

Address Correction

Requested

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 120
WAHPETON, N.D. 58075

The Official Publication Of The North Dakota Aviation Association and carrying the Official News of the North Dakota Aeronautics Commission

2 VN

Roger Pfeiffer 1202 Imperial Dr RR-2 Bismarck ND 58501

Volume 3 - Number 3

March 1982

Wahpeton, N.D. 58075

Democratic process prevails

At NDAA convention

— Off The Record — By Larry Linrud, NDAA President

The intent was there, but. .

... Those of us who attended the NDAA convention were afforded the opportunity to listen to and participate in what was meant to be primarily a question and answer session concerning the management and operations of the NAAA.

That is not what I heard. What I did hear was a glowing discourse on the virtues of the NAAA with very little time at the end for specific questions on the one hand, and a carefully planned scenerio concerning mismanagement and personnel problems within the NAAA on the other.

The end result of this came in the form of a resolution to discontinue state membership in the NAAA in 1983 unless specific issues are resolved.

The intent was there, but. .

... While I do not personally agree with all of the language presented in the resolution, the Democratic process

has prevailed and I agree 100 percent with the intent of that resolution.

There is a genuine concern with management and operations of the NAAA and these issues must be dealt with, not with political rhetoric nor with dramatic presentations but with reason and constructive thinking.

The intent is still there . . .

... To resolve specific issues, one way or the other, so we can get on with the business of promoting and protecting our industry.

NAAA Past President Dick Reade lists goals

By Patricia J. Estes

Past president and one of the founders of National Agricultural Aviation Association Dick Reade, Hayti, Mo., came to the NDAA annual meeting in Dickinson in January to extol the virtues of NAAA and take a peak at its future. Reade offered to take back complaints, suggestions and concerns by the state members to the national

But by the time those concerns erupted into a decision to withdraw membership in NAAA unless changes can be made before the 1983 dues billing period, Reade was airborne, back to Missouri.

Reade opened by saying NAAA provides aerial sprayers with an opportunity to stay ahead and not fall behind with the terrific technology changes taking place at such a fast pace in recent years.

For him he said a love of the industry equaled a dedication to NAAA. The need for NAAA was recognized 30 years ago. The ag spray sector was very active in the National Aviation Trades Association (NATA) and because of this aerial spray members soon held many of the key spots in that associ-

Continued on page 2

NDAA resolution passes unanimously

By Patricia J. Estes

Every issue has at least two sides and the members of North Dakota Aviation Association heard at least two viewpoints on the current National Agricultural Aviation Association during the state January annual convention.

While the issues of management, finances, long range goals and organizational structure of the national association were touched upon in the opening state business session, that ongoing discussion was part of every gathering throughout the three day event in Dickinson.

By the final business session, the determination to get answers to questions and to open debate on direction of the national group, resulted in a unanimously approved motion to withdraw North Dakota state membership from the national organization.

That action does not take effect until 1983 since the 1982 dues are already paid.

Membership discussion centered on the goal of achieving necessary changes by 1983 so that withdrawal of membership by the state group need never happen.

Some of the state membership concerns were expressed in the unanimously approved resolution which appears below:

The resolution with the criteria is as follows:

Whereas, the North Dakota Aviation Association finds that the National Agricultural Aviation Association is no longer serving the best interests of its members, and

Whereas, NDAA feels that NAAA has not functioned in an accountable business like manner, and

Whereas, NDAA feels that the past presidents of NAAA are controlling NAAA rather than the NAAA state directors,

Now Therefore Be It Resolved by the North Dakota Aviation Association that we discontinue membership in NAAA until such time as it is determined that significant steps are being made to institute the following:

1. The business of NAAA be conducted in a responsible manner with complete and understandable financial accountability.

Continued on page 2

Dahl questions NAAA leadership, operation

By Patricia J. Estes

Both the opening business session of the NDAA annual convention in January and the closing business session included presentations on the National Agricultural Aviation Association (NAAA).

One view presented by Dick Reade, Hayti, Mo., a past president of NAAA, recounted the founding and accomplishments of the organization.

The second view, offered by state organization member Larry Dahl, focused on concerns over management, financial mismanagement, and other problems that need to be addressed, he said.

It was Dahl who made a motion to discontinue state membership in the national association unless certain changes outlined in a resolution are made.

That motion and resolution, passed unanimously, does not take effect in 1982 since the dues are already paid for this year and a state delegate appointed to the board.

And realistically, NDAA President

Continued on page 3

Spokesman for agricultural aviation



From page 1

ation. This made them realize it was time to start a separate organization for aerial sprayers and those connected to that industry.

Interested individuals put up \$5000 to start this group and approached NATA to work on that concept. NATA, however, rejected the idea and the group went on its own to form what is now NAAA. It was formed on the basis of one vote on the board per state member.

The first step, after organizing approximately ten years ago was to interview candidates for the full-time executive spot at NAAA,

Farrell Higbee was selected from a number of qualified candidates, according to Reade, due to his knowledge and experience in agricultural aviation.

Members may ask, he said, what has NAAA done for me? The association annual budget of \$650,000 is not a big one. "We are always operating on the thin

There are 1000 operator members plus visibility of ag aviation. "PR is a big voting national board members. associate members. Based in part of NAAA.' Washington, D.C. the association is recognized as the spokesman for agricultural aviation, he continued.

All board members serve free and all are interested and involved in agricultural aviation.

The association was active in securing fuel during the fuel crunch when member ag spray operators ran out of

Effective lobbying and education related to tax savings has more than paid back any individual member's dues investment.

The board works closely with such

National convention draws 3500

agencies as EPA, he said, NAAA was involved in research efforts with NASA related to target precision delivery of spray material.

Some of the information found from that research is now being utilized by members. It is hoped that now the NASA research funding is gone the research will continue through other agencies.

While the workmen's compensation issue is not key to North Dakota where a severe problem does not exist, it is serious for other states and NAAA worked to provide a means of getting compensation at reasonable reduced rates with no surcharge. This is an income source for NAAA and makes the individual and states dues payments good investments for the participating members.

Continuing in his presentation on the of increasing the public relations and past presidents to remain as permanent

NAAA profit, safety, operator oriented

NAAA worked on keeping the congested area in FAR regulations rather than moved to EPA. The association also worked on the careful definition of what constitutes a congested area.

A speakers kit and film library is available for members to use in bringing the message of agricultural aviation to the

Each year the NAAA convention at Las Vegas, Nevada, with 3500 attending is a highlight. The sight of 40 airplanes taxiing down the highway and into positions under one roof is an impressive one, he said.

NAAA has worked on the reciprocity issue for certification of operators.

NAAA is profit, safety and operator oriented.

Aware of the importance of aviation history, NAAA has worked with the state of Mississippi on the national agricultural museum which includes an agricultural aviation section.

Having brought to the NDAA membership the benefits and accomplishments of NAAA, Reade invited questions.

Questions centered on plans to construct an office building in Washington, D.C. in spite of member opposition; proposed changes in the dues structure despite initial board direction against such action; management of finances; budget allocations; interpretation of the annual finance report; controversy surrounding the current leadership and effectiveness of NAAA, Reade said the full-time chief executive; the Women's NAAA does a tremendous job philosophy and wisdom of allowing all

Reade begged off responses to most financial and budget questions, noting he lacked expertise in those areas.

He defended the continuity of past presidents remaining on the board for life as a practice that brings experience and wisdom to the organization.

Asked if that practice hadn't been discontinued through a vote at one time and reinstated by the board, he agreed but said that these board members have the interest of the membership at large at heart.

Reade said it was his understanding that the dues increase would only raise the fee to individual members and not to the state membership dues structure, which was the cause of concern.

(NDAA officers, however, checked on this with NAAA officials and learned the board had approved changes in the dues structure which includes the state membership fees. NDAA officials expressed the view to members that this new dues structure penalizes states with certain national individual membership levels.)

He assured NDAA members that no building would be constructed unless it was economically feasible and that investigating that possibility in spite of membership resistance was just good business.

The achievements of the chief executive far exceed any problems, he said, and all management problems had been resolved following a leave of absence and return by the person in question.

Asked about accountability of staff and steady rumours and questions about public performance of a key member, he again said such problems were solv-

Reade said he would remain around for the remainder of the convention and urged anyone with questions or concerns to see him.

"That's what I'm here for," he said.

FAA cities poor 1981 safety record

The Accident Box December 1981 24 Accidents **Fatal Accidents**

Fatalities 15 The passing of 1981 brought to a close one of the worst aviation safety record years in history for North Dakota. As indicated in The Accident Box, we suffered through six fatal aircraft accidents resulting in 15 fatalities, all occurring in the first six months of the

year. In next month's newsletter, I will

break down the safety problems of 1981.

Winter weather has made its mark on flight operations in North Dakota during the last 60 days. Two accidents evolve out of essentially the same circumstances - a circling instrument approach during reduced visilibity conditions. During the circling maneuver, the pilot's attention was diverted to reference points outside the cockpit. With limited visual cues, adequate references for aircraft control were not available. Airspeed and altitude were not properly monitored and, in both cases, the aircraft were allowed to stall while in the turn. One aircraft, a Cessna 402, was being operated under air taxi rules. The other aircraft was a turbine

Another aircraft was substantially

powered MU-2.

forced landing. The pilot stated the He stated he "tried" carburetor heat engine began to run rough and then failed. Preliminary, investigation of the engine did not reveal any malfunction. Weather information at the time of the accident included a temperature and dew point of approximately 40°F. That drifts and snow banks on or along many equates to a relative humidity of 100%! The pilot had just completed a descent

damaged when it overturned during a when the engine roughness occurred. but that made the engine run worse so he immediately took it off.

> With the recent snowfall and drifting, we now have the problem of finger airport runways.

Publishing firm responsible ONLY for accuracy of customer approved proofread ads. Any error in customer approved

ad will NOT result in adjustment to the hill

Errors in non-proofread ads will be adjusted by 10% off the NEXT

From page 1

- 2. A new executive director be hired to eliminate the current controversy surrounding the executive director.
- 3. The office staff be reduced to four.
- 4. The executive offices be moved to a central location relative to its membership.
- 5. The dues be set at \$150.00 annually for regular members.
- 6. The management of NAAA be returned to its membership by reduction of the Board of Directors to a maximum of five past presidents and the state
- 7. That the Finance and Budget as well as nominations committees be made up of state NAAA directors.

Be It Further Resolved, that copies of this resolution be sent to the president, executive director, and each state director of NAAA.

Passed by Unanimous Vote.

RELATIVE WIND

Official magazine of the ND Aviation Association. Published monthly for its members and others in the ND Aviation industry; carrying the official news of the ND **Aeronautics Commission.**

CO-PUBLISHERS **North Dakota Aviation Association** and Prairie West Publications.

> **EDITOR** Patricia J. Estes

EDITORIAL ADVISORS Robert Odegaard, Larry Linrud, William Beeks, Ron Ehlers, Fred Andersen and Jack Daniels.

ADVERTISING MANAGER Richard K. Estes

ADDRESS ALL CORRESPONDENCE TO: **Prairie West Publications** Box 1018 Wahpeton, ND 58075

N.D. looks for changes at national level

State votes to withdraw 1983 membership

From page 1

Larry Linrud says, not all of those changes may be possible to implement or after study, be deemed necessary.

However, he agreed the issues outlined in the resolution and others discussed, but not included in the resolution, all must be discussed, debated and handled on the national level.

Representing NDAA on the national board as that resolution is presented for consideration will be NDAA member and national delegate, Dan Thompson, Wyndmere, N.D.

Dahl, Cogswell, N.D., backgrounded the proposed resolution in a presentation to the NDAA final convention

He advised the group he was acting as his father's (Al Dahl's) spokesman as well as voicing his own concerns

Al Dahl, a founder, former treasurer

"NAAA is needed. It is needed badly...

and president of NAAA as well as longtime member and former officer of NDAA, missed his first NDAA convention in a quarter of a century.

His son, Larry, explained his father had hoped a debate on the operation of NAAA between Reade and himself, as The writer pointed to the fact that two past national presidents could have

However, the state board instead, according to Linrud, opted to extend an invitation-to-Reade-to-make-a-presentation and answer questions and concerns of state members about the national organization.

Larry Dahl said his father thought his best option was to remain home and miss the convention. So Larry presented the motion and background.

Saying he had a serious concern over NAAA, Dahl thanked the NDAA Board for bringing the issue to the attention of

"NAAA is needed. It is needed badly . . . but we need a strong national organization."

To achieve once again a strong national organization, Dahl suggested states might have to take drastic steps such as North Dakota was considering.

1978 letter states concerns

when great pressure from environmen- NAAA official magazine. talist groups existed, he said.

However, follow through is lacking. It hasn't come and the national organization is in trouble, he said.

Proof of this, he said in his view, can be found in the files kept by his father.

Dahl referred to those files. These records document mismanagement, mishandling of finances and personal problems with management skills within NAAA, said Dahl.

He then read a letter to his father. That letter pointed to the lack of and the agreed need for travel invoices instead of travel allowance for staff. The letter said there were questions concerning the budgeting report and concern about retraction said that in one instance tion. March 1982

the accounting staff. Reports were months late. Concern with the financial situation was stressed as Dahl read each sentence of this letter.

Letter questions board policy

He then read the name of the letter writer. The letter was written in 1978 by Dick Reade, who was serving on the budget and finance committee. It was written to Al Dahl as president of

Dahl reminded the group that Dick Reade had appeared earlier on the NDAA convention agenda to discuss NAAA. However, Reade has said he was not qualified to answer budgetary and finance questions.

Dahl pointed out Reade served on the budget and finance committee in 1978 and has served on it at other times.

The second letter, presented by Dahl. was more recent and was written by an officer of a state organization other than North Dakota to Al Dahl. Information and specifics are available from Larry Dahl.

The letter cited concerns of that state president, concerns the writer suggested are shared by others.

Editorial had to be retracted

NAAA appeared to be cliquey. New members feel left out.

The letter said that the policy of continuing votes of past presidents on the board could eventually mean that past presidents would control the board, outnumbering state delegates.

The biggest concern, however, said the writer to Al Dahl, was the paid staff members, particularly one member. This person has a history of past success but the question must be raised now about empire building.

This tendency, the writer suggested, is common and inborn in associations with this kind of administrative setup. It is hard to keep the goals of the organization as a top priority all the time instead of looking toward job

Dahl now stated that Farrell Higbee's job, as chief executive, is to be an administrator. One of his key responsibilities is that of editor of the World of NAAA did get the job done at a time Agricultural Aviation (WAA), the

> Under this title, Higbee writes a monthly editorial. In October he wrote an editorial entitled garbage in- garbage out. The theme of this editorial was the writing by members of the general media or sensationalized undocumented stories on the pesticide and aerial spray industries.

> To back up his view, Higbee cited examples written by specific writers. One writer Higbee said had written articles which, in Higbee's view, should have had a retraction as false.

> However, by December WAA was forc-



NDAA members listen to past NAAA President Dick Reade detail the national organization's achievements during the state annual convention. From left NDAA members are Bill Beeks, Jerry Beck and Bob Odegaard. Both Beeks and Odegaard are past state presidents and Odegaard has served as a state delegate on the national board in 1981.

Higbee had confused writers, articles pull out from NAAA. and newspapers. The result was misspelling of a writer's name and comments about articles that reporter never wrote for a newspaper on which he did not work.

In addition Dahl said the retraction pointed out this writer received a national award for his accurate portrayal of one major incident, which EPA had deemed a disaster.

Dahl expressed concern over the responsibility and accountability of WAA with this kind of incident occurr-

He also voiced concern over the financial picture at the national organization, asking if the staff salary and benefits package might be too heavy for the national budget to handle.

He noted that when Al Dahl was president the board voted to limit past presidents terms on the board to five years. This was done to avoid creating cliques or a board top heavy with past presidents. This action was later reversed.

Dahl concluded by saying that until these issues are addressed problems re-

He said NDAA wanted to remain as a member of NAAA and hoped the resolution would bring the needed attention to unanswered quetsions of NDAA.

Member questions and discussion focused on an unwillingness to in reality

It was pointed out that the 1982 dues were paid and a delegate to the national board, Dan Thompson, Wyndmere, from NDAA had been named.

This strong message, Dahl said, would hopefully lead to discussion and changes and the ultimate goal would be continued membership by NDAA in an improved NAAA.

In the end the NDAA membership agreed and passed the motion to withdraw from NAAA unanimously.

However, Thompson was instructed by the membership and at the board level in a later meeting to try to seek out a method which would allow NAAA to address needed changes and allow North Dakota to remain a strong active member.

NDAA hopes to remain member of national group

Thompson faces a year of challenge in his position as he tries to communicate the NDAA double barrelled message.

That message says NDAA wants to remain as a national member but that some issues must be addressed, even if in the end not all the NDAA suggestions as outlined in the resolution can be met.



ed to print a retraction of Higbee's con- Duane "Pappy" Larson accepts the North Dakota Aviation Pioneer Award from tention, Dahl said. Higbee did not sign NDAA Executive Secretary Jack Daniels during the January NDAA convention. the retraction, according to Dahl. That Looking on is Lawrence Burian, president of National Air Transportation Associa-

Relative Wind

'It's time to take our hands out of Uncle Sam's pockets"



By Patricia J. Estes

"If we want government off our backs, then we have to get our hands out of Uncle Sam's pockets."

That was the message delivered by Larry Burian, president of the Washington, D.C.-based National Air Transportation Association (NATA).

Burian spoke to the annual North Dakota Aviation Association awards banquet held in Dickinson in late January.

NATA, he reported, has a 42-year history and represents 1000 FBOs, 13,000 aircraft and 32,000 employees in the general aviation industry.

"The backbone of general aviation," the NATA aircraft fleet includes 400 turbo jets and 5000 ATCO members.

North Dakotans, he said, have a good attitude. He finds that they are resistant to federal dollars and programs because they don't want the strings tied to them.

In 1980, 75,000 pages were published in the federal register. Stacked, that number would equal half the height of

. .Thank heavens we are not getting as much government as we are pavina for

the Washington Monument.

In that Congressional session, 5,400 bills were introduced but only slightly over 200 were passed.

"Through federal" bungling, thank heavens we are not getting as much government as we are paying for.

"If we want government off our backs, we have to get our hands out of Uncle Sam's pockets.

"Under the New Federalism, as announced by President Ronald Reagan in his State of the Union address, there will be more state control. This will let Page 4

the truly needy get welfare help and rest hurts, we hurt." eliminate frauds. Federal intervention into our daily personal and business This general aviation spokesman said, lives will decrease.

"We're all involved in this situation, we the last to rebound." all helped get the country in this spot,

We all are responsible for more government, inflation, etc., Burian said the situation has been developing over the last 30-35 years and we must all acknowledge our part in that.

Reagan is taking much of the heat and criticism, he said, for high interest rates and unemployment. All this is being blamed on one man who has only been in office for one year.

'The facts are the rate of inflation in 1980 was 13.5 percent. By 1981 it fell to 10.40 percent and currently is running at 8.5 percent. Predictions are by 1982 that the rate will be 71/2 percent. It appears double digit inflation is now behind us," Burian continued.

We were in a collision

course . . .

"We had no choice. We were in a collision course with what . . . I don't think any of us would have wanted to find

Runaway costs of fed government are showing a slowdown. In 1980 government was growing at a 17½ percent. From January 18, 1981 to October there was a 71/2 percent drop in this growth.

Personal savings are up for the first time in years. Some improvement was shown before Reagan took office but it has gone from 3 percent to 61/2 percent, still the lowest rate in all of the free world.

Burian recalled that the late Sen. Everett Dirksen once said during an appropriation hearing, "a billion here, a billion there ... fellows this is going to start running into real money."

How much is a billion dollars, Burian asked. "If I had a billion dollars to spend, I could spend \$1,000 a day, \$365,000 a year for 3,000 years before it would all be spent."

"The United Kingdom is in dire trouble. The economy is so reliant on government...unprecedented in any free country in the world . . . 36 percent of . the gross national product comes from government in England."

Government is the non-productive part of the economy, he said. It doesn't have a product to sell.

Our share in the U.S. of gross national product from government grew too quickly and is now at 25 percent, added The General Aviation Manufacturers

While there are no guarantees the New Federalism will work, he said, this approach hasn't failed and it must be given a chance.

"We do know that it took almost a half a a while to get out of it. It requires time and patience.

"The general aviation industry is link-

"Historically, when the economy falls, general aviation is the first to hurt and

"It will be tough in the trenches . . .

"But," he said, "this time around the effect hasn't filtered as quickly or as badly as it has in other segments of the economy such as housing or cars."

Burian said that he didn't think the general aviation industry would hit bottom this time, the industry has resiliency. It won't be easy though he said, "it will be tough in the trenches."

'The overall economy flies on the wings of general aviation," he said.

With the new federal programs, states: will have to produce revenue, not continue to go to the federal government for hand outs.

State governments will have to look for new sources of income and will inspect all of us, he said.

In coming months we will see more and more people layed off as the economy bottoms out. To stop inflation there must be a recession and unemployment will be part of this.

As less service is forthcoming from government due to budget decreases, changes will be required. He noted that general aviation relies wholly on FAA for a lot of things but "you will see further reduction of services and people.'

"I sympathize with anyone who has to hit the brick wall . . .

In order to balance the FAA budget, people will have to be furloughed, laid off and work weeks reduced.

"For the first time in my life." Burian said, "I am seeing things done right," he said in referring to the changes in programs in order to attack the economic problems.

"I sympathize with anyone who has to hit the brick wall . . . but isn't it about time federal employees were no longer insulated from forces the private sector are feeling?

Association (GAMA) forecast that 8200 aircraft will be shipped in 1982, a drop of 13 percent.

In 1981, 9,500 were shipped for a total of \$3 billion invoiced and that represented a 20 percent decline over 1980.

century to get into this mess, it will take In 1980, the forecast called for delivery of 15,000 aircraft but only 11,900 were delivered.

The 1982 forecast, if it proves true, ed to the rest of the economy. When the will mean the lowest number of

airplanes built and bought since 1977.

General Aviation sales is going to mean selling fewer aircraft at a higher price per unit, he said. But the industry is going to have to respond to what the flying public wants and will buy.

"You must be prepared to cope with the waves in the economy and the fluctuating interest rates. The day of FHA 5½ percent interest will not return."

In today's market prices are controlled by the customers and vendors. To survive. he said, "You, we have to set the price to return a profit."

When fuel was six cents a gallon, it was sold by the business end to the users at a 20 percent profit margin at 30 cents a gallon. Today the margin is 15 percent with \$2. a gallon fuel. We are going the wrong way," he said.

The smart operator is making a 60 cent margin and still selling his product.

Something is wrong in business, he continued. "You have to control the prices, not the customer."

have to make things happen...

Things have changed. The tip you leave for a meal today could have paid for the meal 15 years ago.

Fifteen years ago there were 6000 FBOs. In the mid '60s FBOs began failing at the rate of five-six per day. Now there are 3,600, and of that, 2,000 are really viable operations and likely to be there by the year 2000.

'Those that survive until 1990 will be viable, strong FBO operations . . . just to have survived the tough decade of

The next two years will be years of positioning, not the best years for expansion. It is time to strengthen your position in business, according to Burian.

Don't fear layoffs, he advised. You can't afford to feel sorry. The survival of the payroll must be the goal. Receivables must be watched.

Avoid charge customers, he advised. Look for cash customers or those with a credit card, approved checks, etc.

"You'll have to make things happen, not let things happen."

General aviation is the industry of opportunities. There are bright spots too. In Washington, D.C., we have leadership for the first time. The first one. Lynn Helms, new FAA head is a friend of general aviation and will work to make the industry succeed and improve. A meaningful dialogue with general aviation is ongoing.

I'm bullish on general aviation. It is going to be a great industry for the sur-

All aviation started with general aviation. The Wright brothers were in general aviation and were the first FBO, he said.

In closing, he commended NDAA for its strength and clout because it is an organization that represents a coalition of interests rather than small interest groups.

Linrud makes 1983 NDAA appointments



Newly elected NDAA President Larry Linrud, Wahpeton, announced committee appointments during the NDAA convention in late January at Dickinson.

Nominating committee members during the convention were: Bob Odegaard, Kindred; Bill Beeks, Washburn and Bob Woods, Grand Forks.

Jack Daniels, Williston and Larry Dahl, served on the resolution committee while Jack will also handle the public relations position on the board.

Linrud and Daniels will also serve on the by-laws review committee. Bill Beeks will again be official lobbyist while Mike Pfau will be safety director.

Beeks gave a report from the 1981 North Dakota legislative session. He pointed to the bill concerning aerial spray liability as one of the most



Bill Beeks

crucial to NDAA members.

Poorly drawn in his view and that others in the industry, he said, NDAA succeeded in the efforts to get the bill

Beeks expects that issue will reappear next session along with others related to the industry, ranging from fuel to regulations.

Fuel tax bills tend to be complicated and bear careful monitoring, he said.

The issue of taxations of townships for both a township airport and regional one will surface in the next session, he agreed. This is now an issue for townships in the Fargo Hector airport area.

Cities with airports are exempt from double taxation but the current law is unclear about the legality of double tax-March 1982

ation of townships

Executive Secretary Jack Daniels reported a disappointing return on a convention program and membership needs survey mailed to 186 NDAA members during the summer. Only six returns were received. The timing may have been a problem, some suggested.

The sales tax issue received considerable discussion throughout the convention. At issue is the question of collecting sales tax for out of state sales delivered in state but not out of state. The tax can make competition difficult, according to comments:

> Sales Tax issue referred to study committee



Jack Daniels reads bylaw change.

However, some members did not want to jeopardize the privilege of casual sales by non dealers which are not tax-

Ben Meier of Jamestown Aviation was the spokesman for the dealers' interests in the state.

Linrud appointed a study committee comprised of NDAA secretary Mike Hohl, Mayville, Ron Deck, Hillsboro, and Dennis Rolfs, Bismarck, to work on

A bylaw change approving the seating of a board member to represent the industrial members was approved. Recommendation will come from the industrial member group with approval by the President.

Election of officers saw Linrud elected as president, Fred Andersen, Minot, vice-president, Arnie Widmer, Crete, treasurer and Mike Hohl, Mayville, secreatary.

Bill Beeks will fill the slot of immediate past president on the board due to the inability of retiring president Ron Ehlers to serve. Ehlers is no longer eligible for the position according to bylaws requirement since he changed employment.

Ehlers was thanked during the convention for his contribution as a member and officer to NDAA.

In other action NDAA voted to withdraw as members of the National organization unless stipulated administrative changes are made by the next time dues are payable.

Ron Thompson, Wyndmere, will serve as North Dakota delegate to the National Board until then.

Annual meeting Watch for more coverage of the NAAA annual meeting in the next Relative Wind.

From NDAA President Larry Linrud

About the 1982 convention

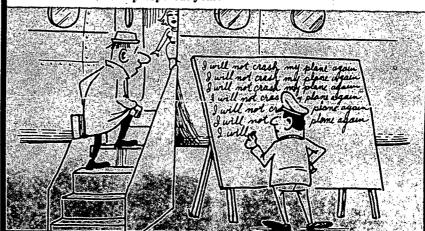
A born master of the written word I am not; which is to say that if you see poor spelling, and grammar, or a lack of continuity please accept my apologies. What I lack in ability I will try and make up with effort. However, he who hesitates is interrupted so -

The 1982 NDAA convention was a success. I would like to thank all of the people who have supported our organization as it is those people who constitute the backbone of the aviation industry in our state. I would also like to welcome Mike Hohl and Dan Thompson, your new secretary and NDAAA director, and Mike Pfau, safety officer, to our board of directors. This represents a considerable comitment on their part and is greatly ap-

Rumor has it that "Disneyland East" (Washington, D.C.) is going to rewrite Part 91 along with several other FAR's. If past history is any indication what is now difficult to understand and poorly organized will get worse! Anyway, we have until April 9, 1982 to submit comments concerning part 91.

Aviation safety in North Dakota during 1981 was absolutely terrible! We must have set some kind of record with six fatal accidents resulting in fifteen fatalities. The current state of the economy is doing enough to put airplanes and pilots on the "endangered species list" without us trying to get into the act also. The enclosed cartoon could add an interesting twist to the FAA's Accident Prevention Program however?!

I am looking forward to working with you and for you during 1982 and I hope we all have a safe and prosperous year



Planning important

tor management

Look behind the scenes at an efficiently operated airport and you'll usually find a management staff that puts a lot of stock in planning. Planning is in no way restricted to master development plans, although these are important, but encompasses every aspect of airport maintenance and growth. A good master plan is the key to organized, timely development of an airport as an integral part of the community. As such, it must be a product of joint community efforts. Too often, airports delegate the complete planning task to a consultant who has very little knowledge of the community and too little insight to pursue the ideas and participation of community groups. Inevitably the product is of little value; and if environmental considerations have been overlooked. it is downright worthless.

On the other hand, airport master plans frequently are completed, filed and forgotten. In order to draw the maximum benefit from such a study, you must design it and use it as a living document subject to annual review in a joint planning conference. It is important in these reviews to get tennants and users to participate so that aviation trends can be accommodated. and state aeronautics commissions, organizations and congressional representatives. It is during these meetings that an airport sponsor can begin to predict noise and compatible land use problems, to prepare zoning and height restriction ordinances, and strategically, in addition to considering Andersen, Minot, N.D. airside development.

who issue building permits stock FAA Form 7460-1, so that projects within four miles of the airport receive an airspace review. Too often, those 150cranes wipe out ILS minimums.

Planning should also extend to Relative Wind

routine maintenance necessities. The daily airport safety inspections required by Federal Aviation Regulation Part 139 need not be seen as a mere nuisance. They can be used as an effective planning tool if they're analyzed for trends, such as lighting outages or drainage and pavement failures. Keep equipment and spare. parts ready for predictable needs. Make sure that mechanics issue regular reports on vehicle operational readiness. Remember, those CFR trucks, which cost so dearly, won't last forever - and it may take two years to replace them.

The lack of careful planning historically leads to controversy and cripples development, not only on the airport but in the entire community. Good planning is the key to progressive airport development and operational efficiency.

NDAA elects

Larry Linrud, Wahpeton, ND. was elected president of the North Dakota Also, encourage attendance by federal Aviation Association at the NDAA annual meeting January 29, 1982, held in Dickinson.

> Linrud is a partner in Tri-State aviation, Inc., Wahpeton and manages the Breckenridge-Wahpeton Airport

to plan future land acquisitions Elected vice-president was Fred

Make sure that municipal officials Arnie Widmer, Crete, N.D. was elected treasurer and Mike Hohl, Mayville, N.D. will serve as secretary.

> Appointed as state delegate to the National Agriculture Aviation Association was Dan Thompson, Wyndmere, N.D.

Page 5

Auction entertains, raises funds

Walt Morehouse took on the job of auctioneer and sparked laughs and a good time. Walt works for Van Dusen.

NDAA passes resolution of thanks

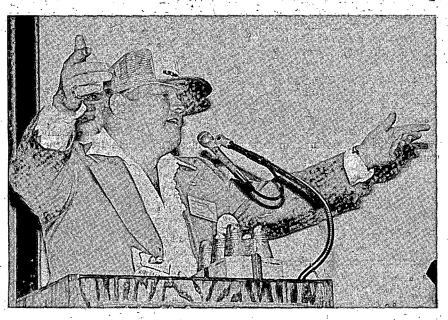
Whereas, the North Dakota Aviation Association is in receipt of a special fund, and

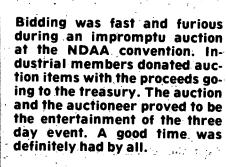
Whereas, the principal behind the raising of these funds is worthy of special recognition for his efforts,

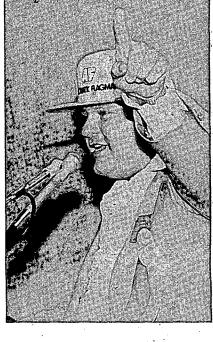
Whereas, the industrial membership of our association that participated in this event need special recognition for this support in the provision of parts, supplies, and equipment for use in this speical fund event,

Now Therefore Be It Resolved by the North Dakota Aviation Association in convention assembled this 29th day of January 1982 at Dickinson, No. Dak, that the association does hereby express its special appreciation to Walt Morehouse for. the part that he played in the auction of the special supplies,

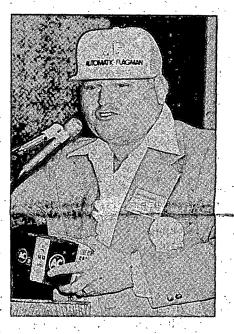
Be It Further Resolved, that copies of this resolution be forwarded to Walt Morehouse and each industrial member company that participated in this





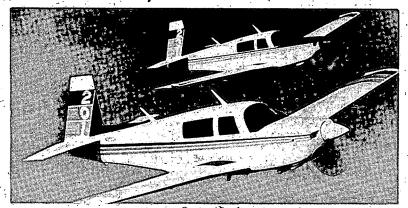


Photos by Patricia J. Estes





MOONEY AIRCRAFT Our 35th year of Sales & Service



NEW in '82 - THE QUIET MOONEY

1982 offers a completely re-designed interior, giving addifional comfort, space and substantially lower noise level check it out! You will be visibly impressed.

1981 MOONEY 201

230TT, King Equipped W/KNS80, Fresh Annual

1976 MOONEY EXEC

1600 TT: 0 SMOH: King Equipped: Fresh Jan '82 Annual

1966 MOONEY MK-21

1981 MOONEY 201

240TT, King Equipped, W/KNS 81 system, stereo entertainment center - Fresh annual. Century-21 Auto Pilot

1961 BEECHCRAFT **DEBONAIR**

3690 TT, 1080 SMOH, IFR Equipped

Special Financing Program Available on 1982 Models Ask For Details

Willmar Air Service Inc.

Municipal Airport — Willmar, MN 56201 Bruce Jaeger, Pres.

612-235-4844 or After Hours 612-235-7985 GOOD SELECTION ON NEW AND USED MOONEYS CALL FOR DEMO TODAY!



New for Wheat and Barley...

Now just one product controls wild oats PLUS pigeongrass . . . new HOELON. Just spray it and forget it. No incorporation! Great control of annual grasses without harming the crop.

HOELON: it does more.

"A RESTRICTED USE PESTICIDE"

Distributed by:



P.O. Box 2159 Minot, ND 58701 Phone (701) 852-5199

Page 6

Relative Wind

Dr. B.J. Cox speaks on precision spraying

By Patricia J. Estes

Precision spraying was the topic when Dr. B.J. Cox, product manager, NALCO Chemical Company, Prospect Heights, Ill., addressed the annual meeting of the North Dakota Aviation Association in late January at Dickin-

Drift was a prime concern of the 60s, he said. The question was how to control and measure material when applying chemicals.

The issue today is precision spraying, getting the material in a target area



with no overlapping into adjacent

All chemicals, he said, have drift potential. This can cost money for the farmer or the aerial applicator.

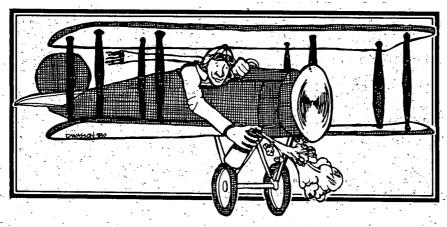
"The community is aware of your errors" when you spray, he cautioned his

"Farmers have a right to get target coverage and not a 60% success rate," he said. A farmer wants a good job, not just one where you apply spray but one where spray is applied correctly.

He also noted that swath displacement, material moving from one target area to another target area is not really

Drift is the physical movement of spray droplets from the target area. The definition of drift includes vaporization of spray droplets before or after reaching the target.

Cox said, "if the material doesn't reach the target in a few seconds, much will move off the target in evaporation.'



are 50 or more factors affecting deposition and drift."

droplet varies with temperature and relative humidity combinations.

environmentalism with drift, a negative one, he said.

we are trying to accomplish in spraying, he said.

Study shows that 50% of drift is due to environmental factors such as temperature, wind velocity and humidity. That means sprayers must work around these conditions while striving for consistency.

The other 50% is related to mechanical factors which can be controlled such as nozzle height and angle.

Humidity and temperature are two key factors. The higher the humidity the better the deposition while the higher the temperature the more evaporation happens.

"A sprayer's job is demanding."

Wind velocity is another factor. Theory says don't fly if wind is more than 10 miles an hour.

However, he said, in a state like North Dakota that kind of wind is almost constant. We need to work around that.

With inversion, he said, remember air temperature increases with elevation and a cloud of material can actually be created under these conditions.

Cox reviewed slides showing the effects of nozzle position, wind and droplet size on spraying effectiveness.

Droplets need to be 150 microns and up for effective deposition, he said.

"A sprayer's job is demanding. There When the air is still, the lifetime of a, relative humidity combinations.

There is usually some connotation of Cox is involved in research assessing target precision spraying. He detailed his research project which includes using copper reagants to trace spray Deposition is a positive word for what deposition on plant material with number, size and spacing of nozzles.

In North Dakota, wind is almost a constant

Cox advised that you can test nozzle and booms with dye to check if you are getting some material back on the boom.

Discussing pump pressure, he said fly. with the lowest pressure that meets the neds of the material being sprayed.

He also discussed plane height at time of spraying, noting the higher a spray droplet is released above ground, the greater the drift potential.

Watch wingtip vortex

Plane size is related to this. Larger planes have to be flown higher. Wingtip vortex must be watched. Any material released in the front of the plane probably will suffer much evaporation escape. Reduce the outer nozzles to help with wing tip vortex, advised.

When adding a polymer to aid in target

deposition, too much will result in a stream and not a spray pattern.

The proper amount of a polymer creates an elasticizing bond and eliminates fine drifting particles. A visco-elastic effect reduces the number of airborne small particles.

Improved deposition results and increased swath width can be achieved with proper use of polymers.

Questions regarding research by Cox can be directed to him through NALCO.

Pesticide book available

FORT COLLINS, Jan. 29 - Dr. Bert L. Bohmont, Colorado State University agricultural chemicals coordinator, has authored a book, "The New Pesticide User's Guide."

Designed to be a textbook, the publication emphasizes safety and provides checklists, drawings and illustrations, figures, tables and charts. Among topics covered are laws and liability, decontamination, insects, weeds, environmental considerations, transport and storage, and record keeping.

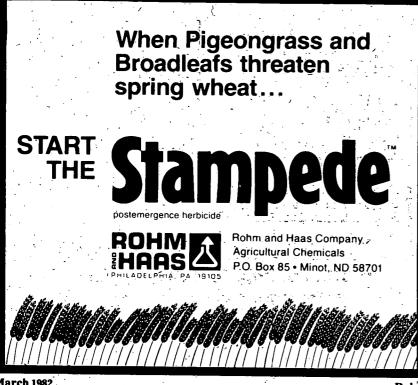
"World hunger would increase dramatically without pesticides," Bohmont says. "Even with pesticides, U.S. agriculture currently loses about onethird of its potential crop production to various pests. I am not against pesticides, nor do I promote them. I just want to see them used safely.

Bohmont also wrote a correspondence course, "Pesticides: Why and How They Are Used," offered through the Division of Continuing Education at

'The New Pesticide User's Guide" is available at the CSU Bookstore for \$15.00. It also can be ordered through B & K Enterprises Inc., 1053 Montview Road, Fort Collins, Colo. 80521 for \$16.50, which includes postage and handling.

Bohmont coordinates CSU's pesticide education program and conducts the annual Colorado Crop Protection Institute. He developed slide/tape programs to train pesticide applicators for certification in the United States.

In 1973, Bohmont was designated national "Agriculture Spokesman of the Year." CSU honored him with the "Superior Service Award" in 1978. He is a native of Wheatland, Wyo.





SPECIAL OFFER!!

For 90 days starting Feb. 15, 1982 NARCO is offering a Center-Pak 11 package for \$9,995.00 which normally lists for \$12,630.00!

Sounds great?! Well Dakota Aero-Tech, Inc. will give an additional \$900.00 off the special price, So your cost now is only \$9095.00.

Time is short — call today.

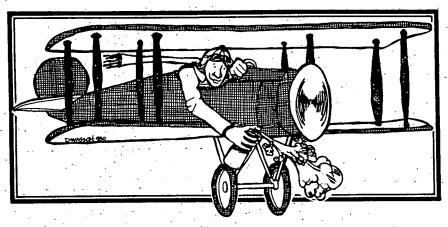
Phone: 701-237-5305

Dakota Aero Tech, Inc.

Avionics that make sense.

P.O. Box 5534 CRS DO-4-10

Of interest to aerial sprayers



Mid Continent aircraft

Mid-Continent Aircraft Corporation of Hayti, Missouri, the first and largest distributor of the famous agricultural aircraft, the Ag-Cat, is proud to announce that the 500 gallon Ag-Cat C mated with the 1200 horsepower Wright 1820 named the "King Cat" received Canadian certification on December 22, 1982 from the Canadian officials. "It's an outstanding Christmas present," stated Dick Reade, president of Mid-

A&PIN1YEAR!

Unique Practical Training BECAUSE

Our FAA Approved A&P School is combined with our FAA Approved Repair Station.

- Approved For Veterans —

Classes Starting In y - March - June - September-Write Or Call:

Dakota Aero Tech, Inc.

P.O. Box \$534, SUS Fargo, ND 58105 - 701-237-5305

Continent. "The King Cat has proven? itself for many years and thousands and thousands of hours in operation here domestically. From the planting and treating of rice crops in the delta to spraying wheat fields of the pacific northwest and Kansas, the King Cat is a true 500 gallon capacity aircraft designed to work out of the rough, short, inaccessible areas that other aircraft cannot," continues Reade. Larry Brooks, vice president of marketing, states that Canadian interest is high towards the King Cat concerning fire attack programs and spruce budworm projects. 'To put the icing on the cake.'' continues Brooks, "the Canadian officials have certified the King Cat without airframe fatigue requirements whereas other agricultural aircraft of the King Cat's size certified in Canada have fatigue requirements imposed on them,

Cat is an economical approach to the high productivity required in today's industry. Its fuel consumption is approximately 38 to 42 U.S. gallons per hour and has a working speed range from 95 miles per hour to 135 miles per hour. In

so we are quite proud."

cruise speeds as high as 162 miles per - airplanes from Lock Haven, where the hour were obtained. The King Cat's standard dress in addition to the 500 gallon hopper and the Wright 1200 horsepower nine cylinder 1820-71 includes 11/8" spring type landing gear with high flotation main wheels, automatic pre-oiling system, three bladed hydromatic prop, sealed cockpit, 24 volt electric system, trailing edge spray, and 80 gallons of fuel. Optional is a 114 gallon fuel system, 38" gatebox with the high volume spreader, and special fire drop dump system.

"Mid-Continent will be announcing the appointment of a new Canadian distributor and service center in the near future," states Brooks. "This will give Canadian operators of the King Cat better support and excellent backup capabilities.

U.S. operators are experiencing 1800 hours T.B.O. on the Wright 1820-71 (20)," continues Brooks, "and our FAA engine overhaul facility besides the standard 100 hour warranty prorates its 1820 engines up to 800 hours. Not bad for an ag industry aircraft engine.'

For more information on the newly Canadian certified Mid-Continent King Cat, contact Mid-Continent Aircraft Corporation, Drawer L. Hayti, Missouri 63851. The phone number is 314/359-0500 and the telex number is 447183.

WTA purchase

From past flight experience, the King LOCK HAVEN, Pa. Sept. 4, 1981 -Piper Aircraft Corporation announced today that it has reached an agreement under which WTA Inc., Lubbock, Texas, has purchased existing inventories of Piper agricultural and Super Cub aircraft. WTA is establishing a worldwide sales system for resale of the Piper Pawnee, Brave 300 and Brave 375, as

well as the Super Cub. WTA will market these aircraft through an independent network of specialized agricultural dealers throughout the United States and minates Piper's factory-direct sales program for its agricultural and Super fatalities and a total of 98 deaths. Cub lines. Piper will continue to provide

the Canadian certification test flight parts and customer service for these agricultural and Super Cub airplanes are manufactured. Service is also available through WTA and other authorized Piper service centers.

WTA Inc. has been a Piper Distributor for 36 years and has long been associated with the agricultural aircraft industry. When Pieper introduced its first ag aircraft, the Pawnee, in 1959, WTA took delivery of the first five airplanes.

Present models of the Piper ag line include the Pawnee D, which features a 235 horsepower Lycoming engine, and the two Braves with 300 and 375 horsepower Lycoming power plants. The Pawnee D has a gross weight of 2,900 pounds and can lift 150 gallons of liquid or 1,200 pounds of dry chemicals. The Brave 300 carries a standard hopper of 225 gallons but also offers one at 275 gallons as an option, and provides a 4,400 pound gross weight. The Brave 375 provides a 4,800 pound gross weight for even greater load carrying capability.

Piper Aircraft Corporation manufactures single-engine piston and twinengine piston and turboprop aircraft for the general aviation market. Piper is a wholly owned subsidiary of Bangor Punta Corporation, a diversified manufacturing company.

1981 accidents

Unofficial 1981 aviation accident figures show slight increases in total and fatal accidents but a drop in total fatalities.

In 1981 there were a total of 3,749 general aviation accidents (not including commuters or air taxis) of which 674 involved 1,251 fatalities. This compares with 1980 figures of 3,708-accidents, 644 with fatalities, and a total of 1,284 fatalities.

A total of 144 air taxi accidents in 1981 included 28 fatal accidents and 78 abroad. The purchase agreement ter- fatalities, compared with 1980 results of 137 accidents, 35 of which involved

RKAMAN OF OMAHA, INC.

New 1982 Models, Fully Warranted **Beechcraft Airplanes**

- DUKE ANNIVERSARY COLLECTION -
 - Has Passenger Entertainment Center.
- #2 BONANZA V-3513
- #3 BONANZA A-36
- #4 (2) BARON 55
- #5 BARON 58P Club Seating.

For the above models, the Avionics package is of the customers choice!

#6 - BARON 58

Deluxe Interior, Club Seating, Complete King Avionics Package.

#7 — BARON 58

Page 8

Deluxe Interior, Club Seating, Bendix 2000 Avionics

Today is The Best Time To Purchase A New Beechcraft!

CONTACT: JERRY PETSCH 402-422-6789



Beechcraft: Full Line Corporate Center

Visit Our New Facility On The East Side.

P.O. Box 19064 • Eppley Field • Omaha, Nebraska 68119

SKY TRACTOR SUPPLY

(A Div. Of Deck Flying Service)

SCHWEIZER AG-CAT

DISTRIBUTOR SALES - SERVICE - PARTS

FOR SALE:

1972 C Model **Hutcherson Pawnee**

2000TT, 700 SMOH, New Fabric, Metal Wings, New Tires, Spreader, Clean - No Fertilizer, Dec. '81 Annual \$20,000.00 \$20,000.00

FOR MARCH '82 **DELIVERY-**

(2) 1982 G-164B (Plus) AG CATS —

Serial #'s (684B, 685B)

600 HP, 400 Gal. FTO, 80 Gal. Fuel, 24V, APU, Nav. Lights, Spray Only, Dust Controls, Bottom Load, Cool Seat.

— Call For Price —



Distributors For:

- Cal-Mil Helmets
- Dura-Kev Flight Suits
- Transland Spray **Equipment**
- Spraying Systems
- Automatic Flagman
- Flags
- Agrinautics
- Pacific Propellers

"YOUR COMPLETE LINE DEALER"

SKY TRACTOR SUPPLY

Hillsboro, ND 58045 701-436-4505

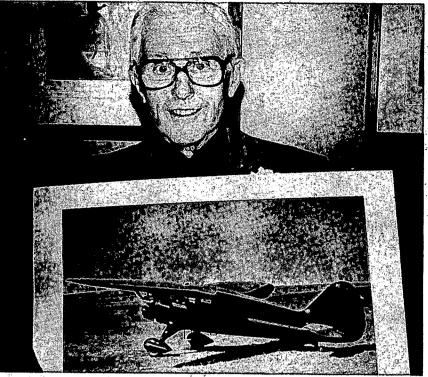
Ole Anderson receives recognition

By Nancy E. Johnson "I haven't seen him since '47," and "remember the time Ole ..." were among the comments heard as veteran aviators gathered to honor Ole Anderson, a pioneer of North Dakota aviation. The gathering was held in Fargo Feb. 6, commemorating the day Anderson first flew into town back in 1937.

Anderson arrived for the event in a Stinson Reliant, similar to the model he flew into Fargo back in the '30s. This' 1936 plane was reconstructed by another former North Dakota flier, Roy Redman, now with Northwest Airlines. Anderson is a retired Northwest pilot and still works at the Minneapolis-St. Paul International Airport as a security guard, though he turned 78 late last

A native of Sweden, Anderson came to the United States in 1922 because his father disapproved of flying. "They didn't know how to get an airplane out of a spin at the time, so my father didn't think that flying and going into a spin was a good idea," Anderson explained to the gathering, which included many members of his family.

After getting his first flying lesson in Chicago from Charles Lindbergh, Anderson ended up in North Dakota. Heflew charters and gave flying lessons based in Jamestown after moving there in 1927. By 1930, he had moved to Oakes, where he worked for O.A. Foster, a fly-



Ole Anderson poses with photo of the restored Stinson at recent banquet.

son for Foster and worked there until hemoved on to Fargo in 1937.

During those early years in North Dakota, Anderson developed a reputa-

ing enthusiast. He began flying his Stin- son, only six serial numbers away from the black and red plane restored by Redman.

Redman ran into Anderson while restoring the old Stinson, which made tion as a barnstormer while flying and the project more fun, he noted. During giving lessons. And, that was when he the 4,000 hours needed to make the developed a love for the Gullwing Stin-restoration possible, Redman looked at

pictures of Anderson's plane, quizzed him about details and made sure the colors were correct, since the photos were black and white.

Redman's interest in the Stinson was traced back to the days in 1938 when Ole was so well known in Fargo, small boys recognized his plane when it flew overhead. Redman became determined to get a ride, and that Sunday afternoon flight in 1938 lead him into flying and on to the restoration project, which started in 1974.

While Redman noted Anderson's memory was a tremendous aid to the restoration project, he called for stories from the fliers in the audience. Various members of the audience related their stories of Ole from the days he moved to North Dakota until he left in 1941'to join Northwest. Many noted they hadn't seen him since the '30s.

Members of the gathering came to Fargo from Minnesota and North Dakota and greetings were sent to the pioneer flier from California and other

After the banquet, Anderson was presented with a painting of the Stinson by banquet organizers Redmand and Less Elliot of Valley City. Redman's Stinson was named grand champion at the 1980 Antique Airplane Association meeting in Blakesburg, Iowa.

Faces at the NDAA 1982 convention

Annual meeting

Watch for more coverage of the NAAA annual meeting in the next Relative Wind.



Andersen gives treasurer's



delegate to the national organization.

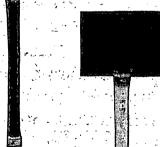
March 1982

Arnie Widmer, taking minutes.



John Odegaard, UND chairman of the aviation department at that school, received the NDAA leadership award during its convention in January at Dickinson.

Airport Lights & Markers



All-Purpose Markers



Taxi and Runway Signs



Telescoping Standards For Lights



and **Pop-out Couplings**



Existing and Telescoping Pipes'Mounted on **Pop-out Couplings**

All of our products feature exclusive patented, unbreakable "pop-out" release coupling — to replace, simply press back into coupling. Telescoping stands are from standard height to 30" high, you may choose to use our base or your own, as our "pop-out" coupling will also fit your base.

For More Information, Contact:

Lift-A-Lite, Inc.

RR6 - Country Club Rd.-Minot, ND 58701

Relative Wind

Page 9

Aviation briefs

Passenger

traffic report

Airline passenger traffic at eight airline cities in North Dakota dropped 15.5 percent state-wide in 1981 compared with 1980, according to Harold G. Vavra, Director of the State Aeronautics Commission...

In 1981 there were a total of 875,000 airline passenger enplanements and deplanements at North Dakota cities compared with 1,035,000 in 1980, a drop of 160,000 passengers, Vavra said.

The only cities with passenger in creases in 1981 compared with 1980 Minot had 107,182 passengers in and with increases of 16 percent. The air freight business in and out of Dickinson and Williston set an all-time high at 523,676 pounds.

Airline passengers dropped drastically 1981 with passenger losses of 64 percent at Devils Lake and 45 percent at James-

The cities of Bismarck, Fargo, Grand Forks and Minot all had smaller losses of passengers in 1981 ranging from 9 to 17 percent in 1981 compared with 1980.

*Bismarck had 296,618 passengers in and out in 1981 compared with 349,414 in 1980, a loss of 15 percent.

*Fargo had 298,467 passengers in and out in 1981 compared with 358,560 in 1980, a loss of 17 percent.

and out in 1981 compared with 164,259 in 1980, a loss of 17 percent.

were Dickinson and Williston, each out in 1981 compared with 118,342 in 1980, a loss of 9 percent.

Vavra blamed the short-fall of airline passengers in 1981 in North Dakota due to the combined affects of economic recession, poor farm economy in the at both Devils Lake and Jamestown in state, the air traffic controllers' strike in August and increases in airline passenger fares.

FAA's plans

Details of the FAA's "confidential" plan to modernize the nation's air traffic control system were leaked to the press earlier this month. The program had been outlined earlier to AOPA President John L. Baker and a few other aviation leaders with the proviso that they kept it in confidence until official publication scheduled for the middle of this month.

The National Airspace System Plan envisions the highest practical levels of automation to handle an expected 116% growth in aviation activity during the next 20 years.

*Grand Forks had 136,686 passengers in. The program would reduce personnel by about a third and consolidate 20 centers into 16, reduce 180 radar approach control facilities to 30 and combine 300 FSSs into 60. Present ILS equipment would be replaced by the Microwave Landing System (MLS) and the Threat Alert and Collision Avoidance System (TCAS) would be implemented. The agency would eliminate 1,200 radar facilities.

> The current computer system would be replaced by faster, higher-capacity equipment, and voice communications

between controllers and pilots would be replaced to a great extent by electronically displayed messages. Controller consoles would have computing capability to reduce the impact of central computer failures.

The program is expected to cost about \$20 billion.

Frontier airlines

Frontier Airlines, Denver, said that it plans to phase out all of its 15 Convair 580 turbo-prop aircraft by June 1, 1982.

The airline said that it is retiring some of the Convair aircraft in conjunction with its previously announced air service termination to 11 cities on its system, because of the sharp reduction in government subsidy payments to large regional airlines.

Cities served by Frontier Airlines with Convair 480 aircraft include Cheyenne, Cody, Laramie and Worland, Wyoming; Alamosa, Cortez, Gunnison, Pueblo, Steamboat Springs, Colorado and Farmington, New Mexico and Harrison, Arkansas.

Get Broad Coverage..





AVIATION

YOUR BROAD COVERAGE AVIATION IN-SURANCE SPECIALISTS — WITH COLLEC-TIVELY OVER 65 YEARS OF EXPERIENCE IN AVIATION INSURANCE.

THAT'S WHY 4 YEARS AGO OUR NAME BECAME WHAT WE REALLY ARE

AVIATION UNDERWRITING **SPECIALISTS**

For FBO's —

FULL LINE COVERAGE

AIRCRAFT LIABILITY

•HULL COVERAGE

PREMISES LIABILITY

•PRODUCTS LIABILITY

HANGAR KEEPERS LIABILITYCARGO LIABILITY

For AG Operators:

signorial barrenses

RCRAFT LIABILITY CHEMICAL DRIFT LIABILITY •HULL COVERAGE

•FARMER/OWNER/GROWER COVERAGE

SPRAYING CITIES AND TOWNS COVERAGE

For Private Owners:

HULL DAMAGE

AIRCRAFT LIABILITY NON-OWNER DAMAGE

Area representative - L. JOHN WEBER



16301 FONTAINE DRIVE - P.O.-BOX 1039 CHESTERFIELD, MO 63017

Distributors Of:

"CLEAN CROP PESTICIDES Complete Agricultural Chemical Distributor

Also

Marking Flags For Aerial Applicators

OSTLUND CHEMICAL CO

P.O. Box 446 — 1330 - 40th St. N.W. **FARGO, NORTH DAKOTA 58107** Phone (701)—282-7300

Plan

To Attend!

North Dakota Professional Aviation **Mechanics Association**

"Upper Midwest Aviation Maintenance"

– Symposium *–*

March 9, 10, 11, 1982

Kirkwood Motor Inn - Bismarck, N.D.

FACTORY SERVICE CLINIC:

Cessna 425 Corsair

Bendix

Piper Turbo Charging

Du-Pont Paint

Bell Helicopter 206 Jet Ranger

FAA - Fargo

Cooper Airmotive Allison 250

Quality Cylinder

Pratt & Whitney of Canada (US) Ltd PT6

Alcor

Teledyne Continental

Ditzler Paint

Champion

Narco Avionics Inc.

Over 30 Display Booths

ALL FOR \$15.00

Phone the Kirkwood for Your **Room Reservations** 701-258-7700

REGISTRATION STARTS 7:30 AM TUESDAY, MARCH 9

Sponsored By ND Professional Aviation Mechanics Association

Relative Wind



ROLLA...

is looking for an engine manual for the BT 400 surplus aircraft heater. They want to tune up the engine and if any airport manager has a manual that Vern gave them, please contact our office, at the aeronautics commission.

WASHBURN . . . is in need of snow blade, blower and vehicle. If any airport managers want to sell a surplus truck, tractor or snow removal equipment, contact airport manager Bill Beeks,

PARSHALL . . . airport has been temporarily closed for periods this winter. due to ice and snow. Contact Minot FSS for details.

CASSELTON . . has a regional airport authority consisting of the community plus surrounding townships. They are planning to construct a public-use airstrip and are reviewing possible sites. The regional authority concept works well since the farming area benefits from aerial spraying of their croplands.

McCLUSKY...has completed graveling the airport runway which was previously turf. They have 3100' of length on a NW-SE orientation two miles southwest of town.

BEULAH...

is reviewing plans on the widening of the taxiway and apron area. With a new FBO and the transient traffic, the present apron has been crowded. It is not uncommon to have six offapron parked aircraft which poses a greater problem in the winter with the snow removal and drifting.

GRAFTON...

is looking into installing a VASI system for both runway ends. These units are used by the pilot in the air as guidance to the approach slope in landings. Costs run from \$1,200 to \$5,000 depending on unit type and installation.

Auto Pilot - Sales & Service

KING EDO-AIRE STEC & ARC/CESSNA

— 6 Years of Experience —

See our booth display at N.D. Professional **Aviation Mechanics Association Seminar**

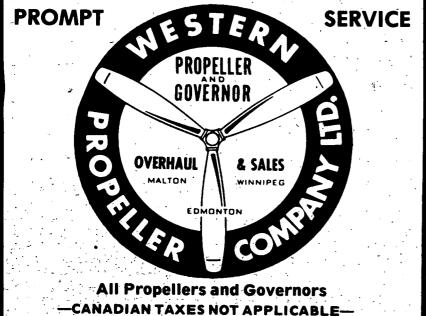
Call Larry at:

Way-Point Avionics, Inc.

701-663-9133

FAA# DO4-14

RR 2 - Box 15, Mandan, ND 58554



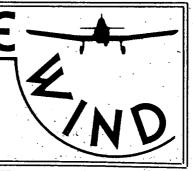
Your dollar buys 20% more in friendly Canada.

Western Propeller (WPG) LTD

1930 Sargent Ave. Winnipeg, Manitoba

(204) 772-5077

Telex 0755223



Recovering And Refurbishing - 237-5305.

Also Engine Overhauls - Contact: Dakota Aero Tech., Box Selective Student Projects For 5534, Fargo, ND 58105 - (701)

Want To SELL Or BUY Something?

Use A "RELATIVE WIND" Classified Ad. Pre-Paid only \$15.00 minimum or .75 per word

> (\$10.00 min. or .50 for NDAA members) Fill in the blanks and mail your check To: Prairie West Publications, Box 1018, Wahpeton, ND 58075

Deadline for April 1982 Issue is March 15, 1982

		·		

		y 2 2 2 4		
•				15.00/10.00
15.75/10.50	16.50/11.00	17.25/11.50	18.00/12.00	18.75/12.50
19.50/13.00	20.25/13.50	21.00/14.00	21.75/14.50	22.50/15.00
23.25/15.50	24.00/16.00	24.75/16.50	25.50/17.00	26.25/17.50

Check One:

☐ FOR SALE

□ WANTED TO BUY

□ JOB OPPORTUNITY

□ POSITION WANTED

North Dakota Aviation Association Officers

President: Larry Linrud, Tri-state Immediate Past President: Bill Aviation, Inc., Wahpeton, ND. Vice-President: Fred Andersen, Aviation Services Inc., Minot,

Treasurer: Arnie Widmer, Widmer Flying Services, Crete, ND 58020.

Secretary: Mike Hohl, Mayport Aviation, Mayville, N.D.

Beeks, Central Flying Service, Washburn, ND.

Executive Secretary: Jack Daniels, Serv-Air Accessories, Inc., Williston, ND.

Delegate to National Agricultural Assn.: Dan Thompson, Thomp-Son Aerial Spray, Wynd-

Hey-Paint Sprayers

LISTEN TO THIS!!

We have the "no mess" spray system

-Not airless, not electrostatic it is a new jet powered principle

-uses low pressure (4 P.S.I.) heated, high volume air.

-6% overspray (not the usual 70%)

-guarantees you the highest degree of product delivery efficiency built today!

SEE THIS FANTASTIC SPRAYER DEMONSTRATED AT OUR BOOTH Mechanics Association Symposium - Bismarck, ND. Kirkwood Motor Inn - March 9, 10, 11

Tasco Aviation

224 Fillmore Ave. E. - St. Paul, MN 55107

Page 11

March 1982

Relative Wind

OVERONER WILD OATS EARLY

New Carbyne 2EC Herbicide gives you greater yields at the least cost.

Carbyne now comes in a new 2-lb. formulation ... Carbyne 2EC Herbicide. A greater concentration, so you use less.

Yet, Carbyne 2EC gets you up to 50% greater yields compared to later wild oat treatments. And it works without incorporation. With or without rain. Best of all, Carbyne

2EC is the least cost wild oat herbicide you can buy.

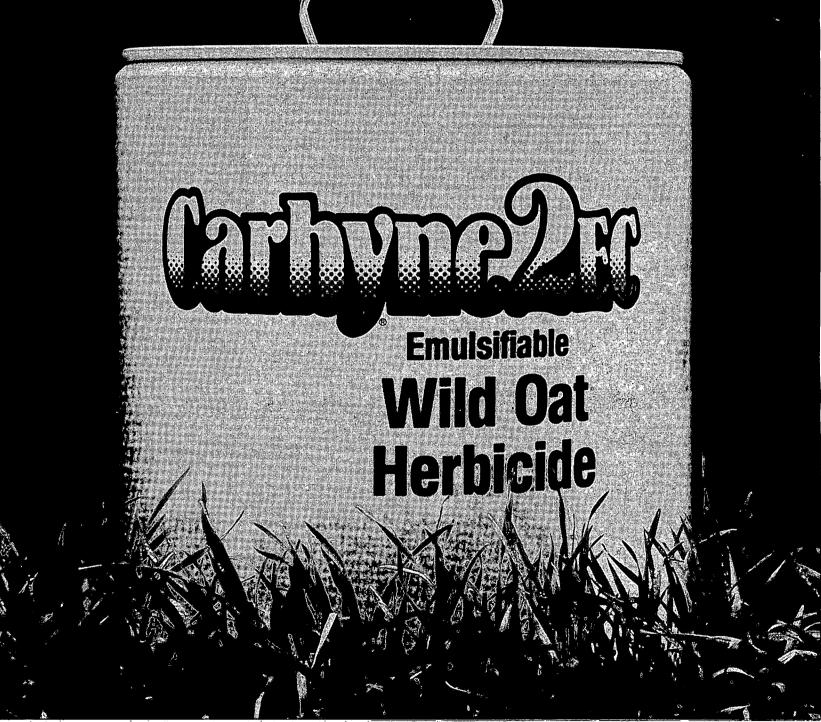
Get Carbyne 2EC for early control of wild oats, canarygrass and annual ryegrass* in wheat, barley, sugar beets, sunflowers and 7 other crops. See your ag chem supplier today.

Velsicol Chemical Corporation World Headquarters 341 East Ohio Street, Chicago, Illinois 60611

"Carbyne is a registered trademark of Velsicol Chemical Corporation. Before using any pesticide, please read the label.

'Carbyne 2EC for use against annual (Italian) ryegrass is limited to California and Oregon.





Page 12

Relative Win