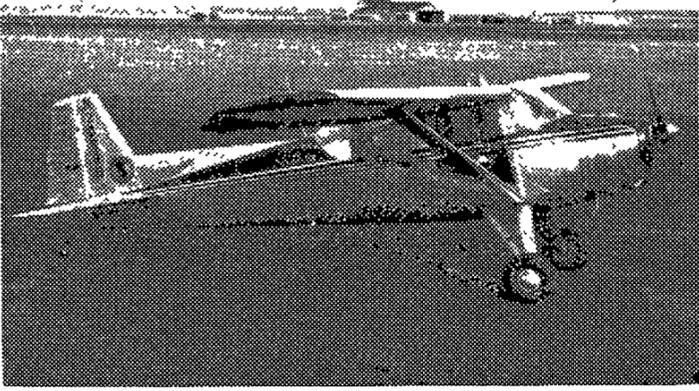
Air Age Timetable

From	To	Surface Time	Air Time
New York	Chungking	11300 Mi	31 Days 7500 Mi 38 Hrs
New York	Moscow	5700 "	8 " 4525 " 23
New York	London	3700 "	5 " 3462 " 17
San Francisco	Brisbane	8200 "	21 " 7050 " 35
Chicago	Fairbanks	4090 "	8 " 2730 " 14

3rd Region Flightlog

FOR JANUARY, 1949

PAGE NINE



TWO PLACE LUSCOMB OBSERVER used by the Federal Aid division of the Game and Fish department for their aerial game surveys is equipped with plastic dome canopy over rear seat to provide 360 degree visibility for spotting game.

One of the most important activities of the State Game and Fish department is the game surveys and research conducted by the Federal Aid division, whose task it is to provide research and inventories to aid in the maintenance of the wildlife in the state.

This division was set up by the Pitman-Robertson act of 1937 to help the states carry on a program of game maintenance and research that most states would be unable to do otherwise.

The group comes under the direct supervision of State Game and Fish Commissioner Bud Morgan and the Federal Fish and Wildlife service. Roy N. Bach acts as coordinator and Russ Stuart is research director of the division. The division's personnel is comprised of ten men, all specially trained in game management, zoology and allied fields. Funds for the work are partially provided by the sportsmen themselves through a 10 per cent excise tax on sporting arms and ammunition; the remaining funds are provided by the state. Allocation of the money is based on the number of licensed hunters and the area of the state.

In addition to their survey work the Federal Aid division also is responsible for the maintenance and new development of game refuges throughout the state. There is also the role of prophet for the coming season's game population.

To predict the amount of game available for the next season is in itself quite an undertaking. The previous year's kill must be tabulated, the rate of reproduction must be determined and finally a count must be taken of the game remaining.

It is this last job that adds a little of the spectacular to the otherwise tedious work.

In the winter of 1940-41 the division inaugurated the aerial survey as a means of obtaining a statewide census of the game population. During the early days there were only seven airports in the state. The problems of low flying, landing where there were no fields, and coping with varying weather conditions were all new and unsolved. In some parts of the state the fields were covered with snow while in other sections, perhaps only a few minutes flying time away the ground would be bare. This condition was compensated for to some extent by carrying both skis and wheels. Arriving at a snowed in area they would find a lake or river that was clear, then they would land, unstrap the skis from the side of the plane, mount them in place of the wheels and take off again ready for snow country, coming back, they would reverse the procedure.

Gasoline was another problem. With few airports in the state they would frequently find themselves a long way from a fuel pump. By using an automobile in conjunction with the plane they would set up their own fuel "pump" anywhere it was needed, on the outskirts of some remote town, on a wheat field or beside a highway on the prairies.

Low flying was something else again. No amount of ingenuity could surmount the experience needed to pilot a throttled down plane over forests and rockstrewn badlands, buffeted by high winds and rocked by treacherous updrafts and downdrafts with but a scant three or four hundred feet between them and an almost certain crackup on the ground below.

Most of the flying was conducted in the winter months, when the

trees had shed their cover of leaves and the game could be easily spotted against the whiteness of the snow.

Yet for all the danger and trickiness of the country they have hung up a record of no crackups and only one emergency landing in their eight years of operation.

In November, 1947, the division purchased a plane of their own, a two-place Luscombe Observer, a prototype of the plane used so extensively by the Army for liaison work and artillery spotting. It is powered with a 90 hp Continental engine has a cruising speed of 105 mph will throttle down to about 75 mph and is particularly noted for its agility at getting in and out of tight places. Where as, in the beginning, both plane and pilot had to be hired, there are now three members of the division's staff, Russ Stuart, Brandt Hjelte and Morris Dock, who are licensed to fly. Other members act as observers.

In operation, they throttle down to as low a speed as is safely possible and then fly across the area, observing with the naked eye the game in a quarter mile wide strip, then turning they cover a similar route one mile from the first and so on until they have a complete sampling of the area. Because they have only taken the count for one fourth of the area, this count must be multiplied by four to obtain the actual population.

Although the system works well in those areas where the game is quite plentiful, it is not infallible in certain areas, such as prairies, the game tends to locate in certain districts making it impossible to judge the population by percentage sampling.

It is in these regions that reports from hunters and farmers enter in census taking. A system of random sampling has been set up wherein two out of each twenty five hunters are asked to fill out a form showing their hunting activities during the season. The form lists the time spent in the field, the amount of game taken and provides for a report on game conditions in general. Tabulations of the amount of game taken compared to the number of hunters in the field shows roughly the amount of game present.

But the surveys are just a part of the work, for they alone indicate only the game that is left after the hunters have taken their toll. Estimating the next year's crop involves the tabulation of kills, the examination of reproductive tracts taken from the animals killed, examination of intestines and blood samples to indicate the prevalence of disease and the examination of stomachs to show the feeding habits of the game. All of these factors must be considered before the

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Skiing Doctor

The country where the famous "Flying Doctors" operate now has a "Skiing Doctor" as well!

In case you mightn't know what country that is, it is far-away, vast, sunscorched Australia, where the prospectors, cattlemen, buffalo-hunters and pioneers far from civilization call medical aid by radio if they have an accident or illness and help in the crisis comes speeding through the air from a central base perhaps hundreds of miles away."

Most of the vast areas over which Flying Doctors zoom is typical of what an Australian poet has well described as "a sunburned country," and generally speaking most of us are right when we think of Australia as a land of great, sun-ny plains and warm ocean beaches. But there is another side—or perhaps I should say another level—to the story. That other level is thousands of feet above the plains and the beaches, in the rugged Eastern Ranges where Mount Kosciusko puts into the air seven thousand feet, and many other peaks reach up into almost perpetual snow.

In the mountains, the Australians enjoy winter sports full of thrills and to most of the dwellers in the cities and on the Ranches the big ranges are just delightful holiday resorts filled with fun when the snow is deep and the log fires are in the comfortable chalets are warm and welcoming. Like careless holiday-makers the world over, they give little thought to the real life of the mountains—to the snow-pastures where tens of thousands of cattle graze in the seasons when the earth below is dry and inhospitable, to the tiny settlements, where vigorous men and women live all the year around keeping open the lines of communication and supply without which neither the pleasure resorts nor the snow-pastures could exist.

But the Skiing Doctor is giving a lifetime of thought and labor to them, motivated by just the same spirit that makes the Flying Doctors devoted to their rugged and dangerous lives far from places where doctors can achieve fame, comfort, and large incomes.

If you're surprised to know that

there is a Skiing Doctor in Australia, then get yourself ready for another surprise before you meet the doctor in person. You'll probably expect to see in front of you a big fur-clad he-man, a rough and rugged character out of a Jack London story of the Klondyke. But the person who shakes your hand and smiles at you will be just the reverse—a slim, forty-four year-old woman, not quite average height, with a greying hair and a pleasant, musical voice. For the Skiing Doctor is not only a woman, but a very feminine woman, tasteful with clothes and make-up, happily married, and the proud mother of a pretty, three-year-old daughter, Anne.



Doctor Muriel McPhillips is her name, and when you ask her why she chose to work in so harsh and rigorous an area she will probably suggest that it might help you to understand if you know that she is a Quaker. If you cross-examine her about her background and past, she will tell a simple, charming story of a happy, strenuous, and well-spent life.

Muriel McPhillips was born in Leicestershire, England, and went to a Quaker school in Somerset. She learned her profession at the University College Hospital School in London, and was graduated in 1927. She then served as medical officer to the Imperial War Graves Commission, traveling all over Europe, and attending particularly to the

families of men who were buried in the great cemeteries of World War I.

She came to Australia in 1934, practiced for a while in New South Wales, and then went to New Zealand for two and a half years. Her course was set in the direction of her present activities when she came back to Australia to marry her cattleman husband, and set up a home with him in Adaminaby, a township then without a doctor.

Adaminaby is in the snow-country, 50 miles from Mount Kosciusko and 100 miles from Canberra, Australia's federal capital. It is nearly 4,000 feet above sea level and lies in a partly protected pocket in the hills where there are extreme variations in climate. Under burning summer suns the temperature rockets up above a hundred, but when winter comes the snowstorms and cutting winds pile in from a new direction and force the mercury below zero. Medicine in Dr. Phillips' dispensary freezes in its bottles, and emergency night calls demand courage and skill. There are many such calls, from isolated villages and homesteads scattered over a wide area, she says.

The doctor's name hit the headlines in Australia only recently, when it was discovered that she was skiing through some of the worst blizzards the mountains have had for years, to the bedside of a desperately ill woman. She became a national heroine as a result of the one episode, but when it was all over and the woman was saved, it was revealed that she had been doing that sort of thing, quietly and without the least publicity, for years.

Doctor McPhillips has a car, of course, which she uses under normal circumstances, and sometimes in pretty abnormal ones. She is proud of her automobile, and says that it has never let her down at night. But there have been many nights, and days, when it would have been foolish to try and move it out of the garage. On such occasions, the doctor goes out on her skis, and a flurry of snow as her small, neat figure starts to skim over the spotless surface means skilled help on the way to some

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SKIING DOCTOR

(Continued from Page 11)

snowbound family which needs it. No doubt when all this business started, her husband had some worrying times. She is often away from one or two o'clock in the morning until daylight, battling against snow and wind and darkness. But nowadays Mr. McPhillips doesn't worry very much. "She's amazingly resourceful," he says, very proudly. But one somehow gets the impression that not worrying "very much" still leaves room for a good deal of anxiety in the small hours of the morning, when the wind is howling around the house and his wife is out somewhere in the snow.

In five and a half years, the McPhillips family have only made three trips away from their mountain village—one to Sidney and two to Canberra—but the doctor's private life, as well as her professional life, is a very full one. She fills in what leisure she has with petit point tapestry work, needlework, reading, and letter-writing. The last named is the hobby that has made her isolation merely geographical, for she has friends all over the world with whom she corresponds regularly, exchanging views on medicine, books, international affairs, and all the problems of the day.

So, the life that this gentle, intelligent Quaker woman has made for herself in the Australian snow country is often harsh and strenuous, but never dull and boring. It is in the very finest traditions of the medical profession all over the world, whether its practitioners serve humanity in the exciting surroundings of the laboratory or the commonplace ways of the country village. She is a real example to all those of us who are impatient of our surroundings, and to whom far hills always seem greenest. Her hills are scorched and hot in summer, and frozen and bleak in winter, but among them she finds a wholly satisfying outlet for the energy, intelligence, and humanity she possesses in such abundance.

Field Rules

Pilots who fly out of a certain airport not far from Chicago have never been known to "buzz" the neighborhood. Those pilots are not saints and they might be tempted to show off, too, if it were not for the man who runs that air field. It is generally believed that he would thoroughly beat up any pilot who was guilty of low flying in one of his planes.

Perhaps we cannot recommend assault and battery as the proper cure for the smart-aleck pilot, but the airport operator can stop reckless flying.

Every airport should have a printed or mimeographed set of Field Rules. These rules should make it clear that the air in that vicinity is not to be considered a race course or stunt area. Penalties should be set out for violation of the Field Rules as well as for breaking C.A.A. regulations. The penalty for unnecessary low flying could be suspension of flight privileges for thirty days on the first offense, and permanent cancellation of airport use on second offense.

Did you ever notice that the airport which gets tough and sets up a rigid set of rules is the most popular in the neighborhood? A sissy operator who is afraid to demand safe flying is soon regarded as a sloppy manager.

Don't miss the advertising value in an attractively printed set of Field Rules. They can specify the charges for rental of aircraft, and for instruction, as well as point out

the other facilities which are available at the field or in the vicinity.

The printed rules should also lay down the conditions under which a ship will be rented to a pilot. It is a lot easier to show a printed set of rules and point them out one by one, than it is to repeat them verbally when the pilot is eager to be off.

Occasionally a check flight will reveal that the prospective renter is not qualified to fly the ship he wants. Then the operator has an opportunity to sell some instruction. Poor pilots are poor business and profits have a way of following the operator who insists on safe flying.

Sheriff's Sale

By virtue of an order issued out of the Court of King's Bench in the action of John M. Zelke vs. Robert Mendez, and dated the 23rd day of November, 1948, and which order I will produce at time of the sale, I will offer for sale by public auction on Wednesday the 12th of January, 1949, at 2 p.m., local time, at hangar No. 3 at Estevan airport, nine (9) Cessna aircraft all in good condition. Terms, cash at time of sale.

Particulars with regards to said aircraft may be obtained from the office of the Sheriff at Estevan, Sask.

Log books for all the above aircraft are open for inspection.

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Another Record by Flying Farmers in '48

A group of North Dakota farmers and ranchers have written an outstanding record of aviation safety for North Dakota this year

The flying farmers—who own three out of every four aircraft in the state—have had only one of the seven aerial fatalities North Dakota has recorded so far in 1948. That ratio of many airplanes to few accidents, if maintained in the next three weeks, will be one of the state's exceptional records in 1948.

The achievement is more impressive in the light of the problems faced by the rural aviation enthusiast. Unlike other fliers, he's usually without the benefit of an airport. He doesn't have other pilots to advise him about the condition of winds, weather or terrain. He can't be as closely supervised for minimum altitude laws, passenger limitations or landing restrictions. And though it is illegal to buzz, he can do it around his own farm without as much danger of being turned in.

This year's record shows most flying farmers overcame such obstacles and temptations.

Planes Used for Business

The acting director of the State Aeronautics Commission—Harold G. Vavra—thinks one reason for the safety record is the farmer's use of the airplane principally for farm business. Vavra points out that aircraft owners who fly for utility purposes are less inclined to become involved in accidents than those who engage in aviation for sport.

Vavra says private fliers in North Dakota have flown 10,000,000 miles per fatality in 1948. That's an exceptionally good record, but Vavra

notes that Flying Farmers and ranchers have done even better.

Gas Ratio Up

Aviation gas used by farmers is now running about 1-3 the total amount of tractor gas they use. They use it for a large number of reasons, principally to fly to nearby communities to obtain parts and service. In fact, they have indicated that they prefer to trade in towns which have convenient airports where farm machinery and equipment can be obtained with the least loss of time.

The farmers used the planes this year to spray hundreds of thousands of acres of farm land. They will shortly be using planes to beat the problem of blocked roads and to provide transportation for their children to school this winter.

Farmers Aid Aviation

In return, the farmers have made quite a contribution to the business of flying.

Aviation, which is still a bit too new to completely escape being in the category of the strange, suffers more bad publicity from accidents than do automobiles. The non-flying public doesn't know that a plane, like a car, crashes usually because the person running it hasn't abided by the rules.

Vavra notes that at least 75 per cent of this year's aerial fatalities in North Dakota were caused by direct violation of flying safety rules. There were exceptions, but generally the flying farmers weren't guilty.

What aviation can do for the farmer, notes Vavra, has been pointed out many times. But flying farmers—as shown by the safety records—have also been of great service to the field of aviation.

NEIGHBORS LEND A HAND

A modern version of an old-fashioned husking bee, or log rolling, took place in the Gillette, Wyoming vicinity recently. An Aeronca Champion was purchased recently by H. J. Spellman, Spotted Horse, in a community thick with Flying Farmers.

Neighbors thought it would be a good idea for all the Flying Farmers in the neighborhood to meet and assist in the construction of a hangar for the new plane owner. A dozen neighbors, together with their wives and families, met at the Spellman ranch, and while the men put a 28x40 hangar together, the ladies prepared a big meal.

In addition to a fine time, and a good meal, nightfall saw the hangar almost completed. Only the finishing touches remained to be done by Spellman.

"This certainly was an excellent way for Flying Farmers to welcome a new member, and it was surprising to see how much interest was created among non-flyers in the community as well," writes James T. Fulkerson, of the Gillette Municipal airport.

"These community activities that revolve around flying are becoming more important, and in fact, will soon be the outstanding social factor among Flying Farmers across the nation," he predicted.

AMERICAN FARMERS FLY TO EUROPE

Thirty Midwestern farmers took off for Europe, by Air France airliners, last week to get a first hand view of agricultural methods in the Marshall Plan countries. They will be abroad for about a month, living with farm families in France, England, Denmark, Holland, Belgium, Luxembourg, Switzerland and Italy and visiting agricultural schools and colleges in those countries.

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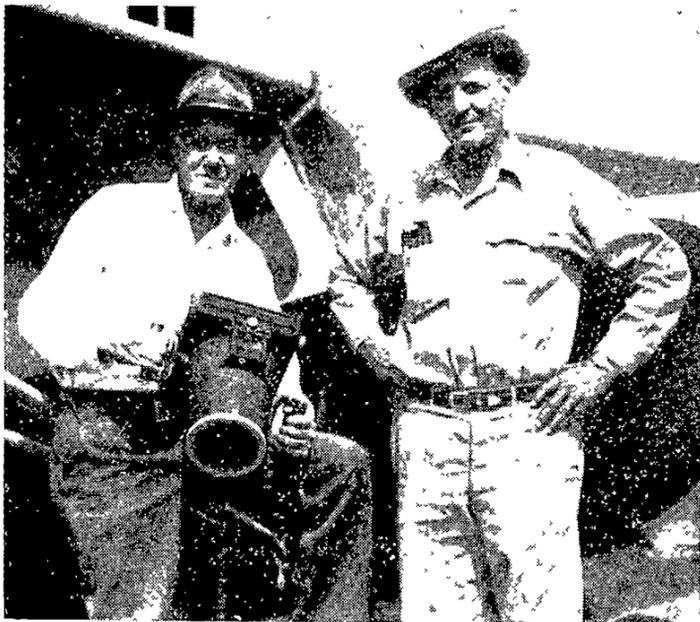
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LEO D. HARRIS, aerial photographer from Killdeer, North Dakota, with his pilot, J. H. Maas, also of Killdeer. Leo Harris is known as the "Cowboy Photographer" and has made thousands of pictures in the Badlands of North Dakota. He is currently selecting pictures for a pictorial historical up to and including the Garrison Dam.

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LUSCOMB OBSERVER

(Continued from Page 10)
final comparison of statistics can be made that will indicate the amount of game in the field for the next season.

What does all this mean to the hunter? For one, it means that there will be hunting in North Dakota as long as there is room for the game to live. The game that is present will not go the way of the buffalo and elk, overstocked areas will be opened and those regions where the count is low will be allowed to develop and produce.

One of the best examples of the success of this program is the case of the antelope in the state. A report of North Dakota game issued in 1925 listed the number of antelope in the state at 225 animals and stated that they were "doomed to extinction." After several years of protection, the August aerial survey of this year showed a herd of over 1400. If a bill to be submitted to the legislature this year is passed providing for a lottery type of regulation of the kill, North Dakota hunters will again be able to enjoy the sport of an antelope hunt.

Have Other Problems

But the men of the Federal Aid division have more to contend with than census taking and regulation of the kill. Their job also includes the development of new areas for the game to live.

With the event of extensive waterway and irrigation development, much of the riverbank cover will be lost. Game will have to be provided with additional cover and feeding areas. New reserves will have to be established, some new land must be reseeded to provide cover for the upland game.

In the reseeded work the airplane again comes into the picture. Spoil piles, top soil that has been stripped off to uncover lignite beds, can be seeded much faster and more economically with the airplane than by conventional methods.

Then there are other activities: the re-establishment of elk herds, the maintenance of a small buffalo herd, restocking poor areas and, generally, any work that would pertain to the maintenance of game in North Dakota.

With the cooperation of the hunters and the continued activity of the state and federal game agencies, future North Dakotans can be assured of the chance to participate in the ancient sport of hunting and it will be in their own back yard.

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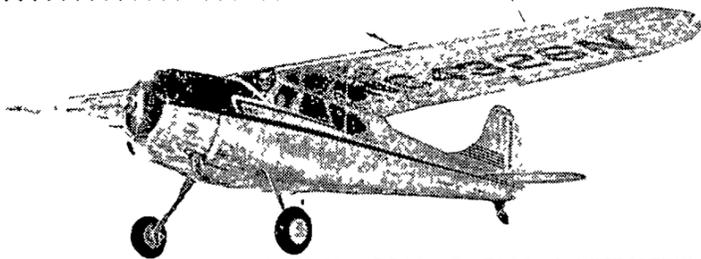
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