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The Central Flyer
Attention: CARL THOMPSON
BOX 232 MARTIN, SO. DAK.
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 racy words and forcible critical thought."

Editor .......................................................... CARL THOMPSON
Advertising and Circulation .................................... ELLA THOMPSON
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CIVIL AERONAUTICS ADMINISTRATION

Third Region
ITINERARY FOR MAY, 1949

MAY 4—Wednesday ... Municipal Airport
Bismarck, North Dakota .................................. Aircraft, Flight & Written

MAY 5—Thursday ... Municipal Airport
Bismarck, North Dakota .................................. Aircraft, Flight & Written

MAY 6—Friday ... Municipal Airport
Grand Forks, N. Dak. ....................................... Aircraft, Flight & Written

MAY 7—Saturday ... Municipal Airport
Jamitau, N. Dak. ............................................ Aircraft, Flight & Written

MAY 8—Sunday ... Municipal Airport
Summit, N. Dak. ............................................. Aircraft, Flight & Written

MAY 9—Monday ... Polar Air Field
Minot, N. Dak. ................................................ Aircraft, Flight & Written

MAY 10—Tuesday ... Municipal Airport
Williston, N. Dak. .......................................... Aircraft, Flight & Written

MAY 11—Wednesday ... Municipal Airport
Dickenson, North Dakota ................................. Aircraft, Flight & Written

Written Examinations may be taken Monday through Friday of any week at 208 Water Bldg., Fargo, N. D. Aircraft Inspections and Flight Tests at Hector Field, Fargo, may be secured by appointment only.

Fifth Region
AVIATION SAFETY DISTRICT OFFICE No. 8

ITINERARY FOR MAY, 1949

MAY 5—Monday ... Municipal Airport
sage 9, 16, 23, 31 Shrew S. Dak. ...................... Aircraft, Flight & Written

MAY 6—Tuesday ... Municipal Airport
Watertown, S. Dak. ......................................... Aircraft, Flight, Written

(Continued on Page 8)

}*AVIATION IN THE NORTHCENTRAL STATES*

"TAILWIND TATTLER"

Tailwind Tattletale

Several readers have written to ask if the airlines are training girls as stewardesses? Seema May want to apply for that very attractive type of employment. We took a quick look—see and find that a couple of the airlines ARE hiring girls again. Notably United Air Lines who expect to train 200 girls for that purpose. They graduate 38 student-stewardesses every 4 weeks. Applicants must be between 21 and 25 years of age, unmarried and with one or two years of college—or— one year of business and one year of college—or— be a registered nurse! If this column can be of assistance to readers, let us know, huh?

In case you're hooked with a double feature, and MUST see that latest, George Raft hammer- um movie (in order to see a GOOD picture) have a laugh when you see him take off in a B-29... and LAND (presumably on the same trip) in a DC-3. We know about refueling in mid-air— but swapping planes in the blue yonder? NO-NON!!

The A. V. Roe Company up in Canada are zooming right along on what will be the world's first jet airplane. Originally it was expected to make its first flight by March 1st. Now we learn that it won't fly before June or July. But they're STILL way ahead of us!

Here are a few little known facts Did you know—that in one day planes using LaGuardia Field in New York are filled with 175,000 gallons of high-octane gasoline — more than the Berlin Air Lift requires in a month.

That the highest recorded altitude ever reached by a human is 72,395 feet — and that tremendous height wasn't reached in a new jet plane. It was made in a balloon in 1935.

That the first free-flight parachute jump was made 180 years ago. Back in 1867, a Prussianman named Gaumerin jumped successfully from a balloon 3,000 feet above Paris.

PACIFIC THESES
The Aeronautics Commission reported today that there has been an excessive number of serious aircraft accidents since January 1, 1949 in the aerial hunting of predatory animals. The Commission has under consideration more rigid safety standards governing both the pilot and gunner. Past experience has indicated that carelessness and inexperience of the gunner may also be a contributing factor to the excessive accidents occurring in aerial hunting.

MOONIE MITE with 61-hp Lycett engine, flying a plane operated from 100-foot strip, with clear approach, took off at 115 at sea level (at 160 over course). It crashed on landing at Watertown Municipal Airport at 11:00 a.m. on Friday, June 10th. While little difficulty is anticipated in clearing customs, all pilots are reminded that aerial hunting for predatory animals in the United States is prohibited as a violation of the laws of the United States. No charge in being made by the Peppie Flying Club for parties who are not members who join this flight. However, in order to arrange reservations, etc., the Club is asking for a deposit of $15 per person for all who wish to go. This deposit will be refunded to the members who assemble at Watertown. Those who will be present to see the flight should report at 8:00 a.m. on Friday, June 10th. A pilot who pre-flights a plane for 15 minutes flat—Is not to be refused in much less than that!
HOLD EVERYTHING

A mid-air collision last March resulted in death to the two occupants of one plane because they did not realize the nature of the damage to their ship.

According to C. A. B. report, "Winston" stated that the plane, seemingly under control, glided toward the ground and as it approached the ground the left wing dropped and the tip stuck the ground causing the plane to cartwheel. "It appears that the propeller of the other plane strike the underside of this ship's left wing, tearing off the left tip. Loss of the flap was evidently unknown to the occupant and an attempt to lower flaps resulted in the plane banking sharply to the left wing tip striking the ground." The result is in contrast to the experience of the pilot of a twin motor transport which lost the wing tip and both alluvia in a wind with turbulent air. Having regained control, this pilot held the ship in level flight for several minutes and then cautiously climbed. At a safer altitude, he simply tried out the plane to find out what its flight characteristics might be in its damaged condition. This testing enabled him to bring in the seriously damaged plane without injury to himself or any member of the crew.

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"BISMARCK'S AVIATION INSURANCE HEADQUARTERS"

For May, 1945

Page Five

Marie Gress Appointed

Marie Gress, former Associate Editor of the Dakota Flier, has been appointed North Dakota Editor for the CENTRAL FLYER. The appointment has been made to fill the ever increasing need for local state management of personal aviation news. Miss Gress understands the problems of the private personal flying, being a pilot herself and formerly employed at the Dickinson Municipal Airport. For the present time she will also act as Advertising and Circulation for North Dakota.

Several applicants are being considered for Editorial positions in other states covered by the CENTRAL FLYER.

A new model jet fighter contains 1,500 feet of electrical wiring. 1,500 feet of tubing.

Capacity of a new freight plane is so great that 65 of them could take the place of 310 standard Bureau Air Lift planes.
SOUTH DAKOTA FLYERS

STUDY WEED CONTROL
PROBLEMS AT PRESHO

by Carl W. W. Sorensen
Assistant Extension Editor SDSC

South Dakota's weed control program got an additional "plug in the arm" April 19th and 20th, when about 70 airplane pilots from South Dakota and surrounding states showed interest in aerial spraying at the state wide school and demonstration at Presho, S. D.

Pilots attending the South Dakota aerial spraying school and demonstration at Presho, April 19 and 20, showed keen interest in the new pump assembly and positive shutoff system developed by Eldon Stahler, Worthington, Minn. Shown in the above picture are left to right--Sorensen, Walter Ball, Huron, and Bill Miner, Sioux Falls. The pilot at extreme right is unidentified.

The purpose of the school was to teach weed identification, recommended control methods, regulations concerning aerial spraying, and other information needed to pass the written examination for permit to spray South Dakota crops and grassland with an airplane.

"It was one of the finest and most enthusiastic schools of its kind I have attended," said Dr. L. M. Stahl, USDA agronomist in charge of weed research in 13 midwest states, Brookings. Stahl, was one of the speakers at the two-day school.

L. V. Hanson, secretary of the state aeromites commission, presented the state and federal weed specialists and research workers for the interest they have shown in encouraging aerial weed spraying both Hanson and L. V. Auman, state secretary of agriculture, Pierre, discussed the new 1949 regulations on airplane spraying. It is expected that these new regulations will be made effective about June 1. In the meantime, the old regulations will be in effect.

Several airplane pilots expressed enthusiasm about the prospect of building a strong tieup between the flying industry and agriculture.

Walter Ball, Huron, said, "Thus far one of the biggest opportunities the airplane industry in South Dakota has ever had--it's a chance to tie up with agriculture, America's most important industry."

Carl Hewett, Pipestone, Minn., pointed out, "When we are working with farmers, we are working with one of the finest groups in the land--but he is going to insist on getting his money's worth."

Elton Sorensen, Worthington, Minn., expressed the need for gaining the confidence of the farmer. "We have to have the willpower to turn down jobs on which we know we cannot do a good job. We have to know the hazards of spraying weed control chemicals in an area and we have to know which chemicals will control which weeds at specific stages of growth."

Sorensen also explained that he estimated he has been turning down five percent of the jobs offered him because, for some reason or another, he felt he would not be able to do a good job.

Last year, Carl Thompson, Martin flyer, sprayed about 15,000 acres during a three-week season. A good day's work would cover 1,000 acres. In addition to his flying, Thompson is editor of the "Central Flyer," a magazine published for pilots and airplane owners in the north central states.

In the April issue of the magazine he began a series of editorials on aerial weed control problems.

At the Presho meeting, Charles F. Gilbert, state weed supervisor and chairman of the school, encouraged the pilots to enter the business of spraying weeds as a service to South Dakota agriculture. Gilbert also expressed the belief that there would be a lot of Central Flyer

(Continued on Page 11)
CAP Shows Flooded Areas the High Value of Personal Planes

The Civil Air Patrol, which gained a new respect from people in stricken areas of the U.S. this winter, now is geared up to fight a new menace — floods.

Officials of the CAP, a volunteer auxiliary of the U.S. Air Force, have prepared their Missouri, Nebraska and Kansas units particularly for flood patrol and relief work. Other State Wings are ready to lend their assistance. Spring thaws already are causing new hardships to people in these plains states.

Experts who have worked in the snow areas this winter say it will take a miracle of good weather to thaw the deep snows gradually as to avoid floods. In the Chadbourn area of Nebraska, for example, those snows reached 21 inches during the month of January alone.

Hedge-hopping CAP pilots, cruising over flooded areas, will be able to gauge the movement of flood crests and fly ahead and drop warms to people in the likely path of water, as well as performing rescue evacuation and supply missions. During the 21-day blizzard emergency, these personal planes pilots were out often from daylight to dusk, dropping messages containing emergency information with them. Around old spark plugs and thermocouples were some of the interesting flying tools used in getting the snow-buried automobiles and animals to the help they needed. During the recent heavy snows many men and animals were daily fate of these men.

In February, two men watching the Nebraska floods from a high point, decided to fly. They flew up to fight a new menace — floods.

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Your chose a train in your past.

But you will not like it.

There is no escape from the past.

And yet she was always there, waiting for you.

The past always returns.

And now, as always, she is waiting for you.

The past is always waiting for you.

And you will never escape it.

The past is always there, waiting for you.

And you will never escape it.

The past is always waiting for you. The past always returns.
Taxi Technique

The safe, stable taxiing of the airplane is important to the control of the plane to its ultimate destination. Taxiing should be done by use of rudder and ailerons, with the use of brakes reserved for the time when the plane is to be moved, keeping in mind that the right rudder is used to move the plane to the right and the left rudder to move the plane to the left.

(1) Three wheels on vehicles are inherently difficult to handle, and (2) the control surfaces of the airplane are not efficient at a speed which is safe for ground travel. Taxi accidents are seldom caused by loss of control, but the damage from them is a major factor in operator and insurance costs.

The basic device for ground control is the rudder. It is difficult to maintain a balance between excessive power and excessive speed to make the rudder turn the slip and a speed which is slow enough to permit safe maneuvering. A walking speed is recommended for taxiing, with an extra blast from the propeller when necessary to produce a turn.

Ailerons can be used to assist turns on the ground. A down aileron increases drag when the relative wind is from the front of the plane. If the relative wind is from the back of the plane, a lowered aileron is pushed by the wind from the rear. Therefore, as a headwind a down aileron aids to turn the plane, and in a tailwind the down aileron helps turn the plane in the opposite direction.

Turns on the ground frequently require that the controls be crossed, and this is impossible with the "safety" planes where rudder and aileron are coordinated for turns in the air. When turning with the wind from the front, the operation of the rudder and aileron may increase the tendency of the plane to depart. The airplane should be made by use of rudder and ailerons, with the use of brakes reserved for the time when the plane is to be moved, keeping in mind that the right rudder is used to move the plane to the right and the left rudder to move the plane to the left.

AVIATION NEWS & VIEWS

(Continued from page 8)

THURSDAY: This is the final day of the week. It's time to say goodbye for the weekend, but we'll be back again on Monday. Until then, check out our latest aviation news and views. See you next week!
New Airport Cafe Open

Mr. and Mrs. Frank Mumaugh have recently opened a new cafe at the Pierre Municipal airport. The cafe is open seven days a week from 7 a.m. to 9 p.m. At the grand opening on April 13th a party of eighteen planes arrived from Aberdeen, Gettysburg and Rapid City. A wonderful breakfast was reported by members of the flights.

Tough Metal Meets Tougher Machine

Above photo shows stretch-farmer converting a sheet of metal into an engine cowling ring.

South Dakota Flyers Study Weed Control

Problems at Presho

(Continued from Page 4)

more weed spraying from the air during the coming season than ever before.

Dr. Stahler encouraged greater use of airplanes in spraying later pastures and sandhills with 2, 4-D. In other states, he explained, records show that one spraying of a pasture he increased beef production by 40 pounds per acre. This was caused by improved pasture conditions when the weeds were killed, and the grass given a chance to grow.

"One of the best "icides" you can make," he told the pilots is to get permission from a farmer or rancher to spray a single strip across a weedy pasture. The difference in grass stands between the sprayed and unsprayed strips will be significant."

Stahler also explained the hazards and advantages of airplane spraying. He cautioned the airmen to realize that 2, 4-D will kill valuable crops as well as weeds, if applied improperly. He indicated the 5, 4-D sprays will drift in the air as far as half mile and more if the plane is flown too high. And when it drifts any of it may land on succeeding crops like potatoes, sugar beets, clover, garden crops and trees. He recommended that the pilots fly as low as practical and to cover a swath of not more than 4 or 5 feet on each run.

The airmen paid close attention to the discussions on weed identification and chemical control methods. After the discussions and demonstrations a large number of them took examinations to qualify for a permit to spray weeds. These tests were given by the state department of agriculture.

It took 45 years to progress from the simple Wright Brothers' engine to a 3,000 h.p. engine. In the last five years, however, power has increased from 3,000 to 10,000 h.p.
Honor Roll Cities

CHICAGO, April 9 — For go-
ing through the entire year of
1948 without a single traffic fa-
tasy, 401 cities with populations
between 5,000 and 10,000 have
won places on the Honor Roll of
the National Traffic Safety Con-
tact.
The National Safety Council,
which conducts the contest, an-
ounced that this marks an in-
crease of 88 from the number on
the 1947 Honor Roll.
Colorado has the highest per-
centage of Honor Roll winners
with eight out of 10 reporting
cities Iowa had the next best re-
cord with 19 out of 24.
Robert, Okla., which state re-
cords show has never had a traf-
fc death since its incorporation
in 1901, maintained its perfect
record in 1948. The Council does
not know of any other city in the
population group which equals
this record

The Honor Roll cities in the
Central area were:

MINNESOTA

Moorhead
Creston
Willmar
Clifton
Cloquet
Hibbing
Paramus
Redfield
Little Falls
Columbia Heights
Ely

MONTANA

Butte
Livingston
Laswain

FLYERS' CALENDAR

MAY 1-2-3—Aerial crop spraying,
dusting, seeding and fertilizing
Conference, Fargo, North Dakota

MAY 13-14—North Dakota Safety
Conference, Minot, North Dakota

JUNE 1-2—North Dakota Safety
Conference, Minot, North Dakota

JULY 15—CAP. Airshow, Norfolk,
Nebraska

JULY 30-31—10th National Model
Airplane Meet, Olathe, Kansas

SEP-TEMBER 3-5—National Air Races
Cleveland, Ohio.

DECEMBER 6-8—North Central Weed
Control Conference, Sioux Falls,
S. D.
FLY-AT-COST PLAN

The public generally believes it costs too much to fly a plane. And whether you are learning to fly, operate your own plane or are renting one at the airport to take you on business or pleasure, the average man says it is too expensive.

To correct that impression and bring down flying costs, the following fly-at-cost plan will become operative on the 15th of April, 1949. Your eritrohma, questions and interest are invited.

Who Can Use the Plan

Anyone, anywhere if you are a pilot, you fly it yourself. If not, you pick any pilot from a pool of certified pilots approved by your local airport operators.

What Kind of Flying

You may take lessons, go on cross-country trips for business or pleasure, with family or friends. How it Works

Simply stated, your airport operators offer the public air transportation at rock bottom prices. They furnish planes in good condition at all times available. You pay only for the time you are in the air, accurately measured by a recording device in the plane. This recorder tells you the minutes and hours you have flown. You buy your own gas and oil when you use the plane.

Figure Annual Cost

Since per-hour flying is the only use of the plane except when you are in the air, it is not necessary to keep the planes in the air every day and pay to you the savings resulting from volume. The following will be the basis of accurately computing the cost per flying-hour: 1 — actual depreciation, 2 — repairs, 3 — clerical and promotion expense of the plan, and 4 — 10 per cent return on investment, that is, value of planes flows.

How You Pay

The plan is set up on a year to year basis, starting the 15th of April, 1949. You may buy as little as $600 a year worth of flying time and pay for it $3.00 per month if you wish. You may increase your purchase of flying time during the year, or sell and unused time to someone else. Or you may sell it back to the airport operators any time after 90 days, at not more than 10 per cent discount. You need not pay in advance for flying time but must have a credit balance in some amount at all times.

Determining Depreciation During Year

On the 15th of April, 1949, the airport operators will post on their bulletin board their true declared value for each plane. Within 90 days any participant may buy the plane at that price. Some procedure on or before the 15th of April, 1949. The difference will be the actual depreciation. The figure midway between value at beginning and end of year will be basis of 10 per cent on investment. For example, if plane is $3750 at beginning and $2750 at end of year, 10 per cent would be taken of $3250.

Per-Hour Flying Cost

During the year the 4-place plane will rent for $7.50 and 2-place plane for $6.00 per hour. On the 15th of April, 1949, the total hours flown will be divided into the total cost for the year, multiplied by the above figure to compute the per hour cost. Any result between the fixed prices of $7.50 and $6.00 per hour and actual flying costs will be returned to you as a dividend on each, or at the option of the operators a credit on flying time under this or a similar plan for the coming year. No assessment will ever be made.

Having paid or signed up for flying time this plan, let us say you want to go to Omaha for a week end and take your family. Or maybe you have a week end of fishing at a lodge on the Canadian border. You conform and ask if you have your own plane. If you don't maybe you know of one who would like to go on that trip. Or if you want them to, the airport operators will arrange a regular commercial pilot for you at a small additional charge. When you come to the airport to leave, your plane will be full of gas and oil, completely ready to go. The reading of hours and minutes will be recorded on your flight ticket and certified by your pilot. When you return the plane will be refilled with gas and oil, the hours and minutes reading entered on your flight ticket to compute your trip flying time. Your pilot again verifies.

All matters pertaining to weather, liability of pilots, minimum hours per day during busy seasons, etc., shall be determined by the airport operators. Maintenance will not exceed $1.50 and $1.00 per hour (4 and 2-place planes respectively). Clerical will not exceed .25 per hour, promotion same.00. Paid for Down, George W. Keefe, Box 215, Yankton, South Dakota, sole owner of this copyrighted Fly-at-Cost Plan. No quotations or use without special arrangement with owner. Copyright will be enforced.

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Grand Forks, North Dakota

FOR MAY, 1949
SUMMER FOGS

The fall weather of summer-time can easily cause pilots to lose their sense of rage for fog. There is nothing more disconcerting than to have the base turn into a solid blanket of white and leave a place stranded in zero visibility. The monsoon fog is one which is likely to occur in the neighborhood of large bodies of water such as the Great Lakes, warm water blowing over the relatively cool surface of a large body of water will result in condensation of the moisture in the air and reversal of the wind may bring this fog from the water over the land.

Ground fog forms during the night as the air cools and is most likely to settle in valleys and low places. A ground fog will probably be “burned off” by the sun during the daytime but its presence must be anticipated at many low lying airports if a morning landing is planned.

There may be fog in the cool air ahead of a warm front, which is rarely enough to fall. An experienced pilot may feel that it is safe enough to fly through falling rain from an advancing warm front when the weather report indicates little or no turbulence in the front, but he must be prepared for lowering visibility as the warm front slides through the cooler air at the surface. This is a condition which can occur through many parts of the United States during the summer season following a relatively cool spell.

Pilots are wise when they check the dew point to see whether it is near the temperature, because this is an excellent indication of possible fog. Low wind velocity and cold ground surface cause fog formation.

A pilot should never take off anticipating dissipation of fog unless a definite alternate is available. Change in condition of cloud cover may delay the “burning off” of a morning fog, or anticipate high winds might not develop in time to clear away the fog to the estimated arrival time.

Once the Wright Brothers’ first flight, there has been a seven-fold increase in efficiency of planes.

Production of typical new fighters plane requires about 12,000 special tools.
Whether You Use It or Sell It...
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SHERWIN-WILLIAMS

AGRICULTURAL WEED-NO-MORE

CLEANS WEEDS OUT OF SMALL GRAINS, CORN, FLAX AND PASTURES

PROVED—on more than 1,000,000 acres in 1949! Use no more than 1 gallon per acre—
with only 1/2 to 2 pints of Weed-No-More!

NEW FREE BULLETIN. —
Before you buy any 2, 4-D weed killer, get all the facts on Agricultural Weed-No-More performance on farms like yours. Ask for our new free bulletin.

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MARTIN, SOUTH DAKOTA
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Minot Skylines, Minot, North Dakota
Valley Aircraft, Grand Forks, North Dakota
Wright Flying Service, Williston, North Dakota
Ice Flying Service, Pierre, South Dakota
Lemmon Aircraft Company, Lemmon, South Dakota
Rauch Flying Service, Lake Preston, South Dakota

DISTRIBUTORS
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Niederhauser Airways, Marshalltown, Iowa

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