POST ON BULLETIN BOARD

North Dakota
Aeronautics Commission
State Capitol
Bismarck, North Dakota
August 18, 1954

NORTH DAKOTA NEWS LETTER

TRI-STATE FLYING FARMERS CONVENTION DRAGS 65 AIRPLANES TO VALLEY CITY, NORTH DAKOTA

(140 Flying Farmers and Wives present)

Valley City, North Dakota. — The "Flying Farmers" Tri-State convention held at Valley City, N.D., July 31 & August 1 drew 65 airplanes from North and South Dakota, Minnesota, Iowa and Wisconsin. One hundred forty Flying Farmers and their wives from five states registered at the convention.

The North Dakota Flying Farmers elected a new slate of officers for the coming year. Milton Aasen, Hillsboro was elected President succeeding Richard Swenson, Belfield; Clifford J. Carr, Carrington was elected Vice President; Harold G. Vavra, Bismarck, Secretary and Mrs. C. J. Carr, Carrington, Treasurer.

The North Dakota Flying Farmers elected five District Directors including Robert Casteel, Columbus; Milton Aasen, Hillsboro; Emil Brueni, South Heart; Dale Rambough, Braddock and Richard Day, Moffit. Directors at large include Homer Andrews, Moffit and August Peterson, Hatton, Richard Swenson, past president was named national director.

Other Flying Farmer dignitaries attending the Tri-State Convention include Kenneth Butler, Minnesota, Vice President of the National Flying Farmers; Arthur Zistle, Wisconsin Regional Director of the National organization and Charles Schmidt, President of the Minnesota Flying Farmers.

Frank Trumbauer, Kansas City Missouri, an official with the Third Region Civil Aeronautics Administration was the main speaker at the Saturday night banquet. O'Dell Amundson, Valley City was toastmaster at the banquet. A square dance was held Saturday night. Church services at the airport on Sunday morning were conducted by Revs. Henry Gernhardt and Forrend.

Flying contests took place Sunday afternoon at the Valley City Municipal Airport with prizes being awarded to first, second and third place in all events.

1. The ribbon cutting contest was won by Emil Brueni, South Heart, N.D., who cut the ribbon eight times after release. Leland Brand, Taylor, N.D. and Dick Swift, Minnesota won second and third places in this event.

2. George Hammer, Reeder, N.D. won the balloon busting contest, breaking the balloon in ten seconds after release from the airplane. Brueni took second and Swift third place in this contest.

3. Shortest take-off contest was won by Richard Day, Moffit, N.D. who took off in 97 feet; second place went to Leland Brand, Taylor and third to Lloyd Strom, Hillsboro.

4. Spot landing contest won by Emil Brueni, South Heart, N.D., who landed within 4 feet of the designated line followed by Robert McHattie, Newport, Minnesota and Leland Brand.

5. Winner of the bombing contest was Robert McHattie, Newport, Minnesota who dropped within 6 feet of the target. Dick Swift took second followed by George Hamer of Reeder who took third place.

Ed. Lee, Valley City, N.D. received a prize for being the oldest pilot present. Dick Power of Hancock, Minn. took the prize for the youngest pilot present. Arturme Zistle, Norwalk, Wisconsin took the prize for the flying farmer flying in from the greatest distance.

Minard McCrea was in charge of local arrangements with the assistance of members of the Valley City CAP Squadron. Cless Rambough, Braddock headed the program committee.

Those in charge of the various activities were: Parking—Lee Elliott, Lee Holgren and Glenn Anderson; Registration—Minard McCrea and Carl Fredrickson; Lunch and Concessions—Leonard Sherman, Dick Path, Don Spenningsky and Dr. Hulett; Banquet—O'Dell Amundson; Square dance—Lou Bruhn; Judging of contests—Harold G. Vavra and Lee Elliott. Church services—Rev. Gernhardt and Dr. Hulett; Contests and prizes—Milton Aasen, and Lawrence Neldahl; Safety devices—Kenneth Haveling; Transportation—
TRI-STATE FLYING FARMERS CONVENTION DRAWS 65 AIRPLAINS AT VALLEY CITY, N.D. (Cont'd)
(140 Flying Farmers and Wives present)

Don Spenningsby; Exhibits and publicity—Hollis Button; F. A. System—Laurence Wmeldahl and Lou Bruhn; Car parking—Norris Deck and Myron Glandt.

A tour of Prairie Studios and Baldhill Dam wound up the convention Sunday afternoon.

Complete TV-coverage of the contests and activities was provided by WDAY-TV, Fargo, North Dakota.

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FLIGHT BREAKFAST SET FOR GARRISON—SEPTEMBER 4, 1954
(Sponsored by Garrison Jaycees)

Ben Vetter, President of the Garrison Jaycees announced this week that a flyer's breakfast flight is planned for Garrison's annual Fall Frolic to be held at Garrison, North Dakota at 8 to 10 A.M. Saturday, September 4, 1954. All North Dakota pilots are invited. The breakfast will consist of pancakes and sausage.

The flight breakfast is being held in conjunction with a two-day Fall Frolic including various entertainment, races and contests.

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FLYING FARMERS BREAKFAST FLIGHT AT Hector, MINNESOTA
(Sunday, August 22, 1954)

Minnesota Flying Farmers have invited North Dakota Flying Farmers to attend a breakfast flight at Hector, Minnesota on Sunday, August 22, 1954, from 7 to 11 A.M. Hector, Minnesota is located about 180 miles southeast of Fargo, N.D. Breakfast of fruit juice, pancakes, sausage and coffee will be served to any person flying in. Meeting of Minnesota Flying Farmers will follow breakfast.

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TOP SPEAKERS SCHEDULED FOR INTERNATIONAL NORTHEAST AVIATION COUNCIL'S CONVENTION
(Vancouver, British Columbia September 19, 20, 21, 1954)

The program of the International Northwest Aviation Council's Annual Meeting at Vancouver, B. C. includes the following top aviation talent from the U.S.A. and Canada:

1. Igor Sikorsky, Bridgeport, Conn.——“The Helicopter”, illustrated.
2. Ian Grabowsky, Sidney, Australia——“Air Freighting”, illustrated.
3. Dr. John Fisher, Toronto, Canada——“Air Relationship”
4. Asst. Commissioner Rivett Carmac, Victoria, Royal Canadian Mounted Police—“Arctic Air Patrols”
5. Frank Martin, Wichita, Kansas——“Light Planes and Their Uses”
6. Colonel Dr. Gordon Shrum, University of British Columbia—“Guided Missiles”
7. Fred B. Lee, Administrator-Civil Aeronautics Administration, Washington, D. C.
8. John Baldwin—Deputy Minister for Transport, Ottawa, Canada

General Nathan Twining, U. S. Air Force and Air Marshall Slessor, Royal Canadian Air Force have given their support to the program and will have official representation.

In addition seven different breakfast discussion groups Monday and Tuesday will discuss the following subjects:

1. Agriculture and Forestry Aviation 5. Airline Traffic and Tourists
2. Light Planes and Flying Tours 6. Airmail, Express and Cargo
3. Airports 7. Air Regulations, Border Crossing

Hotel reservations and other details may be had by writing the Aeronautics Commission at Bismarck, North Dakota. North Dakota would like to have a represent—
TOP SPEAKERS SCHEDULED FOR INTERNATIONAL NORTHWEST AVIATION COUNCIL’S CONVENTION

(Continued)

ative group from all aviation organizations attend this meeting to show that we are on the map. The International Northwest Aviation Council’s Annual Convention is sponsored by the member states of Washington, Oregon, Idaho, Montana, North Dakota, the Territory of Alaska and the Canadian Provinces of British Columbia, Alberta, Saskatchewan and the Canadian “Yukon” territory.

AVOID THUNDERSTORMS — DON'T FLY THROUGH THEM

(Air Safety)

Flying through, or in close proximity to storm areas, when in light aircraft is extremely hazardous.

First, we should consider what makes thunderstorms hazardous. There is turbulence—it is bad because of two things: structural failure is possible due to excessive gust loads being imposed upon the aircraft for which it was never stressed; second, loss of control due to a combination of instrument conditions and turbulence. It has been proven many times that a thunderstorm has enough violent air in it to break up even the largest of aircraft regardless of pilot technique.

Hail is also mighty nasty stuff and hard on the airplane, whether covered with metal or fabric. It can cause severe damage and possible injury to the pilot, because of a broken windshield. Since most hail is formed high in a thunderstorm below freezing temperatures, it often falls from the overhanging environs of a thunder cloud, thereby making it possible to fly into hail in clear air when under the overhanging high clouds of a storm.

Heavy rain and low clouds, which reduce visibility to zero, will require the use of instruments. If the pilot is untrained or out of practice, or if the aircraft is not equipped with fully functioning and accurate set of gyro instruments, his chances of surviving an attempt to sneak under or between storms will invariably end disastrously.

Static, although of secondary consideration, usually causes complete loss of radio reception if other than VHF (very high frequency) equipment.

The following is an actual report of what can happen to a DC-3 Airplane in a severe thunderstorm without a fatality, due partly to skill and luck of the pilots involved:

"A severe updraft was encountered which brought the nose up to vertical position, in spite of full forward pressure on the yoke. The pilots stated that the plane continued on over until it was on its back, at which time the yoke was pulled to full backward position to recover. For twenty seconds normal flight was maintained at 3,000 feet, but again a severe updraft was encountered which threw the airplane into another loop without losing much altitude. Following this, the ship was rolled over on its back, and a half loop was made to recover. Then it was thrown on its left side, and the ground was sighted about 200 feet below the airplane. Thereafter, some altitude was gained but another loop occurred and the airplane, in recovery from this loop, broke out of the overcast in a vertical dive at 240 indicated air speed. Strenuous efforts on the part of the crew were successful in avoiding a crash into the ground, and the airplane was restored to normal flight and proceeded to its destination, where an inspection revealed no apparent damage".

From the foregoing it is evident that thunderstorms should be avoided at all times and serious consideration given to flight cancellations if your course leads into unknown storm areas.

(Courtesy Michigan Air News)

TOWERS— TOWERS— and MORE TOWERS

(Pilot's Beware — 20 New Towers Erected in Four Months)

Twenty four radio-IV and microwave towers have been erected in the past four months in North Dakota or are in the process of erection at this time. Many of these are micro-wave relay towers erected in open country, along U. S. Highway No. 10 or adjoining main line railway tracks.

In most instances in hilly terrain, micro-wave towers are constructed on the
TOWERS - TOWERS and MORE TOWERS (Cont’d)
(Pilot’s Beware -- 24 New Towers Erected in Four Months)

The highest ground elevation available. Pilots are warned to be very cautious while flying low altitude cross country. Beware of following main line railway tracks or highways under below minimum weather or visibility conditions. Here is a list of new towers constructed or being constructed at this time.

### Between Bismarck-Mandan and Fargo, North Dakota

<table>
<thead>
<tr>
<th>Type of Tower</th>
<th>Height Above Terrain</th>
<th>General Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro-wave</td>
<td>270 ft.</td>
<td>1 1/2 miles North of Mandan, N.D.</td>
</tr>
<tr>
<td></td>
<td>220 ft.</td>
<td>4 miles W. &amp; 6 miles N. of Driscoll, N.Dak.</td>
</tr>
<tr>
<td></td>
<td>240 ft.</td>
<td>1 1/2 miles South of Dawson</td>
</tr>
<tr>
<td></td>
<td>200 ft.</td>
<td>2 1/2 miles East of Medina</td>
</tr>
<tr>
<td></td>
<td>270 ft.</td>
<td>9 miles West of Jamestown, N.D. (near Railway tracks)</td>
</tr>
<tr>
<td></td>
<td>190 ft.</td>
<td>1 1/2 miles Southeast of Valley City Airport</td>
</tr>
<tr>
<td></td>
<td>280 ft.</td>
<td>4 1/2 miles South &amp; 5 1/2 Mi. West of Valley City, N.Dak.</td>
</tr>
<tr>
<td></td>
<td>220 ft.</td>
<td>1 mile North Buffalo, N.Dak.</td>
</tr>
<tr>
<td></td>
<td>270 ft.</td>
<td>1 1/2 mile East of Moorhead, Minn.</td>
</tr>
<tr>
<td></td>
<td>270 ft.</td>
<td>1 1/2 mile North of Pembina, N.Dak.</td>
</tr>
<tr>
<td>TV-Tower</td>
<td>1,085 ft.</td>
<td>About 6 miles South of Pillsbury, N. Dak. (Guyed Tower with 3 top guy wires 1 1/2 mile long. Other guy wires at lower levels)</td>
</tr>
</tbody>
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### Between Williston, N.D., and Minot, N.D.

<table>
<thead>
<tr>
<th>Type of Tower</th>
<th>Height Above Terrain</th>
<th>General Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro-wave</td>
<td>105 ft.</td>
<td>In the City of Williston, N.D.</td>
</tr>
<tr>
<td></td>
<td>140 ft.</td>
<td>About 10 miles ESE of Williston Municipal Airport (Top of tower 680 ft. above airport elevation)</td>
</tr>
<tr>
<td></td>
<td>140 ft.</td>
<td>5 1/2 miles SSW from Tioga Airport (Top of tower 400 ft. above airport elevation)</td>
</tr>
<tr>
<td></td>
<td>80 ft.</td>
<td>3 miles SSW of Ross, N.Dak.</td>
</tr>
<tr>
<td></td>
<td>80 ft.</td>
<td>3/4 miles NW of Blaisdell, N.D.</td>
</tr>
<tr>
<td></td>
<td>140 ft.</td>
<td>4 miles SSW Berthold, N.Dak.</td>
</tr>
<tr>
<td></td>
<td>120 ft.</td>
<td>2 1/4 miles South of Minot, N. Dak.</td>
</tr>
<tr>
<td></td>
<td>1 1/2 miles NW of Tioga Airport.</td>
<td></td>
</tr>
<tr>
<td>Radio Trans.</td>
<td>220 ft.</td>
<td>1 1/2 miles NW of Tioga Airport.</td>
</tr>
</tbody>
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### Fargo and Northwest of Fargo, N.D.

<table>
<thead>
<tr>
<th>Type of Tower</th>
<th>Height Above Terrain</th>
<th>General Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro-wave</td>
<td>140 ft.</td>
<td>Bell Telephone Building, Fargo, North Dakota</td>
</tr>
<tr>
<td></td>
<td>300 ft.</td>
<td>3 miles South of Arthur, N.D.</td>
</tr>
<tr>
<td></td>
<td>150 ft.</td>
<td>3/4 mile NW of Clifford, N.D.</td>
</tr>
</tbody>
</table>

### Near Grand Forks, N.D.

<table>
<thead>
<tr>
<th>Type of Tower</th>
<th>Height Above Terrain</th>
<th>General Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio Transmitter</td>
<td>220 ft.</td>
<td>1 1/2 miles ENE of Grand Forks Municipal Airport</td>
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Editors Note: There are at least eight or ten more micro-wave relay towers in the planning stages.

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**CAA PUBLISHES NEW "PILOT MANUAL"**

The CAA has just released a new 48 page "Pilot Manual" wherein pilots and would-be pilots can get detailed assistance in preparing for flight tests. The manual covers qualifications for student and commercial flight tests along with instructor and instrument ratings.

The manual describes the flight test procedures and standards for a "Private" and "Commercial" pilots also instructor and instrument ratings.

In addition to telling how to prepare for each maneuver, the manual sets forth the performance standard required. The manual is an attempt, so far as possible, to make flight tests realistic in view of present-day aircraft use.

Listed as "Civil Aeronautics Manual 20" the publication is available from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C., for 75 cents, including supplementary service.
AERONAUTICS COMMISSION ELECTS OFFICERS

Wesley E. Koller, Minot, was elected Chairman of the North Dakota Aeronautics Commission at its annual reorganizational meeting at Bismarck in July succeeding Leland Brand, Taylor. Irven A. Nyhre, Fargo, was elected Vice Chairman and Raymond W. Heimemeyer, Bismarck, was named Secretary. Other members of the Commission are Lester O. Jolly, Grand Forks and Leland Brand, Taylor.

The commission authorized the Director to advertise for bids for a new all-metal four-place airplane to replace the existing two-place plane owned by the Commission. The Director's proposed budget request for the 1955-1957 biennium was reviewed.

AERIAL CROP SPRAYING ACTIVITIES IN NORTH DAKOTA BREAK ALL RECORDS
(204 airplanes licensed in North Dakota)

Two-hundred-four aerial crop spraying aircraft were licensed in North Dakota this year by the Aeronautics Commission breaking all previous records by substantial margins. This is a 25% boost in the number of airplanes, since only 163 were licensed in 1953.

The infestation of army worms along the Red River Valley on both the Minnesota and North Dakota side during July spurred spraying operations in both states to unprecedented highs. Minnesota had the heaviest infestation by far with some 23 counties reporting army worm damage. North Dakota was affected primarily along a 10 to 15 mile fringe west of the Red River in the eastern sections of Richland, Cass, Traill, Grand Forks, Walsh, and Pembina Counties.

Practically every aerial spraying operator in the northern half of North Dakota from Williston, Minot, Devils Lake and points east operated on either the Minnesota or North Dakota side of the Red River during the outbreak. By far the biggest operations were on the Minnesota side where the infestation was heavier. Aerial sprayers from New Rockford, Jamestown and points east also augmented the number of airplanes made available. It is estimated by the Editor that at least 100 North Dakota airplanes participated in the operation "Army Worm". Aircraft as far west as Sidney, Havre and Conrad, Montana operated from the Grand Forks International Airport during the height of the infestation.

The acreage figures for North Dakota have not been assembled for this year, however, there is no doubt that the total will pass 1,000,000.

FRONTIER AIRLINES SETS TARGET DATE OF SEPTEMBER 15TH FOR NEW AIR SERVICE

W. R. Crisman, Assistant to the President of Frontier Airlines, Inc., Denver, Colorado announced that September 15, 1954 has been set for the inaugural date of air service on the Billings-Bismarck route extension with stops at Miles City, Glendive, Sidney, Wolf Point, Montana and Williston and Dickson, North Dakota.

Crisman said that Frontier wanted to start service on September 1, but communications and operations problems are such that the earlier date could not be met.

According to Crisman the carrier is planning to have a Frontier Airlines Day at each city along the new route, during the week of September 6 to 14. Each city will be assigned a specific date during which the celebration will be arranged to coincide with the inauguration of new air service.

According to Crisman, Frontier Airlines is planning a survey flight over the new route during the week of August 23 with a CAA air carrier inspector to make a primary inspection of the operating facilities.

A final proving run will be made by Frontier Airlines between September 2 and September 8th with a CAA air carrier inspector.

CAA DESIGNATED MEDICAL EXAMINERS IN THE STATE OF NORTH DAKOTA

1. BISMARCK -- Pierce, Dr. Willard B., 221 Fifth Street - ATR
2. DEVILS LAKE -- Pavlack, Dr. John C., -- Lake Region Clinic
3. DEVILS LAKE -- Mahoney, Dr. James H., -- 313 10th Street
4. DICKINSON -- Rodgers, Dr. Robert W. A., -- 1209 8th Street
5. FARGO -- Evers, Dr. George W., -- 303 10th Street
6. FARGO -- Swanson, Dr. Joel C., -- 402 Fourth Street
7. GRAND FORKS -- Graham, Dr. John H., -- 1223 South Third Street
8. GRAND FORKS -- Lieber, Dr. Wilbert A., -- 1223 South Third Street
9. JAMESTOWN -- Woodard, Dr. Robert S., 213 1/2 First Ave., North, Box 1061
10. LAHIDON -- Mulligan, Dr. Victor A. -- Medical Bldg.
11. MINOT -- Lampert, Dr. Max T., -- One Main Street, North
12. HOGG -- Keller, Dr. Emil E.
13. WILLISTON -- Aarflanlp, Dr. J. S., -- 1, O. O. F. Bldg.