

RELATIVE WIND

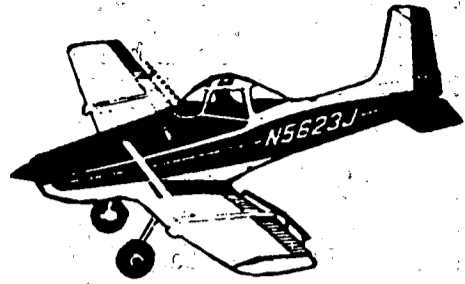
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Republic Airlines wants to terminate air service south of Bismarck and Fargo

The North Dakota Aeronautics Commission, cities of Bismarck and Fargo and the Bismarck Municipal Airport and the Fargo Municipal Airport Authority have filed joint objections with the Civil Aeronautics Board, Washington, D.C. aimed at Republic Airlines notice that effective January 15, 1981, that it intends to suspend its southbound air service from both Bismarck and Fargo to cities in South Dakota, Iowa, Nebraska and terminating at Kansas City, Missouri, according to Harold Vavra, director of the State Aeronautics Commission.

The routes which Republic plans to suspend is between Bismarck, Aberdeen, and Sioux Falls, South Dakota; Sioux City, Iowa, Omaha, Nebraska and Kansas City, Missouri. Republic's Fargo route is between Fargo, N.D., and Watertown, Brookings and Sioux Falls, South Dakota; Sioux City, Iowa, Omaha, Nebraska and terminating in Kansas City, Missouri.

Republic Airlines presently provides both routes with two round trips per day with Convair 580 aircraft with 48 seats.

Republic Airlines' route south of Bismarck has been in continuous operation since 1935 when it was operated by Hanford Airlines. In about 1938 the route was taken over by Mid-Continent Airlines, thence acquired by Braniff Airlines and finally acquired by North Central Airlines, which later changed its name to Republic Airlines.

Republic Airlines route south of Fargo has been in continuous operation since September, 1953, when it was first awarded to Braniff Airlines. In the mid-1950's the route was acquired by North Central Airlines, which later changed its name to Republic Airlines.

The two south bound Convair 580 flights at Bismarck from January 1, 1980 through October, 1980 in a ten month period, boarded at Bismarck, plus transfer passengers a total of 8,738 passengers plus a total of 119,575 pounds of priority mail and air freight.

The Bismarck morning flight southbound averaged 10.2 passengers on board per flight departure, which on a 48 passenger airplane is passenger load of 21.3 percent during the first ten months of 1980.

The Bismarck afternoon flight southbound averaged 18.9 passengers per flight departure which on a 48 passenger airplane is a passenger load factor of 39.4 percent, Vavra said.

At Fargo, Republic Airlines' early morning flight departure averaged about 7.2 passengers per departure. The Fargo afternoon flight averaged about 12 passengers on board when the aircraft departed Fargo southbound.

Republic Airlines in an 11 month period from December 1, 1979 through October, 1980 boarded on both flights out of Fargo a total of 6,335 passengers which amounted to an average of 19.2 passengers per day.

In instances such as Bismarck and Fargo, which are cities served by several airlines, there is no protection or guarantee of specific route segments, under the Airline Deregulation Act of 1978, Vavra said.

Both Bismarck and Fargo are served by other airlines. Bismarck is served by Air Wisconsin, Frontier, Northwest, Republic (other routes to the east) and by Big Sky Airlines. Fargo is served by Frontier, Northwest and Republic Airlines (other routes east and west).

Under the Airline Deregulation Act of 1978, the only cities that are guaranteed air service by the Airline Deregulation Act in North Dakota are Devils Lake, Jamestown and Williston, because these cities are served by only one airline. The Civil Aeronautics Board, under the airline deregulation act, must maintain air service at these three cities until October 24, 1988, when the guarantee expires. Dickinson is served by Big Sky Airlines, but it has no guarantee since it did not have air service when the deregulation act became law, nor did it have air service ten years preceding October 24, 1978, another test under the Act to warrant a guarantee of service.

Attracting a Commuter Airline

The best that Bismarck and Fargo can do is to get out publicity of what the passenger and air freight demand is along the two routes which Republic Airlines will suspend effective January 15th with the hope that a commuter

airline will be attracted. These two routes are not subject to a subsidy under a replacement airline, because there is no definition of "Essential Air Service" involved at either Bismarck or Fargo. Any commuter or potential commuter airline which wants full details

of these two routes and their monthly generation of passengers and air freight should write to The North Dakota Aeronautics Commission, Box 5020, Bismarck, North Dakota 58502 and request information which is available.

Proposed FAA closing delayed

The FAA had announced plans this fall that it may close the Bismarck airport field office. This office deals with the construction and engineering aspects of airport runway construction along with some planning information. The proposed closing is being delayed until the recommendations of a Carl Bailey study is reviewed.

Carl Bailey, a representative of the FAA regional office located in Denver, was in Bismarck recently. The purpose of his independent study was to analyze the impact of this closure and make a recommendation on whether it should close or remain open. Hearings were held to discuss the closing with state airport officials, managers, engineers and contractors.

The chief of the FAA regional Denver office, Walter Barbo, has given Bailey until the end of January to make his recommendation. If he recommends closure, another public hearing

would be held before a final decision is made. If the final decision is to close the office, it would probably not close before next June.

This decision affects 3 personnel working at the Bismarck office which serves the Dakotas. A similar office in Helena, Montana, that serves Montana and parts of Wyoming, also could close. A transfer to the Denver FAA office of these positions would take place to alleviate a shortage of personnel in the regional office due to federal hiring freezes.

1981 aircraft registration

The 1981 aircraft registration forms will be mailed to all aircraft owners the last week of December. In 1980 the Aeronautics Commission had a total of 1,651 aircraft registered.

Consultant to speak

James H. (Jim) Monger, senior vice president of TAP Inc., an aviation consulting firm working with the N.D. Aeronautics commission, will speak at the North Dakota Aviation Association annual meeting at the Holiday Inn in Bismarck. The meeting dates are Jan. 21-23.

Monger is a graduate of Montana State University School of Engineering. He worked his way through college as a night shift welder and snow plow operator at the local airport.

He then did post graduate studies at the University of Washington and Oklahoma University.

Upon graduation, he went to work for the Montana Aeronautics Commission as an airport engineer. He later became chief of the airport division and next acting direc-

tor in 1969.

In 1971 Monger joined TAP Inc. as an airport planner. TAP is an aviation and economic consulting firm located in Bozeman, Montana. The firm's aviation consulting projects cover assignments throughout the west and Alaska. TAP is now on its tenth job in North Dakota.

Monger is a private pilot; president of the Pilots Association; past president of the International Northwest Aviation Council, an American-Canadian organization.

He has served on many civic boards and is president of the local city council, now serving his second term in office.

Monger will address the issue of airport planning and funding during the convention as well as speak on the scope of air transportation in the state.

From Your President

By Bill Beeks, NDAA President

Your president has had a week to recover from the NAAA convention in Las Vegas. It was my first national convention and I was impressed with the quality of the speakers at the sessions. The variety and the quality of the displays was also very impressive.

The report of the health survey shows that those of us working with chemicals are no worse off than persons whose contact with pesticides is minimal.

There is a wide variety of work being done on drift and pattern control. Experimental work is being done with the use of different carriers for the pesticides, nozzle arrangements, nozzle types, methods of pattern testing and the use of additives to reduce drift and give more uniform spray patterns. I feel we may be able to make some major breakthroughs in aerial application.

Our industry is in an era of ever increasing regulations. We are going to have to put an ever increasing amount of time and money into the education of the public and the regulators in an attempt to gain a strong voice in these regulations. We can no longer sit back and let someone else do it. The use of chemicals in the production of food and fiber is essential to our way of life.

See you all at the convention — shall have more information for you there!

Award recipients named

The North Dakota Aviation Association Board of Directors has selected the first three recipients of new awards instituted by NDAA. The awards will be presented at the Jan. 22 special awards banquet during the NDAA annual meeting at the Holiday Inn, Bismarck, ND.

The N.D. Aviation Pioneer Award will be presented posthumously to Vern Balzer, who passed away recently. Vern was a leader, supporter and booster of the overall aviation industry in North Dakota, both through his role as an employee of the North Dakota Aeronautics Commission and as a private citizen.

The North Dakota Aviation Leadership Award will be presented to Harold Vavra, State Aeronautics Commission Director, for his leadership in the field of aviation in this state.

Dan Wakefield, Devils Lake, will receive the first North Dakota Aviation Association Distinguished Service Award

for his service to aviation through outstanding membership in NDAA.

Dan is a charter member of the NDAA who is still involved actively in aviation through his business firm. Personally, according to board members, Dan is limited in his activities currently due to injuries received in an accident sometime ago.

However, Dan is a symbol of those who helped charter NDAA as an organization, according to Board members, and the Board looks forward to presenting the Distinguished Service Award to him.

The Internal Revenue Service doesn't forget

"Form 4683, Federal Use Tax Return on Civil Aircraft, will be revised to apply for the period July 1, through Sept. 30, 1980, and will be due on Jan. 31, 1981. Forms and instructions will be mailed to affected taxpayers at a later date."

From Your Secretary

By Jack Daniels, NDAA Secretary

We are now one year into the decade of the 1980s. Our first state legislative session of that decade will soon begin. The 1980 election has set the pace for things to come both national and statewide.

The aviation community, at both levels, has a lot of issues to watch and participate in this year and coming years.

While we have enjoyed a few months of harassment free living, due to the election and the desire for smooth sailing by the incumbents, the dye has been cast for the new gang and some changes are bound to be forthcoming.

Our annual meeting has been set, the program is nearly complete, we have a good line up of speakers and we need to look down the road for ways and means of dealing with the issues.

These "ways and means" will not come if you fail to participate. We need the ideas and ideals from all of you. The impact we have or can have on our future must be put forth with intelligent responses to semi-intelligent questions. This is the way it is and we must deal with the real world.

The new broom is going to come up with some new trash and unless you want to be a part of what goes into the garbage you best get involved and make yourself known along with your ideas.

Make plans now to get to Bismarck during our annual meeting. It is set for January 21-23 at the Holiday Inn.

In the meantime, hope you had a Good Holiday Season!

NDAA annual meeting schedule

January 21, 22, 23, 1981

Wednesday, Thursday and Friday at the Holiday Inn in Bismarck

WEDNESDAY

4:00- 5:00 Registration
(For NDAA members only, dues may be paid at that time also)

6:30- 8:00 NDAA members party at the poolside

THURSDAY

7:30- 8:30 Buffet Breakfast

8:45-10:00 Business Session

10:00-10:15 Coffee break

10:15-11:15 Business Session

11:15-11:45 Report on ND Legislature

(State Senator Russell Thane, 25th District, Wahpeton)

Noon - luncheon

Speaker: Arthur Varnado, Director of the FAA Rocky Mountain Region

1:30- 2:00 Scope of Air Transport in ND

James Monger, Vice-President, TAP, Inc Aviation Consultants, Bozeman, Montana

2:00- 2:45 Proper Public Relations for aviation is crucial to the success and future of the industry: A challenge to each person in the aviation industry.

Panel: Pat Estes, Editor of the RELATIVE WIND and President of Prairie West Publications. Bill McCoombs, editor, Business and Industrial Development Dept., ND state. Chuck Wall, editor of Bismarck Tribune.

2:45- 3:00 Coffee Break

3:00- 3:30 NDAA - who are we and what can we do for you; what can you do for us?

Panel: Bill Beeks, NDAA President

Ron Ehlers, NDAA Vice-President

Bob Woods, Delegate to NAAA (National Ag Aviation Assn.)

Jack Daniels, NDAA Executive Secretary

3:30- 4:45 This decade's problems and challenges for the ND Aviation Industry

Panel: Harold Vavra, ND Aeronautics Director - finances; K. C. Spencer, Aviation Marketing for EXON, Billings, Montana - fuel supply; Jack Daniels, NDAA Executive Secretary - government regulations and apathy from industry people; Fred Andersen, NDAA Secretary, and Bob Woods, Delegate to NAAA - challenge from anti-chemical faction, the consumer movement; Lee Mills, FSDO Office in Fargo, meeting FSDO requirements, keeping abreast of changes.

5:30- 6:45 Cash Bar

7:00 AWARDS BANQUET

Speaker: John Baker, President of Aircraft Owners and Pilots Association.

Awards: North Dakota Aviation Pioneer Award - given posthumously to Vern Balzer, who served the state aviation industry until his death both through his Aeronautics Commission position and in private life.

North Dakota Aviation Leadership Award - to Harold Vavra, ND Aeronautics Commission Director.

NDAA Distinguished Service Award - to Dan Wakefield, Devils Lake, a charter member and organizer of the North Dakota Aviation Assn.

FRIDAY

7:30- 8:30 Buffet Breakfast

8:30- 9:15 Workmens Compensation discussion,
(speaker to be announced)

9:15- 9:45 Accidents, a powerful persuasive teacher

Mike Beiriger, FSDO in Fargo

9:45-10:15 Two sections running concurrently - attend one!!

Section one: FAR 135, general discussion of various problems, changes, challenges by Jack Daniels, NDAA Executive Secretary, ND Aeronautics Office Rep.

Section two: Ag spray operations - changes, challenges and confusions.

Gas tax refund: supplemental type certificate - notice of making proposal rule change; NAAA Health Survey; EPA regulations and hazardous waste; FAR part 137 - a rewrite?

Beekeeping - a peaceful co-existence needed?

Panel: Dennis Dickson, NAAA President (National Ag Aviation Association) Larry Linrud, NDAA Treasurer

Fred Andersen, NDAA Secretary

Bob Woods, NAAA Delegate

and others to be announced

10:15-10:30 Coffee Break

10:30-12:15 Section discussions continue

Section one: If you get sick or injured who can fly you when and where, or who can not - why not?? What are the standards and issues anyway?? air ambulances

Panel: Jack Daniels, NDAA Executive Secretary

Bob Freise, State Health Department, Emergency Health Services

Pete Hall, Executive Aviation, Inc., Fargo

Dave Voxland, FSDO

Dr. Ken Mathies, Neursurgeon

Representatives from the Insurance Industry

Section two: The same discussion continues

Noon - Luncheon

Special Guest: ND Governor Allen Olson

at 12:15 Speaker: Cynthia Hudson, ND Wheat Growers Assn.

Topic: The threat to agriculture by those "trying to ban" chemicals.

1:15- 2:15 Planning and funding for airport governing boards and airport managers.

Panel: Jim Monger, Consultant, TAP, Inc.

Harold Vavra, Aeronautics Commission

Myron Nelson, Business Industrial Development Division

Dave Rash, FAA

2:15- 2:30 Coffee Break

2:30- 3:30 Small group roundtable discussions

Topic: Common problems shared by airport governing boards and airport managers. How can NDAA help this important part of the state aviation industry?

Discussion leaders: Airport managers, airport board members and NDAA officers.

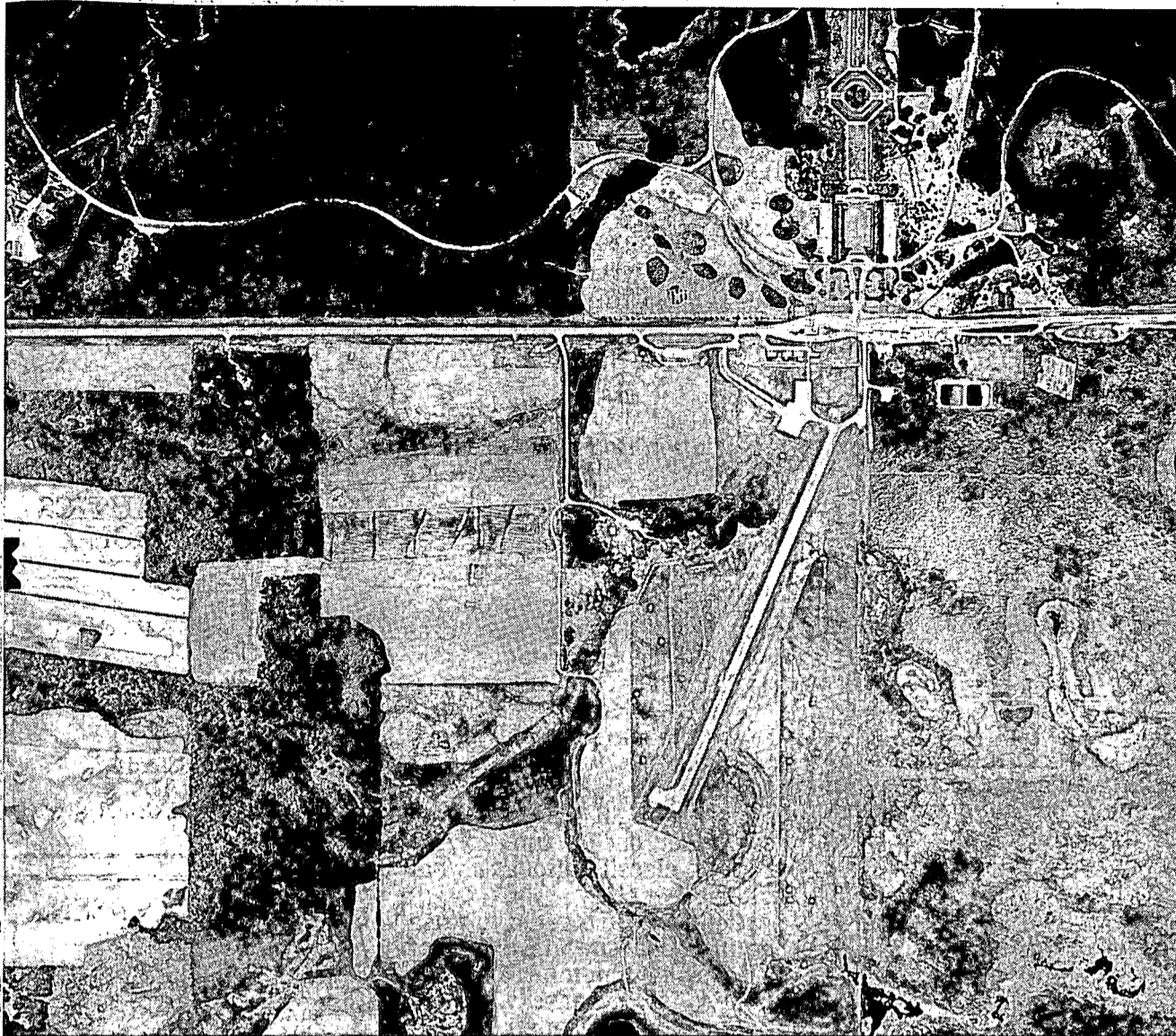
3:45- 4:00 Report by discussion leaders on roundtable discussions

4:00- 4:30 Any needed action on those reports, or unfinished business

4:30 (or earlier) Adjourn

Friday evening - NDAA Board Dinner and meeting

Mystery airport



Pilots test your knowledge as to which airport is pictured above. A clue is that it is one of the only two state-owned airports in North Dakota. We will publish the answer in our next issue of "Relative Wind."

Taxiway hold lines are sometimes confusing

Taxiway Hold Lines consist of two continuous and two dashed lines, spaced six inches between lines and parallel to the centerlines of the runway. Some confusion always seems to exist, especially with the student pilot, as to whether to stop or cross the lines after landing. Page 28 of the Airmans Information Manual, Part One states: "When instructed by ATC "HOLD SHORT OF (runway, ILS critical area, etc.), the pilot should stop so no part

of the aircraft extends beyond the holding line. When approaching the holding line from the side with the continuous lines, a pilot should not cross the holding line without ATC clearance at a controlled airport or without making sure of adequate separation from other aircraft at uncontrolled airports. An aircraft exiting the runway is not clear until all parts of the aircraft have crossed the holding line."

The area between the hold line and the runway is for the protection of the landing/departing aircraft. Before departure you should move up to, but may not cross the hold line until instructed by ATC. At an airport with parallel runways, it is important to keep in mind that each runway has its own protected area. After landing, taxi across the hold line, call ground control, and hold short of the taxiway or the next hold line until instructed by ATC.

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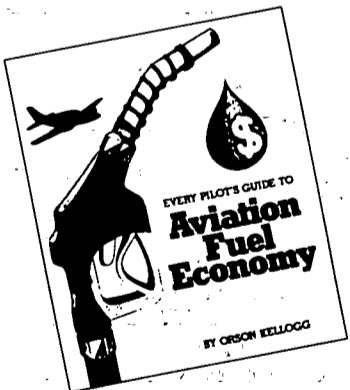
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FAA stresses proper radio operation

The FAA has recently encouraged operators of aviation service transmitters to install visual monitors on those transmitters.

Air traffic control facilities have reported several systems errors as a result of continuous-

ly keyed microphones resulting in the inability to communicate with airborne aircraft.

Unintentional transmissions can be caused by sticking microphone buttons, operators sitting on microphones, mikes wedged in seats and equipment

malfunctions. They usually occur without the knowledge of the operator.

Benefits of the visual monitor include reduced operating costs, prevention of premature failures and transmitter operation can be verified during preflight and inflight situations.

Avionics repair facilities or the Fargo FSDO may be contacted for further information.

General Aviation Around The State

STEELE . . . the City Council is considering the formation of a local airport authority to study plans for relocating their runway to another site.

ROLLA . . . is still awaiting FCC frequency approval before ordering their NDB. They are also looking at the FAA criteria required for IFR capability at their airport.

RICHARDTON . . . has had problems with a rough turf surface. This problem was increased by the drought conditions of this last summer along with grass clumping. In late fall they had graded the turf surface cutting the clumps off and smoothening the surface. Due to the ground being frozen, the root systems were not pulled out. This is a good method to solve grass clumps. They will reseed and fertilize in the spring.

ELGIN . . . plans to do snow removal by the city crews to accommodate the medical services using the airport weekly. Plans for an all-weather surface are not pending since local funds are not sufficient at this time.

LAKOTA . . . an overlay of all asphalt surfaces at their airport may occur this coming summer since a highway construction and asphaltic plant may be in their area. These asphalt surfaces need work and an extension may also be considered.

HEBRON . . . is planning on runway lights for their airport, but first they need some electricity at their airport. So underground service to the airport is planned with REC doing the work.

HARVEY . . . is looking at selling their airport beacon. Contact Russel Olson at Harvey if interested in excellent used beacon light. Plans are also for a new lighted windsock and used snow plow tractor. They are insulating and remodeling the airport trailer office. Would like someone to live on the airport in the trailer so that there is someone at the airport at all times.

NORTHWOOD . . . is doing the paperwork necessary for state-aid grant application for runway repair work for the upcoming year. It is a good time to do your planning and get some estimates of costs so that your airport is ready to do the work when good weather is here.

Register now for convention

To pre-register for the NDAA Convention, please complete the following form and return by January 16. Envelopes must be post-marked January 16 to be eligible for the pre-registration fee. Pre-registered NDAA members will be eligible for a special door prize drawing for a **FREE SUITE AT THE HOLIDAY INN DURING CONVENTION.**

You also save \$5. by registering early. Just complete the following form. **DO NOT SEND YOUR CHECK. YOU CAN PAY WHEN YOU PICK UP YOUR REGISTRATION** packet at the convention registration desk. Mail this form to: Patricia Estes, Convention Coordinator. Box 832, Wahpeton, N.D. 58075.

Extra tickets for various meals will be on sale at the registration desk. However, anyone attending any of the sessions must pay the registration fee. The convention packet will cost \$45. at time of registration and \$40 for those who pre-register.

Name: _____

Address: _____

Firm name: _____

Names of others from my firm attending convention: _____

Number of convention registration packets needed: (The \$40. registration fee includes: the fee to attend all seminars; two breakfasts; two lunches; banquet; 4 coffee-breaks; NDAA party for NDAA Members only if dues are currently paid; various hand-out materials; opportunity to win a weekend for two at Holiday Inn and other door prizes). Please note only NDAA members may attend Wed. night NDAA party . . . so join now and pay 1981 dues. Contact Larry Linrud, treasurer.

New membership classification created

The North Dakota Aviation Association Board of Directors meeting December 17 created a new membership classification.

The new classification, Airport Memberships, was instituted to allow and encourage membership in the organization by airport managers and governing boards of airports.

One membership fee of \$50. covers the entire airport board as well as the manager. However, it is hoped the airport manager might also decide to join under one of the already existing classifications, if that criteria is met.

The board also acted to raise the membership dues for pilot and associate member to \$25.

The dues increase will help cover additional membership services already in action such as the monthly publication, the Relative Wind.

Formal approval of these measures will be sought at the NDAA annual meeting in January. All three are by-law changes.

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RELATIVE WIND

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Bendix Avionics for all Nippon Airways 767s FAR 135 proposed rule changes

FT. LAUDERDALE, Florida ports. — All Nippon Airways selects five Bendix ARINC 700 series avionics systems for their new Boeing 767 twin jet air trans-

The announcement was made during a ceremony in Tokyo attended by Y. Funatsu, Sr. V.P. Eng. and Maint. of All Nippon

Airways; R.W. Thwing, Sr., Director of Marketing, Bendix Air Transport Avionics Division; R.D. Raabe, a Director of Bendix Japan Limited and also C. Itoh Aviation Co., Ltd.

Thwing pointed out the avionics system selected by ANA include — the RDR-4A color weather radar system — ALA-52A low range radio altimeter — RIA-35A ILS receiver — DFA-75A automatic direction finder with special Bendix combination loop sense antenna and the RVA-36A VOR/marker receiver.

"The selection of these advanced digital systems was based on All Nippon Airways extensive technical evaluation and subsequent negotiations to provide the finest avionics available with a comprehensive support program," Thwing stated.

All Nippon Airways has ordered 25 firm and 15 option of the Boeing 767 high technology twin jet air transports with first deliveries scheduled in 1983. The All Nippon Airways Bendix systems represent the most advanced technology avionics available for air transport operation and have been designed to provide high orders of reliability and performance in the era of high technology air transports.

"Low operating costs and lightweight with an all digital concept were design goals, achieved with these advanced systems," Thwing noted.

The Bendix systems will be manufactured in new facilities under construction in the Ft. Lauderdale Bendix Complex.

rule changes

By Jack Daniels

The Federal Register of Thursday, December 4, 1980 contained a number of proposed rule changes for the aviation community.

The most significant one consists of changes to 135.297 (PIC Instrument check rides) for any IFR operations.

The proposal calls for amending the IFR requirements to allow operators to demonstrate and train for those approaches it elects to use, a change in the operations specifications to cover approval for those approaches in the same manner that we now have for autopilot authorization.

In addition, the record keeping required for all this will change so as to greatly simplify the paperwork for 135 operators.

Make sure you plan to get to Bismarck for our annual meeting and participate in the discussion on this and other issues. We need some intelligent input into the response we need to make on these issues.

Luncheon speaker named

Those involved in aerial spraying or any phase of agriculture will be interested in attending the Friday noon luncheon, Jan. 23, during the NDAA convention in Bismarck, N.D. at the Holiday Inn.

The speaker, Cynthia Hudson, of the North Dakota Wheat Growers Association, will provide information on the various efforts and attacks now underway by groups who wish to limit the use of chemicals in agriculture.

Her topic is one making current headlines and one that could affect the livelihood of farmers, aerial sprayers and the world food supply.



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Airport snow removal

TO: General Aviation Airport Managers, Airport Authority Chairmen, City Foremen, Plow Operator and all others.

SUBJECT: To try and forestall the numerous complaints that the North Dakota Aeronautics Commission receives every winter, starting with the first snowfall, about the inadequacies of snow removal, the Commission would like to stress and emphasize the following points:

1. Move the first snowfall out beyond the lights. Reason No. 1: If you don't move the first fall out beyond the lights, you will not have room for subsequent falls and will wind up with a trench, looking a little like the Grand Canyon. Reason No. 2: If the lights are further than 10 feet from the edge of the pavement, all the more reason for plowing and moving the snow out beyond the lights is that a pilot landing in darkness is trying to stay in the center. If lights are 120 feet apart and pavement narrow, such as 50

feet, it is very easy to have a wheel, especially with a twin, catch in the snow with dire results.

2. Establish priorities and maintain them. This pertains especially to airport authorities that have agreements with city crews to plow the airport. Reason: While this arrangement gets very good utility out of the equipment, it leaves a lot to be desired in that most city crews will only remember the airport after they have cleaned every street, alley, driveway, etc., which may take days. Try and open the airport at least on the day following a fall. In a situation where you are sharing or renting the city equipment, try and get at least one piece out to the airport. Get together with the foreman, street commissioner, alderman or council member and establish a good priority and maintain it.

3. Make sure crews know how to plow the airport. Reason: Most crews, with a few exceptions, will plow an airport just

as they would a city street because they do not understand the needs of an aircraft versus an automobile. They will leave small windrows and finger drifts which have a habit of partially melting and then freezing hard, raising havoc with propellers and fragile nose gears. Remember, just because they did a good job last year is no guarantee, because old Joe may not be on the job this year and the new man needs checking out.

4. Clean your ramp of all chocks and other loose debris. Reason: If a blower is to be used, nothing will wreck a blower faster than a chock made out of a good length of 4x4. Rocks have the same effect.

5. Make a point of having someone knowledgeable out on the airport the first time the crews go to work. Reason: If you don't, you will have tie-down ropes sheared off, your tie-down perhaps wrecked and tied down aircraft possibly damaged. Remember, this could be a new crew and maybe if it is old Joe, he may have forgotten where everything is.

Conclusion: Perhaps what the foregoing all boils down to is professionalism "in a job well done and with pride."

Aircraft weight and balance control

During a recent inspection it was noted that the weight and balance data in an aircraft flight manual was 257 lbs. low. The aircraft in question had been weighed less than two years ago with the correct weight being noted in the aircraft logbook. However, the operator did not comply with FAR 91.31(b) and (e) by updating the aircraft flight manual to reflect the correct weight.

The significance of this error is that the aircraft was used in air taxi operations for approximately two years and was 257 lbs. over gross when the operator thought he was within limits. In this case, 257 lbs. was 35 percent of the total useful load. We all know that light twin engine aircraft do not perform very well at gross weight with an engine out. Just imagine what the performance would be under these circumstances!

Weight and balance control will be emphasized on all inspections and surveillances conducted by this office. If you haven't taken a close look at the data for your aircraft and checked for errors, you may want to do so in the near future.

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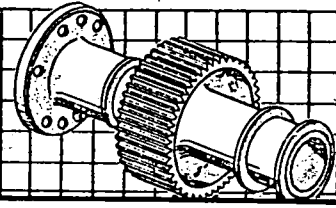
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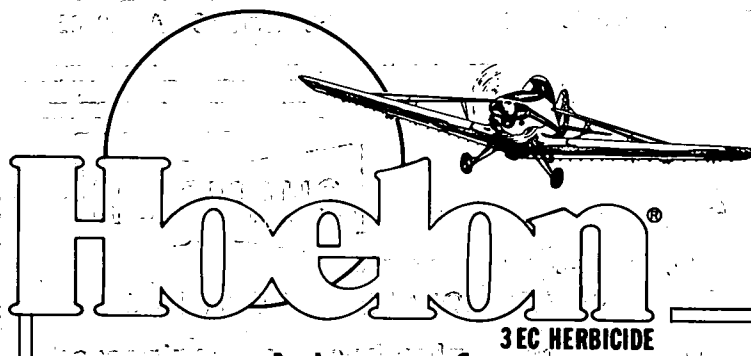
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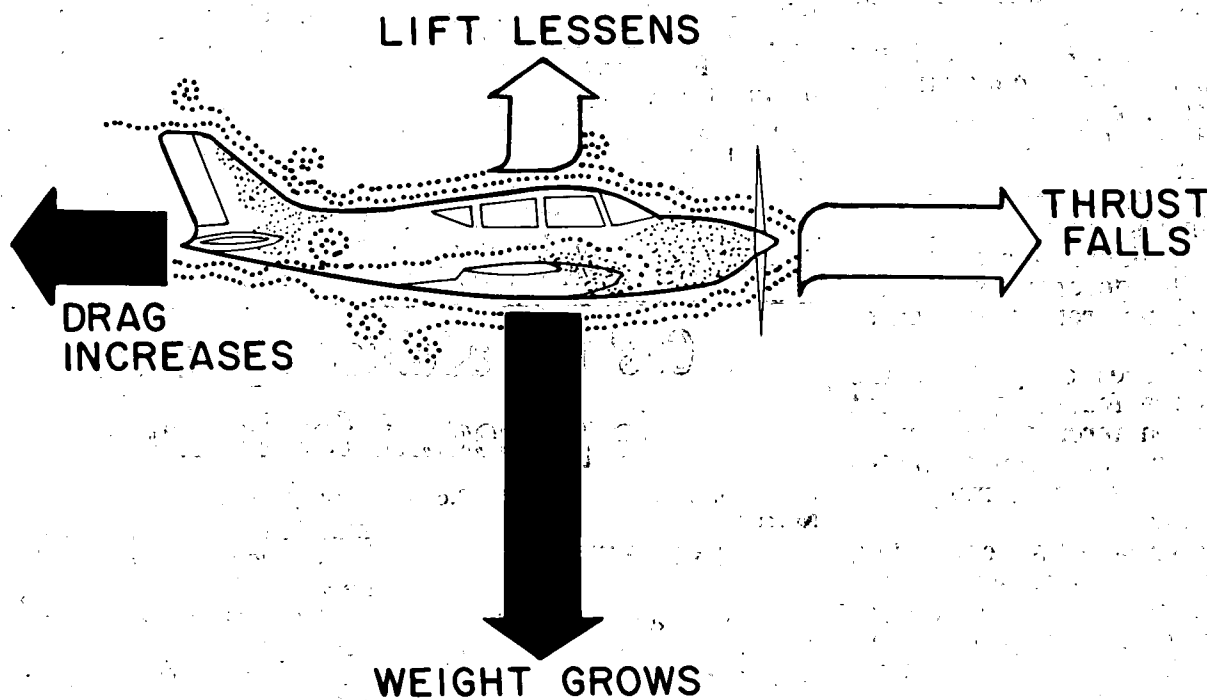
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The Effects of Icing Are Cumulative



It has been said, "There are two kinds of pilots... those who have flown in ice... and those who will." Ice is not an uncommon thing for a pilot to encounter. It's another important realm of flight to know and understand.

Generally, the most severe icing an aircraft will encounter will be below 12,000 feet MSL, and around 32 degrees F. Ice is weight. A general aviation light twin can quickly put on as

much as two or three cubic feet of ice (150 pounds) in LIGHT icing conditions. At an ounce of ice per drink, that's enough for a party of 2,400 people.

Weight, however, is not the real culprit of ice. The real culprit is DRAG — interruption of airfoil. As ice builds up on the wings or props, the smooth flow of the air over the airfoil is interrupted. The airfoil becomes more and more inefficient and

finally is stalled — even with maximum power applied to the engines.

When you first start to get ice, start working to get out of it — and that generally means a different altitude. Very often a change of 1,000 feet can make the difference between severe icing conditions and no icing conditions.

Do not attempt to fly into icing conditions unless your aircraft has all the required anti-icing equipment. Even then, use that equipment only to get yourself out of the icing situation.

Award winners

Congratulations to Dana Siewert, the Rocky Mountain Region 1980 Flight Instructor of the Year Award winner and to Karmen Johnson, the Rocky Mountain Region 1980 Mechanic of the Year Award winner. Dana is employed as the chief flight instructor for the aviation program at UND. He serves as a Designated Pilot Examiner and an Accident Prevention Counselor for the Grand Forks area. Karmen is employed by Executive Air East, Inc. in Grand Forks.

These two outstanding individuals are deserving of the recognition accorded them and reflects favorably upon the aviation community in North Dakota.

"Flying Boat" update

The Howard Hughes' Flying Boat, the eight-engine aircraft built in the early 1940s, and flown but once, will soon be on its way to a display site. The Summa Corporation has donated the flying boat, perhaps better known as the "Spruce Goose", to the Aero Club of Southern California, a non-profit organization. The Wrather Corp., active in the entertainment, energy and hospitality industries, will maintain the aircraft and manage the project. Present plans call for the aircraft to be on public display June 1, 1981, in a facility alongside the Queen Mary, in Long Beach, California.

10 commandments to kill an organization

1. Always have something else to do when a meeting is called.
2. If you attend a meeting, be sure to find fault with the officers and fellow members.
3. Decline to hold office, as it is easier to criticize than to be criticized.
4. Get sore if you are not put on a committee.
5. If you are put on a committee, fail to serve.
6. If the chairman asks for opinions, by all means keep silent, but later tell others what should have been done.
7. When a few fellows roll up their sleeves to help things along, always preach that a clique is running the organization.
8. Stick to telling what you have done in the past for an organization, never look to the future.
9. Delay paying your dues as long as possible and never answer any requests.
10. Never bother about getting new members — let George do it.

1976 CESSNA 182 II
1586 TT, 50 SMOH, 2-KX-170B's, KMA 20 Audio Panel W/3 LMB, KR 86 ADF, KT 76A X pponder, GS, EGT, Carb, Air Temp., LH Articulating Seat, T-Windows, Quick Drain, Winter Kit, RH Hinged Window, LR Fuel, 200A Pilot, NDH, Aug. Annual, Green/White, Green Interior. N9886M
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491 TTSN, 300 Nav/Com, 400 G.S., 300 ADF, 300 X pponder, 400 MB, RH Hinged Window, Rear Seat Vents, Hobbs, Courtesy Lights, GSP, LR Tanks, NDH, Winter Kit, LH Articulating Seat, New Annual, Green/Tan/White, Green Int. N2487E NDH
\$24,000.00

1968 PAWNEE 260
Flagger
\$15,500.00

1978 CESSNA 182RG II
990 TT, 720 Nav/Com, GS, 300 ADP, 300 X pponder, 200 A/Pilot, Post Lights, Courtesy Lights, Rear Seat Vents, Hobbs, RH Hinged Window, Winter Kit, Marker Beacons, Blue/White, Blue Interior. N7369X NDH
\$40,000.00

1979 PIPER TOMAHAWK
160 TT, KX-170B, KT-78 X-ponder, Pilot Heat, Post Lights, ELT, Brown/White, Tan Interior. N2589C NDH
\$13,500.00

1980 PIPER ARCHER II
350 TT, like new.
\$39,500.00

1966 SKYLANE
1600 TT, Like New.
\$14,500.00

1970 PIPER NAVAJO B
3300 TT, 1050 SMOH, L&R, 2-KX-170B's, KR-85 ADF, KT-76 X-ponder, 190 DME, KNX 40 Radar, IIC A/pilot with couplers, GS, C. Pilot Instruments, C. Pilot Brakes, Cabin Divider, Executive Tables L & R, Toilet & Bar, Oxygen, Tinted Windows, Floor Runner, Full DEICE, Hot Windshield, Stobé, 8 Seats, Nov. Annual, Blue/Red/White, Red Interior, NDH N6647L
\$125,000.00

1978 CESSNA 150
300 TT.
\$12,900.00

1978 WARRIOR
300 TT
\$24,500.00

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450 HP, 250 HRS; B Model High Density Combo. 80 gal fuel, 12 volt, side load, Nav Lights, APU, In Line Strainer, Pilot Cool Seat.
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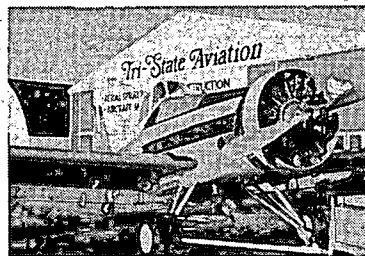
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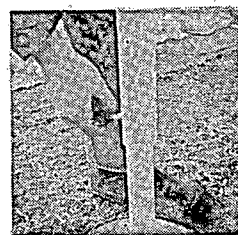


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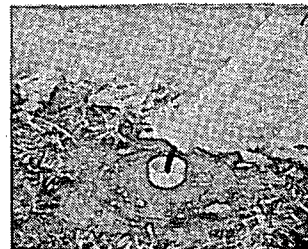
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One step forward, two steps backward

By Richard L. Leshar

Ever get the feeling that, no matter what you may do, someone from the government will always be waiting to pounce on you and say: "Gotcha!" This seems especially true in the area of regulation, where, under the guise of protecting the public, the government is constantly forcing the public into a position of heads I win, tails you lose. For example:

Hospitals in Baltimore were required by city law to keep hot water coming from the taps in patients' rooms at 110 degrees or more; but federal regulations required them to keep the same water at 110 degrees or less.

One federal agency ordered hospitals to use liners in waste containers to protect hospital workers from contamination; but another agency prohibited the use of liners, calling them a fire hazard.

Operators of a meat-packing plant were told by one federal agency to wash the floor several times for cleanliness; but then they were told by

another agency to keep the floors dry so employees would not slip and fall.

OSHA ordered builders to put beepers on construction vehicles; but then they were fined by EPA for making too much noise.

The government ordered children's pajamas treated with a flame retardant; but then the government decided the same retardant causes cancer.

These are merely a few of the ways the federal government has been forcing the private sector to spend more than \$100 billion a year to comply with regulations.

The president's stonewalling on regulatory reform is the latest in a long series of Presidential flip-flops on critical national issues. However, it does adhere to the pattern which can be seen in so many of his Administration's policies — a pattern which might best be described as, "One Step Forward, Two Steps Backward; Heads We Win, Tails You Lose... Gotcha!"

Fuel system icing

A winter challenge

By Jack E. Mathisen

Reprinted from the Minnesota Flyer.

We have noticed that from one winter season to the next the same type of accidents, incidents, and malfunctions occur with regard to our perennial problem of fuel system icing. Each year your GADO investigates frequent occurrences of solid or crystal ice blockage in various systems such as Cessna 150, 152's mentioned below.

In a one month period a few years ago in a neighboring state, three Cessna 150's encountered engine failure while doing power on stalls. Each resulted in a forced landing with no injuries to the occupants, but in two cases substantial damage to the aircraft.

After exhaustive testing it was determined by placing the aircraft in a power on stall attitude on the ground that the engine failure could be induced. Further investigation revealed solid ice in the belly drain tee forward of the fuel selector on each aircraft which resulted in partial blockage of the fuel flow to the engine.

In each of these cases it was found that the required 100 hour inspection interval draining of this tee fitting had been neglected. During the many years that the subject aircraft have been operated the neglect of the draining of this fitting during 100 hour, annual, or progressive inspections have resulted in a great number of engine stoppage accidents or incidents.

The FAA district offices have submitted safety recommendations and taken enforcement action against owners, operators, aircraft maintenance personnel and/or repair stations for failure to follow the manufacturer's in-Page 8

structions. In addition, it has been determined that aircraft covering all makes and models have encountered accumulation of water or ice crystals in the fuel system.

In most of the aforementioned cases the aircraft manufacturer's recommended service instructions spelled out intervals for routine draining of fuel system low points which if adhered to, help prevent such failures. Some manufacturers have recommended specific use of aviation grade isopropyl alcohol as a deterrent to fuel system ice and/or ice crystals. There are specific manufacturer's service letters addressing these problems, which if adhered to, could materially reduce accidents and incidents.

Every year we disseminate information through newsletters, manufacturers literature, pilot safety seminars, and flight instructor workshops, where these items are discussed. It is a repetitive requirement and must be repeated each year.

As we approach winter flying, we recommend the following simple precautions: follow strictly your aircraft manufacturer's service instructions with regard to routine draining of fuel sumps, fittings, gascolaters, strainers, finger screens, header tanks, etc. Also adhere to manufacturer's approved flight manual information regarding daily and preflight inspection requirements by the pilot and in some cases where an approved flight manual is not supplied, an owner's handbook invariably contains the necessary information to guide you to trouble free flying.

The use of isopropyl alcohol is recommended by some manufacturers of both aircraft and engines and is somewhat complicated by the fact that it

is not readily available at all fixed base operators. You may, however, be able to locate a source by simply inquiring around the aviation community and contacting your aircraft dealer. Isopropyl alcohol used during the winter season can generally purge water or ice crystals in your system. Should you find you are unable to obtain the necessary information for its use, do not hesitate to contact your general aviation

district office accident prevention specialist.

The FAA, Central Region, Kansas City, has issued a Notice of Proposed Rule Making on the subject discussed. A copy has been sent to all owners of the aircraft affected. If you want more information, or a copy of the NPRM, contact the Minnesota District Office. Write: FAA-GADO, 6210-34th Ave. South, Mpls., MN. 55450. Telephone 612/725-3341.

Customs addition agreement is precedent for Frontier

Reprinted from Minot Daily News, November 1980.

By Phil Glende

Plans for a new U.S. Customs station at Minot International Airport are taking off at a high rate of speed.

Monday, the city of Minot and Frontier Airlines, Denver, Colo., reached an agreement calling for up to \$78,750 from Frontier to pay for the 2,352-square-foot addition. Federal officials in Washington, D.C., also approved the architect's design.

Wednesday, bids on the addition, which is expected to cost up to \$175,000, will be opened at City Hall.

Next Monday, the Minot City Council probably will approve the cost-sharing recommendation of its Airport Committee, and award a contract for construction which could begin yet this year.

By next May, Frontier wants to have daily flights between Denver and Regina and Saskatoon, Saskatchewan, according to Richard R. Liebermann, deputy director of properties for Frontier. One flight would originate in Denver, and another in Canada.

Liebermann met with committee members Monday night to work out final details of the precedent-setting agreement. Frontier will pay 45 percent of the cost of building the customs addition, up to \$78,750. Frontier originally agreed to pay \$45,000 for the facility, but City Manager Robert Schempp upped the ante in two rounds of negotiations.

William W. Hogan vice president and treasurer of Frontier, noted in a letter to Schempp Oct. 31 that, "We agreed to fund 45 percent of this amount, in the interest of expediency, even though we have not pre-funded a city facility of this type before anywhere on Frontier's system."

Minot Airport Manager Clinton Petersen noted at the meeting that the city would not be spending nearly \$100,000 on the facility if Frontier were not starting international flights through Minot. The addition is needed to meet federal regulations.

Under the agreement, the addition will be city property. Frontier will get 45 percent of any revenues should other aviation customers ever be charged for use of the customs station.

Liebermann was surprised to find that the contract stated that Frontier would pay 45 per-

cent of the costs of operation and maintenance. "Why didn't I know about it before tonight?" he queried.

"I forgot about it," replied Schempp.

Liebermann successfully had delayed any discussion of operation and maintenance costs until October 1982, when a contract for January 1983 will be negotiated.

"Frontier needs this and I think you need it as much or more," Liebermann said.

Architect Scott Bexell said he received telephone notification Monday of approval of the design by the U.S. Customs Office in Washington. Edmond C. Leonard's firm designed the addition.

Bexell said bales of hay have been placed on the ground northeast of the existing terminal to permit a contractor to begin work immediately after the contract is awarded. He said the addition can be completed by May 1.

Liebermann noted that Frontier wants to start as soon as possible to tie the Canadian flight to new flights to Western U.S. cities. "We're looking at other West coast destinations which I cannot reveal," he said after stating that Frontier will start service next month to the Los Angeles, Calif., area.

In other business during the one-hour meeting, the Airport committee recommended transferring the lease and liquor license at the airport cafe from Gene and Marion Larson to William and Virginia Stevick.

Petersen noted that the lease includes the liquor license and if the City council approves the lease transfer, the liquor license will be included. He said the Minot Police Department already has approved the license transfer.

The Larsons have operated the Airport Restaurant and Lounge since August 1978.

The committee recommended renewing its contract with Texaco Inc., Denver, to supply aviation fuel at the airport.

Committee members present were Kenton Bischke, and Aldermen Curtis Zimbelman, chairman, David Germain, Ronald Klecker and Bruce Christianson. Alderman David Badgley was absent.

Afterwards, Petersen told The News that the Republic Airlines, Minneapolis, Minn., plan to eliminate 10 of 16 flights in North Dakota will have no effect on service in Minot.

January 1981

RELATIVE WIND