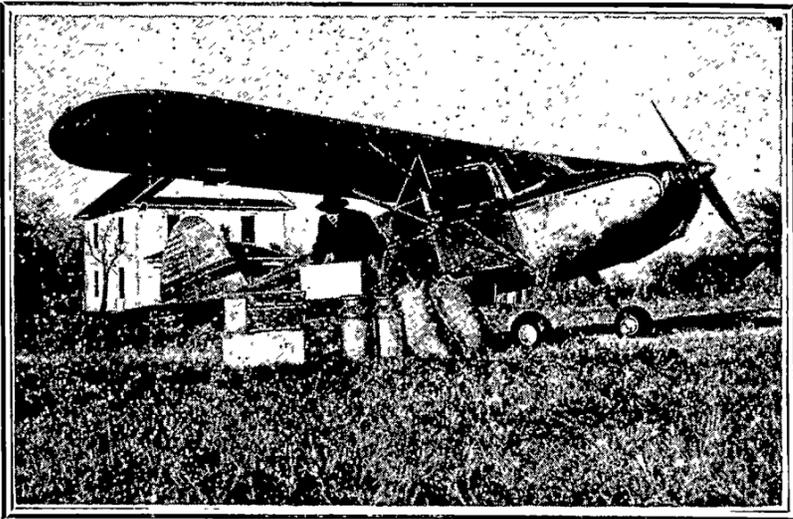


Dakota Flyer

AUGUST, 1948

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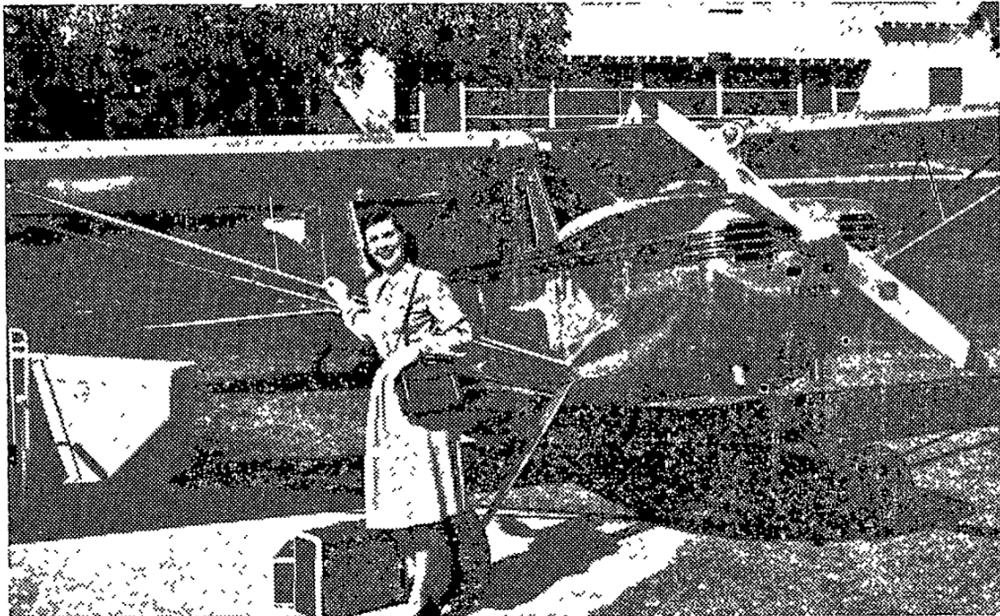


Cessna 170

FIRST INTERNATIONAL AIR SHOW
August 11, 1948
Estevan, Sask., Canada

*Voice of
Dakota Aviation*

CESSNA SETS THE PACE AGAIN IN 1948 WITH
More for your Money



Get off to a flying start on business or pleasure trips . . . in winter or summer . . . In a CESSNA It's a year-round, cross-country performer with a cruising speed of over 105 m p h ---a range of more than 450 miles---a service ceiling of 15,500 feet and an 80-pound luggage capacity. Directional ventilation system makes possible heating the cabin for comfortable cross-country winter flying. What's more, with the Cessna patented, safety landing gear, you can take off and land safely in winds that ground most light planes.

The Cessna 140 is a fast, clean, 2-place craft, that delivers for only \$3,345 (f o.b. Wichita). The 120 is basically identical---minus starter, generator, battery, flaps and with less luxurious interior trim---and delivers for \$2,845 (f o b Wichita).

CESSNA 170

The low-cost, 4-place "Family Car of the Air" Easy to fly---economical to operate---plenty of room for the whole family (4 adults) plus luggage. Never before has such room, speed, comfort and utility been offered at anywhere near the same price. All-metal structure. 145 H P Continental Engine---over 120 m.p.h. cruising speed---500-mile range. See it.

CESSNA 190-195

Practical 4-5 place personal or company airliners. All metal---airline-type engines---Hamilton Standard Constant Speed Propellers---every safety and comfort feature. Yet surprisingly economical to own and operate. You get about 12 miles per gallon of gas! The 190 has a 240 H P Continental Engine and cruises at well over 160 m.p.h. The 195 has a 300 H. P. Jacobs Engine and cruises at over 165 m.p.h. Both have ranges of over 700 miles.



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DAKOTA FLYER

Vol 11 August, 1948 No. 10

Editorial Manager Carl Thompson

Associate Editor..... Marie Gress

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Published Monthly at the Office of the Conrad Publishing Company, Bismarck, North Dakota

The Cessna 170 is Cessna's newest contribution to aviation's 4-place airplane. It is of all metal structure—with high wing design. The 170 is powered with a 145 Continental Engine. A feature story on this aircraft will be found on page 8 of this issue

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NAVION - - LUSCOMBE - - AERONCA

Tailwind Tattler

IN COLORADO the new Travelgram has been instituted by Western Union through the efforts of the State Division of Aeronautics. The special rate was set up for handling telegrams which notify your friends of a safe arrival following cross-country flights.

PARTNERS IN CLOVER, Frances Langford and Jon Hall have taken on another partner, Robert Young. They operate Santa Monica's Clover Field and have just announced that they will become world distributors for a new type of hangar, The Cloverleaf Quad Hangar.

TWO SOUTH DAKOTA men, Gail Coe and Elmer Bekken, are coyote hunters with or without a gun. Spotting a coyote from their light plane, the chase was on. The coyote tired quickly so they landed, lassoed the animal and killed it with a fence post.

3,500 ACRES OF WHEAT were saved, totaling some \$3,000,000.00 as the temperature dropped to 28 degrees with the harvest only six weeks away. Six airplanes from Fairfield, Idaho, flying at low level, raised the temperature about 3 degrees and created a wind that was just as important in preventing frost.

YOUR INTEREST IN THE "DAKOTA FLYER" WILL BUILD UP INTEREST IN DAKOTA AVIATION!

FRIED CHICKEN
and

FRENCH FRIES

Bart's Drive Inn

Municipal Airport
WILLISTON, N. DAK.

NAA Airport Safety Campaign

During July the North Dakota Aeronautics Commission mailed the National Aeronautic Association Airport Rating Lists to all North Dakota airports. The Safety Advisory Council of the NAA has revised the requirements for awarding the "Certificate of Good Airport Operating Practice." In order to qualify for the award this year, the airport must meet all of the basic NAA requirements along with a minimum of 20 of the additional desirable items.

In last year's safety campaign, 493 airports throughout the United States, of which ten were in North Dakota, met the requirements for the Certificate of Good Airport Operating Practice.

The 1948 NAA award is a very fine appearing Certificate which every deserving North Dakota airport should have on display. All airport managers are naturally interested in safe operating practices. Here is an opportunity to check your facility and receive personal recognition of your work. All completed reports should be mailed to the North Dakota Aeronautics Commission, Bismarck, N. D.

N. D. Gas Tax Amendment

As of midnight July 3, 1948, the deadline for the filing of the "Initiative Petitions" which propose to amend Article 56 of the North Dakota Constitution there were 9,600 signatures returned on some 353 petitions. Inasmuch as 20,000 signatures are needed to place this measure on the ballot it was decided to forego the November 2nd, 1948, ballot in favor of the next general election. The gathering of signatures will be continued until the 20,000 are secured so that the measure may be placed on the ballot at the next general election following the Nov.

2nd election. At the moment we have the job just about half finished. 3,000 petitions have been printed and circulated. We need about 400 additional petitions returned in order to complete the job. Your help in the past has been most sincerely appreciated. Let's finish the job.

Accident Report

Beach, N. D.— On June 26, 1948, Homer Smith of Beach, North Dakota, according to an accident report submitted by State Patrolman Hollis Dietz, took a Piper Cub belonging to Dr. C. A. Bush of Beach and engaged in reckless low flying over several fishermen on Odland Lake, 7½ miles north of Beach. William Uehlman was a passenger in the aircraft.

Smith buzzed the fishing boats until a very low dive the propeller of the aircraft struck the water, the impact of which broke off both ends of the blade with a resulting crash of the aircraft into the lake. The crash occurred about 200 feet from shore in 10 feet of water. The airplane sank almost immediately. Smith managed to save Uehlman who could not swim.

According to the violation report the pilot, Smith, was flying Dr. Bush's plane which he had taken without permission. He also was carrying a passenger on a student permit which constitutes another violation. Smith also violated the "Reckless Operation of Aircraft" provision of the North Dakota State Aeronautics Act which provides: "No person shall operate an aircraft in the air or on the ground or in the water while under the influence of intoxicating liquor, narcotics or habit-forming drugs, nor operate an aircraft in the air or on the ground or in the water in a careless or reckless manner so as to endanger life or property."

Licenses Suspended

July 16, 1948, Phillip Victor Mayer was tried before the Civil Aeronautics Board at the hearing room in the United States Post Office Building, Bismarck, North Dakota, on the charge of violation of the Civil Aeronautics Board minimum safe altitudes for flight of an aircraft over other persons, vehicles or structures.

Phillip Mayer was the pilot of an aircraft involved in an accident last July 9, 1947, three miles east and four miles north of Baldwin, North Dakota. His passenger John Savenko of Bismarck was fatally injured when the aircraft crashed to the ground near Baldwin.

The evidence presented at the trial revealed that Phillip Mayer piloted the aircraft at an altitude as low as 150 to 200 feet in the immediate vicinity of the Joe Sorch farm near Baldwin. The Civil Aeronautics Board examiner ruled that such action on the part of the pilot was in violation of the minimum safe altitude regulations of the CAB and that if the aircraft was maneuvered at such a low altitude there was insufficient height to permit maneuvers especially in turns.

Testimony indicated that the aircraft was in airworthy condition prior to the flight. The CAB examiner ruled that on the basis of the evidence introduced at the trial that Phillip Mayer was guilty of violation of Part 60.107 of the federal rules and regulations of the Civil Aeronautics Board.

Mayer was fined by the CAB examiner by having his private pilot's federal certificate revoked for a period of two years.

John A. Cannon, Regional Attorney, Civil Aeronautics Administration, Chicago handled the prosecution for the CAA. Witnesses were Mr. and Mrs. Joe Sorch, Baldwin, Ray Waltos, Orrin Auch and Joe Lippsmeyer.

S.D.A.T.A. Meet at Spearfish

Doctor Kenneth Bayne was guest speaker for the South Dakota Aviation Trades Association meeting held at Winner, South Dakota, on July 12

Mr Bayne talked at some length with regard to the various chemicals used in crop spraying, including 2-4D, DDT, Taxophene, and Chlorophene. He briefly discussed the amount of spray mixture to be used on various crops and under various conditions, the effect of the same, etc. He advised that the people in the crop spraying industry, particularly aerial crop spraying, must educate the farmers on the beneficial results of the same. He stated that, according to actual experience, the best results have been obtained by making a forty-foot swath from a distance of approximately ten feet above the ground, thus practically eliminating the possibility of danger from drift. He also advised that it had been proven that an airplane could spray a town for a cost of approximately \$100 per family. Mr Bayne spent some time regarding the spraying of cattle and other animals, chemicals used, results obtained, etc. In conclusion, he stated that the two main rules to follow in aerial crop spraying, in his opinion, would be (1) do a good responsible job of applying the spray mixture, and (2) do a good safe job of flying.

At the invitation of Don McFall it was decided that the next meeting would be held at Spearfish, S. Dak., on Monday, September 13.

Licenses Suspended

The Civil Aeronautics Board reported in a recent news release that the private certificate of Egbert Wayte of Williston, N. Dak., was suspended for a six-month period. This action was taken because the pilot violated the Civil Air Regulations by engaging in flying, in the vicinity of Williston, below the minimum altitude prescribed.

At a public hearing held at Fargo, N. Dak., on June 30, the Civil Aeronautics Board suspended the Student Pilot certificate held by Palmer Eidem for a period of ninety days. Eidem, of Hillsboro, N. Dak.,

was also flying at low altitudes.

Minot Holds Pilots Barbeque

Sunday, July 11—Human interest, thrills and color at the pilots' barbeque kept more than 2,000 spectators entertained at the Minot airport.

Sixty-two pilots — six from Canada — flew their craft of all types and descriptions to the airport for the event which opened with a barbeque starting at 10 a. m. and continued with a program and contests in the afternoon.

Prizes were awarded as follows:

To Alvin Officer, Ryder, for the first pilot to arrive and for first place in the balloon busting and streamer cutting contest, to Bruce Wright, Williston, 62, oldest pilot, to Ken Nicolson, Estevan, for the quickest take-off, 168 feet, to Marvin Larson, Plaza, for the private plane spot landing contest, to Joe Engels, Minot, for the quickest take-off with a plane loaded with four passengers, to Virgil Nordstrom, Minot, for the spot landing contest, commercial planes, to Leonard Daily, Larsland, Mont., pilot of the plane coming the greatest distance.

An Estevan pilot, flying a 1928 Gypsy Moth, copped the prize for the oldest plane to arrive and a number of other prizes were given to visiting pilots.

Man can do more things in the air than birds can—but that's no reason he should be careless.

That sums up the viewpoint on flying by Bruce Wright, Williston, who at 62 got an award in Minot Sunday for being the oldest pilot present at the program at the airport.

Wright has been flying since 1925. He started with an old Jenny of World War I vintage. He has never had an accident. And as an instructor he is rated as "tough" but he denies any intention of being such—he just wants his students not to be careless.

Somewhere between 11,000 and 12,000 is the number of hours of flying Wright has done.

Wright has his own field at Williston, conducts a flying school and sells aircraft.

We'd Like
You . . .
To Meet



Harold G. Vavra, Acting Director
North Dakota Aeronautics Commission, Bismarck, N. D.

Harold has been associated with the aviation industry since November, 1941, when he was engaged by the Aeronautics Division of the Minneapolis Honeywell Regulator Co., Minneapolis, Minn., as a production engineer assigned to the task of developing mass production methods for the manufacturing of aviation electrical instruments.

In March, 1942, he was assigned by Honeywell to the Boeing Aircraft Company, Seattle, Washington, to supervise the installation and flight testing of one of the first electric automatic pilots to be installed on the Boeing B-17 Flying Fortress. This equipment was known as the type C-1 electronic autopilot which was destined to play a very important role in all precision bombing undertaken during World War II. The C-1 autopilot was installed in all B-17's, B-24's and B-29's flown by the Army Air Forces.

July 1, 1947, Vavra became associated with the North Dakota Aeronautics Commission as airport engineer. After the resignation of Erling A. Nasset, Director of Aeronautics, he also assumed the duties of Acting Director of the North Dakota Aeronautics Commission.

N.D.A.O. Meeting at Dickinson



William Piper



Donn Flower

Piper, Airplane Builder, Says Girls Can Influence Flying

Friday, July 9, the North Dakota Aviation Operators Association held a meeting at Dickinson, North Dakota. Heading the list of speakers were William Piper, manufacturer of the Piper Cub airplane, Donn Flower, sales manager of Cessna Aircraft Corp., Donald Thompson, senior inspector of the Civil Aeronautics administration, and Harold Vavra, acting director of the Aeronautics commission, Bismarck.

Donn Flower addressed the group of 30, stressing the need for those in aviation business operations to "sell flying, as well as airplanes." Mr. Flower advocated more instruction in cross-country flying for private pilots, and said that it was the operators duty to "build up a desire to go places by plane." He said "We must get the airplane in use, get people to talking about it and set a good example."

Girls definitely influence and help the development and progress of private flying." William Piper pointed out that for women, hats and flying are similar. If one woman has a new hat, all the women will want one. He said, "If one girl starts flying others will want to start too. Soon all the girls will be out at the airport. If the girls are out there the boys will want to be

there too, so all we have to do is talk the girls into it."

He also stressed that private flying isn't exclusively a young man's field, explaining that older people are better equipped for aviation because they have the available time and funds for flying.

Piper considered used cars for the public to use to go to town, very important to airport operators. He also stated that low priced, used airplanes were needed to plant the seed of desire, then the pilot would buy a more expensive plane as time went on.

J. C. Lippmeyer, president of the N.D.A.O., conducted the meeting, and Dan Wakefield, Secretary-Treasurer of the group gave his report. Carl Thompson, Editor, DAKOTA FLYER, acted as master of ceremonies at the dinner served at the Villard Hotel.

Wisdom is knowing what to do next, Skill is knowing how to do it, and Virtue is in doing it.

A turtle never gets anywhere unless he sticks his neck out. He also knows when to pull it back.

Federal Aid Airports

Twenty-seven North Dakota communities have been allocated federal-aid funds to construct, improve or enlarge their public airports. The total amount of federal-aid airport funds allocated to the twenty-seven communities is \$466,040 on the basis of 25% of the allowable land acquisition costs and 50% of other allowable construction costs.

The largest airport improvement project is Hector Airport, Fargo with \$62,500 of federal-aid airport funds earmarked for expansion of their airport. The smallest scheduled project is Ellendale Municipal Airport with \$1,200 of federal airport funds allocated.

All twenty-seven North Dakota communities have the airport sites selected while 44% of the twenty-seven North Dakota Communities have completed the engineering field survey. Ten communities have completed the land acquisition of their airport. Eighteen of the communities have indicated that their share of the funds will be available.

The first federal-aid airport in North Dakota to finish all plans and actually receive a grant agreement from the Federal Government, which really is the green light for the start of construction, was Westhope, North Dakota. Westhope Municipal Airport with a federal grant of \$9,625 should be under construction soon.

Aviation Law Enforcement

A two-day law enforcement school was held July 24-25 at the State Capitol at Bismarck, North Dakota. Approximately 35 members of the State Patrol along with several county sheriffs, attended the school. Flight demonstrations were held at the Bismarck Municipal Airport of the various violations of flying regulations most common in the law enforcement field. The law enforcement officials were instructed on the proper procedure in the investigation of aircraft accidents and filing of complaints in accordance with the 1947 Session Laws.

FLYING HIGH

with

MARIE

"Hello Ladies" — From now on every month I would like to have a column here just for us (The men get too much attention anyway, but of course we won't mind if they take time to read our column too. Maybe they'll learn that women are more capable than they have always thought) Each month I'll try to have some news of what women have done in the past, and are doing now, for aviation.

At Beach, N. Dak., the other day, I met a woman who described perfectly what many wives must be thinking. She said that if she goes with her husband to an air show or breakfast flight, she not only feels out of place because she is the only woman present, but everyone thinks that her husband is henpecked because she "Trails along." Yet, she doesn't want to miss out on all the fun—and why should she? A woman has a right, and a duty, to go to the air shows with her husband. What about it? Let's make it our business to attend the air shows with the men and show them that it'll be a lot of fun for them to have us with them.

Maybe we could even form some kind of club for women pilots and the wives of pilots, so that while the men have their meetings and conventions, we could be in the next room having a meeting of our own. It would be a nice way to get acquainted with each other, don't you think so? Also it would provide a golden opportunity for us to form a sort of study club. You know the men seldom bother to discuss airplanes and their aviation problems with us because they think we don't know enough about it to carry on an intelligent conversation. Could they be right? Well then, let's get together and learn a little more about stalls, spins, and the business we all love—aviation.

If you like the idea of forming a club for women — why don't you write and tell me? (The men can write and tell me what they think of the idea, too, since they're the ones who'll gain by it in the end.) If enough of you seem to like the idea, we'll see what we can do to get the group organized.

By the way ladies—this is to be your column. It is dedicated to you, the wives of pilots—and especially to you—the women pilots of North and South Dakota.

Please send in your news and views. We'll publish them, and don't forget—I'll be waiting for those cards and letters.

"Goodbye now. Be with you again in September."

"WE MUST ALL PUSH TOWARD ONE COMMON GOAL. A FUTURE IN AVIATION FOR WOMEN"—Wm. Piper

SUGGESTIONS WE'D LIKE YOURS

The Dakota Flyer is published for YOU, the businessman in aviation. It is published to serve your needs - - - In getting non-air-minded persons interested in knowing what you at home are doing.

Any suggestions which you may have at any time will be welcome, any criticisms will be appreciated. The editors try to select for publication articles which they think you'll find valuable. If there is some subject we have missed, please drop us a line and let us know. Or tell us when we visit your airport.

The DAKOTA FLYER

Dickinson, N. D. - - Box 624

FOR AUGUST, 1948

Gentlemen's Corner



Miss Darlene Leverson, age 19, started flying in Mott, North Dakota, in August 1946, while she was still in high school. She received her Private Pilots license in September, 1947. To date Darlene has 66 00 accident-free hours to her credit.

Darlene, a sophomore at the University of North Dakota, is very interested in music — especially the piano.

Elected "Miss DAKOTA FLYER" in 1947, Darlene is now vacationing at her home in Elgin, North Dakota. EDITOR'S NOTE. This Column, similar to "We'd Like You to Meet" is to appear monthly. It is written especially for the gentlemen who may find it interesting to know that women ARE capable as pilots.

CROSS COUNTRY PILOTS

Stop at

Airport Lunch
JAMESTOWN, N. D.

Zack Mosley has dedicated his comic strip, Smiling Jack, to the advancement of private aviation. His 18,000,000 readers are currently getting tips on air marking. Lack of air marking is a pet peeve of Zack's at present.

PAGE SEVEN

THE CESSNA 170

The Cessna 170 is one of the most pleasant airplanes to fly and ride in that you can imagine. It represents one of the best combinations yet, of the three basic ingredients which private owners want: good flight characteristics, comfort, and performance.

If you go out to fly one parked among a group of 140's you may not spot it at first. But finally you see it. Nose a little longer, and sharper, just a little taller, just a little longer. But as you get closer it begins to grow, until up close it impresses you as a rather large airplane.

That impression is heightened when you open the wide door, for the cabin is a roomy one, and trimmed with the same neatness as the 140. There are doors on both sides, and both front seats slide back on a track. It is easy to get into, and after you do and pull your seat forward until it is latched in the most appropriate notch for your leg length, there's plenty of room for the passenger to pass between the back of your seat and the rear of the wide door. The rear seat is several inches wider than a 140 and its removable back has the same adjustment for angle that the 140 has. The baggage compartment is larger than the 140's and is behind the rear seat with shelf above. It will hold 3 large suitcases, the shelf two. Seated in the front or rear, you will find more than adequate head room and leg room as well.

The only noteworthy difference between the 140 and 170 cockpit is in finding that you have more gas in the right wing than in the left. You have, for cruising and landing purposes 37½ gallons or four hours with about a thirty minute margin, cruising at 2400 r.p.m.

The engine, a Continental 6 is rated 145 h.p. at 2750 r.p.m., and normal cruise is 2350 to 2400 r.p.m. with a redlined maximum cruise of 2500. With the McCauley prop it turns around 2200 on the ground.

The only thing worth particular mention in preparation for take-off is to set the trim tab indicator correctly for the load you have. This is because the stick forces are fairly high and if you trim for a speed much below or much above what

you want to climb at you'll have to push or pull on the wheel rather firmly to get or hold the speed you want unless you re-trim in the climb. Actually, that's what you are probably going to do anyhow, so it is good right off to start thinking of the airplane as a trim-tab airplane, and that you're going to use that tab a lot in flying it.

As you level off, you might as well start trimming nose down, otherwise the back pressure on the stick will build up rapidly due to the airplane's wanting to nose back up to the climb speed for which it was trimmed.

Levelled off, trimmed and turning 2400, with the nose riding well down, you find the airspeed sitting right in the middle between 120 and 125, even though you're then 2500 feet above sea level at close to standard temperature. Cessna's "over" figure on this airplane is 120. It's easy enough to get an airspeed to indicate 120, but you can bet this airplane does it, and that's the speed at which cross country flying starts making about 50% more sense.

The next thing you're likely to notice is the low noise level and how free of vibration the ship is. You aren't long concluding that here's an airplane in which you could ride all day without getting bushed. Now what pleasure is an airplane if it isn't like that?

From this point you're ready to consider flight characteristics, but already you've been unable to avoid getting some sort of impression of them. For instance, even though the flight was in rough air, you couldn't help but be aware of the fact that the ship had mighty little roll to it, and had pronounced longitudinal and directional stability. It is characteristically one of those airplanes that if you put it in some attitude it tends to stay there. All this comes from the fact the ship has an extra long tail and in addition quite generous tail surfaces together they do for it just what the feathers on an arrow do—a swift, steady flight.

At 70 the airplane has quite a gliding radius, and holds its speed closely. Your tendency on the first landing will probably be to put the flaps down a little late. When they

are first put down the airplane tends to nose up slightly for a second and then goes back to its trim speed. At any rate, flaps down and around 65, the descent isn't exactly flat but on the other hand it isn't quite what you usually expect out of full flaps.

But to make the landing—you can get out a lot of "A's" to put in your log book. It's just one of those airplanes that you flare, then get the tail down some without any gain in altitude, and after that it almost lands itself. You find yourself putting on just the slightest back pressure just before it touches. If you try to make any more work than that out of the landing you tend to land slightly tail first.

Flying the airplane solo, is, of course, giving it a 510 lb break and it practically takes to the air from a standing start. At 70 the rate of climb is from 1,000 to 1,200 f.p.m. and seems as if you're going practically straight up.

When you trim to cruise, light this way, and watch the airspeed you begin to wonder if this is one of those airplanes which flies maybe just a few miles an hour faster loaded than light. There have been a few. It is caused by the fact that the fuselage is best into the relative wind when the wing is at the angle of attack that goes with a full load. Lightly loaded the fuselage is moving along slightly nose down compared to the full attitude. As far as the 170 is concerned this could be only whimsy, but at any rate at 2400 it seemed much more inclined to indicate 120 instead of the 122½ it showed with full load.

Climbing on up for some stalls your already favorable impression of this airplane is going way on up too. In the power stall, with cruising trim, the main indication is the considerable pull it takes on the wheel to achieve a stall, the extremely high nose position, and a final slight buffeting just at the stall. The break is rather slow, the ship remains stable laterally and there's full aileron control as the nose sinks down. If you pull up a little faster, enough to really get it good and stalled, the nose goes down faster, of course, and farther.

(Continued on Page 14)

Over My Desk



Anticipating Weather

Meteorologists at weather stations are always glad to go over the latest reports and to advise pilots regarding the chances of flight along a projected route. At a smaller field, where there is no weather station, there is always a telephone, and a call to the nearest station will get the desired information.

In the United States the general movement is from west to east, and a flight in that direction usually is moving with the weather. An east to west flight will find more rapid changes, and conditions will become better or worse depending on what is reported in the line of flight.

Certain types of weather can give the small plane pilot a nasty time. A low pressure area is treacherous and the pilot should note from the sequence reports how rapidly the pressure is lowering. A fast pressure drop indicates that a severe storm center is in the making, and it would be wise for the pilot of a small plane to stay out of the whole area.

The wind velocity should be examined along the route and especially near the destination. Head winds mean that extra refueling stops must be planned. Landing will be difficult in high winds and dangerous if the winds are gusty.

During the summer months thunderstorms are a possibility anywhere in the United States, and the small plane pilot should avoid them like the plague. Exact prediction of thunderstorms is difficult, but meteorologists can tell when conditions are right for their formation. They are frequent along weather fronts, and summer afternoon thunderstorms may occur when there is a deep layer of humid air. The building up of high cumulous clouds frequently will foretell the development of the severely turbulent cumulonimbus.

Another factor to be watched on the weather sequences is the proximity of the temperature to the dew point. When they are tending to meet, precipitation can be expected in the form of fog or rain. In the late afternoon the cooler air may speed up this tendency and it would be wise to stop short of an area where ceilings may be closing in—

W H Rodda

Hazen, N Dak
Dear Editor:

Your magazine is really getting around I advertised for a flight instructor, and got one from New York through your paper

Sincerely,
LYLE BENZ

Northwood, N D
Dear Editor:

Just a few lines to let you know how much my wife and I enjoyed the convention at Fessenden. It's the first Flying Farmers convention I have ever been able to attend although I have been a member for some time. I'm already looking forward for next year's convention.

The people of Fessenden and members of the flying farmers are a good bunch of people.

I'm sending you a picture of myself and my family in front of our Taylorcraft

Yours truly,
Chester Offerdahl

Editor's note: Thank you very much for the picture. We certainly would like to print it, but it is too small.

Estevan, Sask
Dear Mr Thompson

We wish to advise that plans are finally underway to hold an Air Show here in Estevan, on Wednesday, August 11th. We would appreciate any publicity extended in your Dakota Flyer.

To yourselves and to all our American Flying Friends we extend a hearty invitation, to attend this International event. So far our plans call for the attendance of a

Helicopter, Mustangs, Paratroopers, etc. As for the regulations in crossing the border, we are arranging to have Customs and Immigration Officials stationed right at the Estevan Airport, availing all visitors of satisfactory clearance, and thereby avoiding any out-of-the-way reporting.

We are also planning to hold various contests for our visitors, such as spot landings, shortest take-off, etc.

This is our first Air Show being sponsored by The Estevan Flying Club, and all efforts are being made to provide an interesting day of Air activity for all our American and Canadian fliers.

We therefore trust that our Show may be honored with a good turn from across the border, and we assure you that your visit will be a pleasant one.

Thanking you for your very kind personal interest, and looking forward to seeing you here in Estevan on the 11th of August, we are,

Yours truly,
The Estevan Flying Club,
H Mandel, Sec'y.

Stop at
Border Aviation
MUNICIPAL AIRPORT
Langdon, North Dakota
LUSCOMBE - PIPER
AIRPLANES
Bob Wells, Operator

Cruising Around Our Airports

Yankton, S D—Our year around restaurant continues to be a welcome sign to many transient pilots and local hangar flyers, who are also the life of any party and naturally all showed up with blue ribbons for our RAMP DANCE on June 26

There were about 200 present when one of our local boys ordered a rain so we moved the piano inside Oh well HANGAR DANCES are just as much fun.

Some people are just determined to get ahead In the case of Leo Larson and Floyd Hessler, a commercial ticket is on the blue horizon, and they'll get it by using their newly purchased Luscombe

Every so often the airport is plessed with some beautiful feminine face This time it's Nancy Gurney, taking instructions in their 1948 Station Wagon Speaking of 1948 Stinson Station Wagons, Charley Tycz of Tyndell, S Dak, has a nice new blue one We will see him at the next Flying Farmers convention.

Everything is nice and quiet down here now The shop is in its new location in the east Hangar, and the wind sock that blew down in a recent windstorm has been replaced with a sky hook anchor

Jamestown, N Dak—Walking into the office of the Smith Flying Service you will find a slight change in the scenery — and we're not talking about the new paint job on the walls No, siree — she's a redhead, just out of school, who is replacing Blanche Pedersen Blanche has decided to give her whole-hearted efforts to homemaking instead of dividing her time between the Airport and home Patricia Jacobs is the new secretary's name and we know you'll find doing business with her a pleasure

A familiar face again to be seen in the shop is Jim Parkhouse and we are glad to have him back Jim replaces Walter Peters, whom most of you knew. Walt has gone back to the farm in Isle, Minnesota Another back-to-the-farm boys is

Lloyd Toftner The old faces have been replaced by Floyd Broadland from Breckenridge, Minnesota, and Richard Naumann of Temvik, N. D

Huron, S Dak—Three local GPs started a crop spraying venture here this summer with an Aeronca 85 hp Champion, equipped with a Sevdy-Sorensen sprayer They have been very busy and are providing very satisfactory service to farmers in this community

On Saturday, June 26, three polo players and several other interested parties (the horses were not among the interested parties who arrived by air) arrived in Huron from Milwaukee, Wis, to attend the polo game played on Sunday, June 27 The party included a Navion, flown by Dr Heise, and a Cub Cruiser, piloted by Mrs Heise

Presho, South Dakota — At the well-attended air show here on June 29, Dakota Aviation Company won first place in the two-place short take-off contest with their new 95 hp Aeronca Champion First place in the four-place short take-off contest also went to Dakota Aviation Co with the new Aeronca Sedan

Superior Airways, Inc, won the bomb dropping contest in a new 90 hp Luscombe

Buster Hendrickson entertained the spectators with a Stearman acrobatic act, and Joe Foss of Sioux Falls, S D, "Cut a few capers," in his new Navion.

Well, it's back to the home 'port for now, but we'll be "Cruising Around Our Airports" again until September

NASAO Meets at Colorado Springs

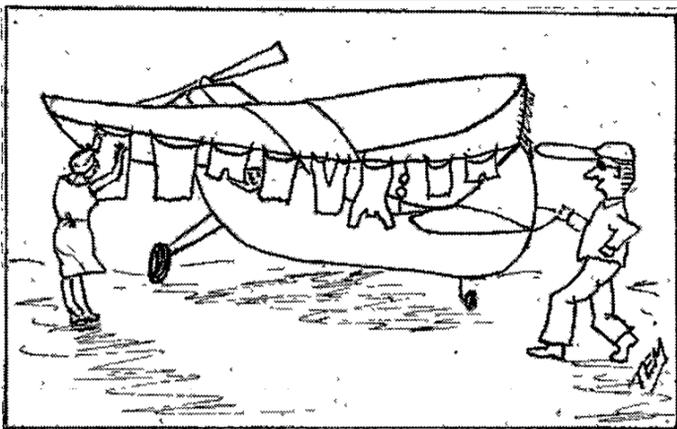
The National Association of State Aviation Officials from 21 states met at Colorado Springs, Colorado, July 6 7 and 8th to discuss the activities of the organization during the past year

Following discussion of the GI flight training program and Public Law, 80th Congress, by which funds were appropriated for the activities of the Veterans Administration for the fiscal year 1949, the NASAO went on record by concurring on the following resolution

"The National Association of State Aviation Officials reaffirms its previous policy and the activities of its officers in support of the Veterans' Flight Training program It further offers its cooperation to, and urges its members to actively cooperate with, the public, the veterans, the Veterans' Administration and the flight school operators to the end that the intent and purpose of the Congress in providing a sound flight training program for all veterans who are entitled to such training be fully accomplished"

The group heard reports by President Cornish and A B McMullen, Executive Secretary on aviation legislation passed by the 80th Congress

Several pilots crack up each month while "Buzzing" their homes The family gets a great show, but they probably don't enjoy pulling the pilot's body from the wreckage



To Patent Model Invention

Elmer G Wood, Freshman at the School of Mines, Rapid City, S D, and inventor of Y-control for toy and model airplanes, has recently had his patent accepted for approval

Woods, who conceived the idea two years ago, said that the main object of the device is to provide a special Y-control device for manually controlling the take-off and landing of a captive plane and to simulate the flight of a full-sized airplane



Elmer G Wood

The plane is controlled by a lever on the ground, with a line attached from the lever to a center post From the center post two lines extend to the toy aircraft, controlling it Pushing the lever forward will cause the plane to dive, pulling it backward, the plane will climb

"The invention is for use on gas-powered model airplanes The planes can fly over an area extending from a radius of just a few feet to 150 feet," Wood said He expects this invention to be used for education purposes by the prolonged use and study of the model aircraft in flight

Wood, nineteen years old, is originally from Taylor Ridge, Illinois

5-Church Sky

When the folks in half a dozen Lutheran Churches in western South Dakota want to seek guidance, they look towards heaven And, right on schedule, the Rev Norval Hegland will be heading for the church's own air strip When the roar of the plane motor dies, the service begins

It was almost a year ago that the young minister began what must be the most unusual parish in our Upper Midwest The high school youth of South Dakota raised the \$3,500 to buy the Cub Cruiser plane

The pastor's wife and children are air veterans In fact, the baby not yet one year old has more flying hours than most adults in the world --65 hours

"I conducted five Easter services in five churches," said the enthusiastic young parson "Firesteel, Isabel, Morrinstown, Shadehill, Reva—all in the one day At Christmas, we took two days for the five, but the weather wasn't so good"

Only once in almost a year has a service been canceled because the flying pastor's plane didn't appear A blizzard stopped that one Each of the five churches—and a sixth at Newell is soon to be added — has

Pilot Moves Fast

constructed its own red-flagged landing strip

Part of Rev Hegland's time schedule reads like this "Isabel 9 a m, Firesteel 11 a m.; Morrinstown 2 p m, Newell 7 30 p m, first and third Sundays" On the second and fourth—Newell, Rosebud, and Slim Buttes hear the roar of the engine as the flying pastor approaches

Pastor Hegland took flight instruction in Miles City and Plentywood, Montana, and received his Private Pilot license on Aug 22, 1946 — Condensed from George Grim's "I Like It Here" column, The Minneapolis Morning Tribune

DO UNTO OTHERS AS THOUGH YOU WERE OTHERS

See that your plane is cleaned after operating in mud or slush Dirty surfaces deteriorate rapidly

Ignoring right-of-way rules has caused many accidents Do you know what the rule requires of you when approaching other aircraft?

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New Four-Place Family Cruiser with Radio

We are particularly interested in trading for some two-place airplanes, Aeronca Champions preferred

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AFTER AN ACCIDENT

Preservation of Wreckage, and Making Official Reports Are Pilot's Responsibility.

The Civil Air Regulations require an immediate report in person, or by cable, telephone, telegraph or radio, to the CAA or the CAB when there is serious injury or death, or when there is reason to believe that the accident resulted from structural failure. A written report must be made to the CAB in all such cases, and also on any accident which results in damage rendering an aircraft unairworthy. If the pilot is incapacitated, the operator must furnish the report.

It is also the duty of the pilot or the operator to see that the wreckage is not disturbed until it can be examined by a representative of the CAA or the CAB, in all cases where there is serious injury or death, or structural failure of the aircraft. The wreckage may be disturbed only when it is necessary to rescue personnel, or for the public safety.

If it is necessary to move the damaged plane, it should be done with the minimum possible disturbance to the aircraft and its parts. Prior to such movement a record of the original position and condition of the wreckage (as complete and accurate as possible under the circumstances) shall be made unless the danger to public safety is such as to permit no delay whatever.

Protection of the wreckage may be a difficult task, and the assistance of Police authorities should be secured as quickly as possible. People have an insatiable desire for souvenirs. Following an airplane crash in Maryland last year, a man was found carrying away a wheelbarrow full of parts. There have been cases where spectators have set fire to damaged aircraft by careless disposal of lighted matches and cigarettes.

Immediate and accurate reports to the insurance companies are important. Liability companies need the names and addresses of all persons who are injured or killed, and

the insurers of the aircraft want all the details of the accident, and the location of the wreckage. The names and addresses of witnesses are desirable and will help in the handling of any claims which might result. It is the owner's responsibility to protect the wreckage from further damage. Insurance companies are not liable for any additional damage which results from the owner's neglect to protect the wreckage.

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 airport. 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 top reckless flying.

Every airport should have a printed or mimeographed set of Field Rules. They can specify the 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 CAA 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 ridged 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 other facilities which are available at the field or in the vicinity.

The printed rules should also lay

Airport Purchased

Mitchell Aviation, Inc., has just been purchased by Walter F. Ball, Abner G. Ingalls, and Edw. G. Youngs, all of Huron, South Dakota. This transaction involved transfer of all of the corporation stock previously held by Marjorie Anderson, Wm. Kienast, and Irwin L. Bocker.

The new officers of the corporation are Youngs, president, Ball, vice-president, and Ingalls, secretary-treasurer. The management of the corporation has not yet been determined, as at present Youngs is president and manager of Dakota Aviation Company of Huron, and Ball is vice-president and sales manager of the same company. Ingalls is manager and owner of Abby's Standard Service Station in Huron.

Mitchell Aviation will continue as an aircraft sales and service agency and pilot training school, including the training of veterans. It is planned to expand the automobile gasoline and service facilities along Highway 16, as well as some expansion of the restaurant facilities and operation. The company has also been granted a dealership for Crosley automobiles and will handle parts and service for the same.

Mitchell Aviation has been operating on the privately-owned airport west of Mitchell since January 1, 1948. The new owners advise that a lease for the use of the field and buildings has been entered into with E.J. Anderson, owner of the airport, and that the lease contains an option for purchase.

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.



3rd Annual Flying Farmers Meet

Highlighted by the WDAY Hayloft Jamboree, the Flying Farmers and Ranchers Association held their Third Annual Convention at Fessenden, N Dak, June 24 and 25

About 75 planes arrived in the early part of the day and a free lunch was served to all the visiting flyers and their guests. An educational program on tillage, haymaking, and weed control demonstrations were conducted by the Wells County Soil Conservation District.

The evening was devoted to an air show and aircraft parade with several new types of aircraft being demonstrated. The WDAY Hayloft Jamboree, broadcasted over WDAY, had approximately 1,000 spectators present.

Completing the entertainment for the first day was a dance at Festival Hall.

The second day of the convention began with the election of officers, and was followed by speakers including H G Vavra, acting Director, State Aeronautics Commission; Bert A Hanson, Secretary-Treasurer of the National Flying Farmers Association, Carl Thompson, Editor, DAKOTA FLYER, Ralph Hanson, Editor, DAKOTA FARMER; Everett Welch, Tom Letnes, and Otto Klindworth.

H G Vavra, who spoke on the subject of State-wide Elevator Air Marking, informed the group that the Aeronautics Commission sent letters to 50 Line Elevator companies representing about 600 Elevators in North Dakota. He reported that replies to the letters were very gratifying, and that the project was now being seriously considered. He also said that when the project once got underway, from 10 to 15 per cent of the elevators would be marked per year.

Bert A Hanson, Vernon Center, Secretary-Treasurer of the National

Flying Farmers Ass'n reported and outlined the NFFA Insurance program, which is now in force.

The Secretary reported that a total of 90 were registered at the convention. He also reported that the present membership in the association stood at 133 with 33 members being delinquent for a period of time from six months to one year. He also reported that if the 133 members, 11 had paid only the National dues and 16 members paid their State dues only.

Resolutions adopted by the 1948 convention included: "to extend the city of Fessenden and Wells County Extension agent a vote of sincere thanks for the excellent program, the fine arrangements and the many courtesies and hospitality." "To support the North Dakota Civil Aeronautics Commission for their consideration and action in the Elevator Air Marking program." "Commend the North Dakota Radio Stations for their Flying Forecasts and that consideration be given to make these forecasts on every day in the week."

"Support an initiated measure to allow gas money for the use and development of North Dakota Aviation." "That consideration be given by the National Flying Farmers Board of Directors to include as honorary members of the National Association the Governors, Commissioners of Agriculture and Secretaries of State Aeronautics Commission." "That the outgoing president be made a member of the directors for the following year."

Leland Brand extended an invitation to Carl Thompson, Dickinson, new publisher and owner of the DAKOTA FLYER magazine, to attend the Board of Directors meetings of the NDFRA.

Following the adjournment, the group enjoyed themselves at a ban-

quet at which Richard Day, the new president was introduced and presided.

1948-49 NORTH DAKOTA AND RANCHERS ASSOCIATION BOARD OF DIRECTORS

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Floyd Plath, Vice-Pres	Kindred
M C Altenburg, Sec'y	Bismarck
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Leland Brand	Taylor
Thorval Staven	Hatton
Howard Henry	Westhope
Wallace Stockman	Williston
Ira Aafedt	Fordville
Duane Larson	Fort Clark

Piper Guest at Beach Barbeque

William Piper, manufacturer of the Piper Cub Airplane, was at Beach Sunday, July 11 for a Beef Barbeque at the airport. After the Barbeque the local and visiting pilots visited a ranch to witness some wild-west branding. Mr Piper, with a slightly small cowboy hat on, tried his hand at applying the hot Y-3 irons of the Pat Murphy herd.

Mr Piper expressed his appreciation for the hospitality shown on his second trip to North Dakota. The first trip was only two weeks previous to this one.

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FOR SALE—PT-19 Rawdon hatch, Fabric wings Excellent condition \$1,000.00 Cliff Beeks, Washburn, N Dak.

FOR SALE—Two 1946 Aeronca Champions, licensed, May 1948. 225 hours and 250 hours respective. Fabric and Engines, A-1 condition, always hangared Priced to sell 523 First Ave N, Jamestown, N D

FOR SALE — 1946 Taylorcraft for sale Excellent condition, privately owned and always hangared Skus and radio Write for details Howard Terning, Route 2, Cokato, Minnesota.

—THE CESSNA 170—

(Continued from Page 8)

down, but there's still no reversal of ailerons The main thing to remember in connection with stalls that you reach from a moderate zoom towards the last is that strong tendency of the airplane to seek its trim speed Entering these with cruising trim you get down to 50 or slightly below as the nose goes down, so when you ease off for a recovery you are in effect giving the airplane its rein when it's going 45 or 50 m p h and is trimmed for 120 trim speed, so if you don't watch and hold the necessary back pressure on the wheel you'll get into an unnecessarily prolonged recovery dive which will obviously overshoot the 120 considerably So keep after it once you've eased off a little

FOR SALE—Luscombe 8C Silvaire. 75 h p fuel injection motor Ship in excellent condition Many extra's including blind flight group and two-way radio Always hangared If interested call, wire, or write Verne H Crabtree, Rapid City, So. Dak.

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to start the recovery

Probably the only feature of the 170 about which some question will be raised is the fuel capacity Cessna's answer to that is "Do you want range in hours or miles?"

With a 500-mile still-air range they figure that is all about 90% of the purchasers want and that an extra tank would bring on two undesirable factors First, even offering extra tankage as extra equipment would tend to raise the cost of standard models and thereby penalize 90% of the buyers Secondly, they are very much opposed to building an airplane which is easily overloaded Any extra gas would have to mean that pilots would limit either baggage or passenger weight and they figure that just

enough people would overload the airplane on hot days and on small fields to injure the reputation of their product

At any rate the 170 has 500 miles range, and doubtless Cessna is right in concluding that the large majority of purchasers will find that quite enough You can't satisfy everybody in any business, and the main thing is to be sure you satisfy a majority The 170 is certainly going to have no trouble doing that for it is a smooth, steady, good performing airplane that fits right into any pilot's hand—(By Leighton Collins, condensed from AIR FACTS)

Most people believe only half of what they hear—the worst half

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