

# RELATIVE



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## Controllers have come to expect unexpected while pulling duty at Grand Forks

By SUE RETKA

The popular press image of a controller is a chain smoking, grim, pressured individual intensely watching a radar screen. The view from within the Grand Forks tower is vastly different.



On a sunny summer afternoon, the controllers were relaxed and in good spirits. The morning rush had let up, and there was time to chat. Tower chief, Bob Burke, and the four controllers on duty welcomed this pilot-writer.

There was an easy flow to the conversation. The banter was light, the teasing was friendly. In mid-sentence, the local controller would give the occasional airplane instructions, and continue talking. Yet, while things were slow, and the conversation

Controllers come from all over the United States to gain experience working in the Grand Forks tower. The Grand Forks assignment is considered as an opportunity for learning. That experience on this day included working with this PBV World War II vintage plane. The tower staff took a short course in that plane's design and construction as they asked questions such as 'what are those two wire loops...?'

continued, all the controllers kept a steady watch on the airspace around the airport.

Grand Forks controllers have come to expect the unexpected. Approximately 80 percent of their traffic is student pilots, mostly from the University of North Dakota (UND). Their day ebbs and flows around the UND flying schedule.

During the summer months, the University flies from 6 a.m. to 1 p.m., then shuts down during the afternoon

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# Controller strike averted

By Patricia J. Estes

The Federal Aviation Administration, the White House, the airlines, the network of airports and even the airways passengers all geared up for strike contingency plans as the Professional Air Traffic Controllers Organization President (PATCO) Robert Poli kept announcing a June 22 nationwide strike was a sure shot.

Late June 21, as the clocks edged toward June 22 and the predicted 7 a.m. EDT walkout, Poli announced the strike vote was only a formality, according to Associated Press (AP) reports.

But when 7 a.m. rolled around, the nation's taxiways were still the usual scene of arriving and departing planes carrying an average of 812,000 daily passengers. Since June is one of the two busiest months for the airlines, the pending strike would have snarled traffic seriously.

An 80% approval by union members was necessary for the PATCO strike and when the tally was complete, only 75% were reported willing to walk out and risk the possible imposition of civil and criminal penalties.

A 1970 permanent injunction prohibits the 14,800 union members from striking. In all the strike would have affected a force of 17,000 controllers.

That injunction was upheld again in 1978, during a four day PATCO slowdown, recalled N.D. Commissioner of Aeronautics Harold Vavra.

Judge Thomas Platt of the federal district court in New York issued the 1970 injunction, and held firm on the issue again in 1978. Platt ordered PATCO to pay a total of \$100,000, \$25,000 per day for the four day slowdown, to the Air Transport Association,

an organization of scheduled airlines.

Reinforcing this strike prohibition, Vavra noted, is the federal law which prohibits federal employees from striking. The controllers are federal employees.

The Reagan Administration had said it would not tolerate an illegal strike and would seek civil and criminal penalties should a walkout occur.

As federal employees, air controllers faced a maximum criminal penalty of \$100 fines and one year in jail for striking, according to AP. However, that penalty had never been enforced. Civil penalties for violating the federal injunctions could range into the tens of thousands of dollars a day.

At issue was a contract sought by PATCO totalling \$770 million versus a government offer of a contract worth \$40 million.

The union had sought \$10,000 raises for the controllers, who average \$34,000 a year with a low of \$20,500 and a high of \$49,200. The union contract would have lifted the average wage to between \$45,000 and \$47,000 with a high of \$59,000, according to union officials estimates.

Media reports reflected the public stance of PATCO that the package was a firm item in the negotiations. That package included a reduced work week from 40 to 32 hours, increased pension benefits and the across the board pay increase.

As marathon talks were conducted at the Federal Mediation and Conciliation Service in Washington, D.C. with federal mediator Kenneth Moffett participating, the FAA geared up to handle the looming strike.

In early June FAA briefed its regional offices on the overall contingency plans, according to Vavra.

The contingency plan assumed a

'worst case' situation where all PATCO members would strike.

In that case FAA was prepared to handle about 25 percent of the average air traffic levels with supervisory personnel who would stay on the job.

Such personnel, Vavra said, constitutes about 15 percent of the average controller work force and would likely have been used on a 10 hour shift, six days per week schedule.

FAA had plans to fly supervisory personnel to staff key air traffic control facilities if severe staffing problems developed. The contingency plan favored long haul scheduled flights of over 500 miles rather than short haul nonscheduled operations.

The National Business Aircraft Association had predicted that such a strike would have totally disrupted general aviation flights for at least the first 24 hours into and out of controlled airports. The air traffic system would have been reasonably confused for the first 72 hours, Vavra predicted.

The Commuter Airline Association of America advised members to set up individual contingency plans and to contact regional a facility chiefs to insure coordination. That association was ready to operate a special information system for its members.

FAA Administrator J. Lynn Helms sent a letter to all air traffic controllers in May warning that the government "will have no alternative but to vigorously pursue all remedies available to it to bring any unlawful action to an end."

Use of 400 military controllers was mentioned publicly as part of the contingency planning by FAA and the Reagan administration.

Airports in North Dakota with control towers include Bismarck, Fargo, Grand Forks and Minot.

Over the weekend travelers jammed the airports to get home before the strike while others disrupted travel plans, canceling planned trips.

A delegation of members of the North Dakota Press Women, attending a convention in Philadelphia, arrived at the airport, Sunday, June 21, over three hours before planned departure.

Upon arrival the airline offered to seat them on an earlier flight, scheduled to depart in less than a half hour. That delegation accepted that invitation and upon boarding the plane discovered one passenger flying home as much as seven hours ahead of schedule.

During installation of new officers at the convention, the newly elected President, D.J. Cline, of South Dakota State University, Brookings, reported her husband, on a temporary business trip to Des Moines, Ia., could not join her. He could get flights out but non returning and like other business travelers, according to AP reports, opted to just skip this trip.

While reports focused on the dramatic economic impact of such a strike, no public assessment has been made yet of the taxpayers cost of having to bear the brunt of necessary FAA contingency planning.

Also unresearched are the costs in money and inconvenience to business and pleasure travelers who disrupted plans based on the looming strike. Various air industry related associations also invested time and money into efforts to prepare to cope with the burden of such a strike.

On Friday night, June 19, Transportation Secretary Drew Lewis entered the negotiations while advising the public that the \$40 million package offered by the government was a firm

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Bob Burke, Tower Chief, on the job at the Grand Forks tower on a perfect June day.



## 50% of our pilots 'shaky' on procedures

From Page 1

until 5 p.m. or so. During the school year, the busiest times are early in the morning and right after lunch. September, October, April and May have been the busiest months.

At 2 p.m., the shift changed at the tower. About a half hour before, the controllers took off their headsets, switching to the loudspeakers. The tower chief took over one position, letting three of the controllers leave early to make room in the tiny parking lot for the next shift.

The supervisor came in early to relieve the fourth controller. On a day like this one, the briefings were brief — "no traffic in the pattern, watch for the guy mowing along the south end of the field . . ." On busier days the briefing may be a silent one — there's too many planes in the pattern for the controller to take time to explain what's going on. In that case, the new guy simply plugs into the same position, listens and watches until he's learned all the planes' numbers and positions. It may take 10 minutes before he's ready to take over.

There are 10 controllers working at Grand Forks, plus a supervisor and tower chief. Some of the controllers are full performance controllers, while others are developmental.

Every newcomer to the Grand Forks tower, experienced or not, starts out with the easiest position — ground control during slow times. At first, every word is monitored by a full performance controller who can override transmissions. The newcomer works his way into heavier traffic until he begins to handle ground control

under general supervision.

The next step is to the local position — working the planes in the pattern. He starts during slow times and works his way up to the busiest times. It takes 10 months to a year before a controller will work the local position alone. Even then, the team at Grand Forks tower prefers having two people working the planes in the pattern whenever it's busy. One will do all the talking while the other spots planes.

For a couple of hours the new shift was relaxed. The controllers took turns working the ground and local positions, partly to relieve boredom, partly to gear up the rush. Soon the pace picked up. The headsets were put on making it easier to hear the increasing number of pilot calls. Idle chatter died out. The backup controllers watched for planes through binoculars.

Even though busy, the tower was quiet. The controllers spoke softly into the headsets. Their professionalism masked whatever pressures they were feeling. The atmosphere had changed — not to a grim tenseness — but rather a cool, alertness. Being able to talk, listen, write and watch for planes simultaneously has to be second nature to a controller. On a busy day at Grand Forks, a controller can be talking to 20 to 30 planes in the pattern at one time.

The pressures of the Grand Forks tower are as great, or perhaps greater than at Minneapolis or Chicago. The big airports have radar aids, they deal mostly with professional pilots, and have parallel runways. Grand Forks has no radar in the control tower, deals with mostly students and uses intersecting runways when the wind

permits.

On their busiest day at Grand Forks — a lovely fall day two years ago — the controllers handled more operations in their 16 hour day than Chicago O'Hare did in 24 hours.

The tower and university have tried to work out ways of handling the heavy student traffic without inconveniencing other pilots. UND planes do their runups in a different area of the field than other planes. When around the Grand Forks airport, UND planes identify themselves by their "Sioux numbers" — a one or two digit number painted on the tail. The instant student identification and simplified numbers make the controller's job a little easier.

The tower also limits the number of planes in the pattern making touch and goes to six. The university has tried to minimize congestion by sending planes to several outlying airports for touch and goes, as well as assigning airplanes to specific practice areas.

When wind conditions are ideal, the tower uses both runways generally keeping the full-stop landings on the north-south runway while working the touch and goes on the intersecting runway.

Of all the practices at Grand Forks, the one that probably makes unfamiliar pilots the most nervous is the use of both runways. Tower chief Burke explained the procedure is legal and they're perfectly willing to accommodate a pilot who doesn't want to land on a runway with instructions to hold short of the intersecting runway.

"If you as a pilot don't feel comfortable doing it, don't do it," said Burke. "When we're busy, we don't take the time to ask if you can. We don't want to put anybody in an unsafe position — just tell us, and we'll plan accordingly."

Burke also stressed that if a pilot doesn't understand the controller's instructions to ask him to repeat. "Lots of times we speak too fast, just ask us to slow down." When a pilot acknowledges a controller's instructions, he assumes that the pilot totally understood and is capable of doing it. To an inexperienced pilot, for example, it might be difficult to handle a right downwind or straight in approach.

A controller can frequently tell by the tone of a pilot's voice just how experienced or confident that person is. When they detect uncertainty, they try to allow for that.

The controllers at Grand Forks

estimated 50 percent of the itinerant pilots who fly into Grand Forks from around the state are shaky on procedures. Some pointers:

—When preparing for departure or when approaching, listen in to the frequency. If they're busy, use ATIS for basic airport conditions.

—Reduce your transmissions to the bare minimum. When the tower is handling 20 planes, even an extra five or ten words is too much. If you've come in on Approach Control, they already have your position and N-number. When you call up tower, be prepared to get your instructions. If they need any extra information, they'll ask. Similarly, if you fly in without contacting Approach all they want is your N-number, position and intentions. If they need altitude or other information, they'll ask.

—When you call tower, ready for take-off, be ready at the yellow line, facing the runway. If they clear you for immediate take-off, they want you on roll-out immediately.

—When landing, turn off at the first available taxiway, cross the yellow line and contact ground. When extremely busy, they don't want you taxiing on the runway, waiting for instructions.

—If you should lose your radios, you can land at Grand Forks (It wouldn't be wise to try it in a TCA). Try your transmitter. Frequently, while you can't hear them, the controllers can hear you. You can ask them to flash a green or red light, if they do hear you. Take a look at the airport, get into the pattern (fly above it if you wish to see how planes are flying the pattern). Then get into the pattern and land. Remember to watch for the tower lights. Usually they will be green — they want you down and out of the way. If you don't get your radio fixed, just call the tower. They will explain what procedures to follow when leaving.

—Wake turbulence can be a problem at Grand Forks. If they clear you to land or take off behind a jet, they'll try to space you out correctly — but they do expect you to know how to handle it. If you can't remember, ask. The controllers cannot volunteer the information, but they'll gladly answer your question rather than see you bounce out of control in the jet's wake.

—The controllers at Grand Forks tower are a friendly bunch who welcome visitors, whether busy or quiet. They like visiting with pilots, answering questions and explaining the view from the tower.

# Final decision still pending

From Page 1

one. Poli, PATCO President, continued stating on Saturday that little progress was being made on the substantive issues.

And yet when the 7 a.m. strike deadline rolled around, the strike was like the proverbial bride left at the altar.

Poli later announced he was pleased with the settlement of the contract which, according to Lewis, is the same \$40 million level offered from day one.

The controllers' work week will drop from 40 hours to 36, although they will work and receive four hours overtime pay. The union had sought a 32 hour work week.

The union also won a voice in FAA decisions affecting controllers, the AP reported, plus an increased night pay differential.

Poli stated the increased voice in FAA was a key in the settlement. The Union head said the settlement was eased by government of the acceptance of a redistribution of the money in the \$40 million package.

"Under present economic conditions, I feel it's the best we could achieve," Poli said. He stated he was convinced that President Reagan would not endorse any additional money.

The average salary increase in the first year would be about 6.6 percent in



addition to the increase of approximately 4.8 percent that all government employees are due to receive this year, Poli said.

As the strike issue quickly moved off the nation's news headlines, ballots were being prepared to mail to PATCO union members. The ballots will then have to be tallied. Results may not be public for two to three weeks due to the mailing and tallying procedure.

While PATCO officials such as Rich Dahlen, a spokesman for the Minneapolis-St. Paul PATCO, stated the contract proposal as it now stands will be accepted, union members still must individually mark that ballot.

If the contract receives the predicted approval, then the issue moves to Congress for action.

The procedure there, according to Senator Mark Andrews office is as follows . . .

The Administration will have to draft a bill for introduction to Congress. A spokesman in Andrews office noted it is still rather early after the successful contract negotiations to predict when this bill will be drafted.

She suggested the Administration will likely begin preparation work immediately but counseled that final drafting will have to wait the complete contract. It is possible minor changes in the union settlement might have to be worked out yet.

Once the bill is drafted it will be sent to committee with the Government Affairs and Civil Service committee a likely starting point. Introduction of the bill to both Houses simultaneously would speed the process but as yet no one has announced if this will be the procedure used.

If Congress views the final bill and associated contract favorably, approval could be swift. However, that story is yet to be played out.

Thus, as Relative Wind goes to press, this is the story as of June 23 of the strike that wasn't, a strike everyone publicly involved seemed to say would happen.

That situation makes this writer a little uneasy about the current announcements that seem to suggest approval by the union and Congress will be routine.

This story revealed the only routine in these negotiations thus far was a surprise ending.

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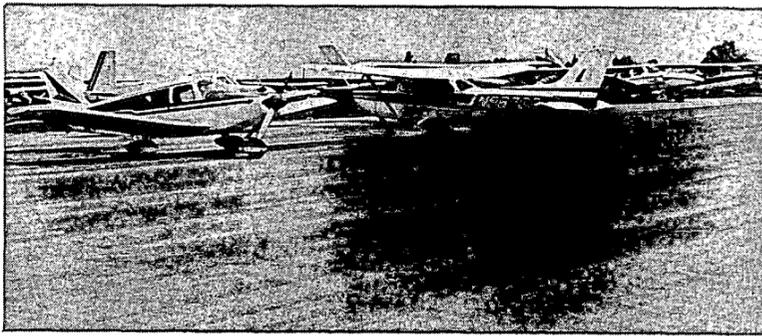
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# Oakes dedicated new airport

Over 1,000 served a delicious breakfast



Parked aircraft at the new Oakes Airport large apron during airport flight breakfast and air show on June 7.

Over 1,000 persons were served a flight breakfast of sausage and pancakes at the Oakes Airport dedication on Sunday, June 7, which was followed by an air show.

There were 43 airplane fly-ins to the event. Local pilots gave 350 to 400 free airplane rides during the celebration.

Walter Pfeifer formerly from Oakes and now an M.C. for Northern Air Shows, Cloquet, Minnesota near Duluth, gave a pre-show narration of the aviation history of Oakes. The air show included precision aerobatics by Arne Odegaard from Cloquet, Minnesota, flying a Steen Skybolt and Bob L. Schroeder, Sr., Erie, North Dakota, flying a Pitts S-1. Arnie Widmer of Crete flew an aerial spraying demonstration.

Following the air show, the new Oakes Airport was dedicated. The airport boasts 3,500 ft. by 60 ft. runway, a large apron and new installation of 85 and 100 octane aviation fuel, large pole-type hangar installation with bi-fold

doors and medium intensity runway lights. The new airport including land acquisition and construction, and installation of hangars was built at a cost of about \$540,000 of which \$410,000 was FAA Federal funds and \$65,000 State

funds from the Aeronautics Commission and the balance furnished by the Oakes Municipal Airport Authority.

The dedication ceremony was chaired by John R. Breitbach, Chairman of the Oakes Airport

Authority. Speakers were Harold G. Vavra, Director of the Aeronautics Commission and Kent Jones, Bismarck, Agriculture commissioner of the North Dakota Department of Agriculture. Oakes Airport Authority members present were Vernon Courtney, Lester Trinka and Lee Ruhn, who is also Manager of the Airport. Also attending from Bismarck included Roger Pfeiffer, Assistant Director, Aeronautics Commission and Milton Heupel, Airport Engineer with the FAA Airport Field Office.

Senator and Representative from District 26 attending were State Senator Leroy Erickson, DeLamere and State Representative John Crabtree, Ellendale.

The Aeronautics Commission furnished a unicom two-way radio on 122.9 Mhz for airport advisories to aircraft during the event.



Crowd of over 1,000 who attended the Oakes Airport dedication and air show on June 7.

Lower fuel taxes advocated

Senate Bill No. 1272 was introduced on May 21 which lowers federal aviation fuel taxes from the level initially recommended by the Senate Commerce, Science and Transportation Committee. This new bill was introduced by Senators Cannon (Nevada) and Kassebaum (Kansas), which calls for 8½ cents per gallon federal tax on aviation gasoline and jet motor fuel used by general aviation, which would continue at the same level to October 1, 1985.

Earlier the U.S. Senate Aviation Subcommittee had recommended an aviation gasoline tax of 10 cents per gallon through 1983 and 12 cents per gallon during 1984 and 1985, and yet fuel tax starting at 15 cents per gallon and increasing to 18 cents per gallon by 1984 and 1985.

S. 1272 also lowers the airline ticket tax from its present 5 percent to 3 percent of the cost of airline tickets. The bill also lowers the cargo tax from 5 percent to 2 percent of the cargo waybill and drops the federal head tax on international travel on scheduled airlines from \$3.00 per person to \$1.00.

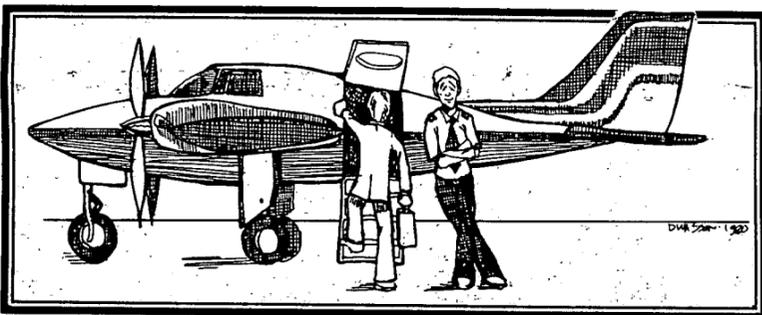
The sponsors of the bill estimate that the lower level of aviation user taxes will reduce the aviation trust fund surplus from its present \$4 billion to about \$1.3 billion by 1985.

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July 1981



## Another record month for Big Sky Airlines

Big Sky Airlines had a record month in May in North Dakota for both airline passengers and air freight at five North Dakota cities, according to Harold G. Vavra, Director of the North Dakota Aeronautics Commission.

Big Sky Airlines in the month of May at Bismarck, Devils Lake, Dickinson, Grand Forks and Williston enplaned and deplaned a total of 4,912 passengers compared with 4,415 in April this year, an increase of 11 percent.

Big Sky Airlines in May enplaned and deplaned a total of 77,687 pounds of air freight at five North Dakota cities compared with 64,997 pounds in April for a one month gain of about 20 percent, Vavra said.

In the month of May, Big Sky Airlines enplaned and deplaned 2,041 passengers at Bismarck; 1,885 at Williston; 439 at Grand Forks; 276 at Dickinson and 271 at Devils Lake, Vavra said.

Big Sky Airlines doubled its frequency of air service between Bismarck, Devils Lake and Grand Forks beginning April 26 from one to two round trips daily, Vavra added.

A breakdown of Big Sky Airlines' air freight enplanements and deplanements in May at five North Dakota cities in pounds are: Bismarck, 33,215; Williston, 25,811; Dickinson, 12,358; Devils Lake, 3,209 and Grand Forks, 3,094 pounds.

## Big Sky offers stock

BILLINGS, Montana — Big Sky Airlines (Pacific Stock Exchange), a regional airline, filed on Wednesday, June 10, 1981, with the Securities and Exchange Commission for an offering of 1,150,000 shares of Class A common stock. The announcement was made today by Terry D. Marshall, President and Chief Executive Officer of the Company.

Tom L. Footitt, the airline's Vice President of Administration and Treasurer, said proceeds of the offering will be used for acquisition of certain existing leased aircraft, securing of delivery positions on additional new aircraft, purchase of ground equipment, repayment of debt, and for additional working capital.

The offering will be through an underwriting group managed by D.A. Davidson & Co., Inc. of Great Falls, Montana, and will be completed within one to two months from the date when all regulatory requirements are met. Davidson also handled Big Sky's initial public offering in September, 1979.

The public offering will be made only by means of an official prospectus.

Relative Wind

Devils Lake will hold dedication July 12

Lawrence Knoke, Manager of the Devils Lake Municipal Airport announced a fly-in Terminal building dedication and air show on Sunday, July 12th. The J.C. Etts will serve lunch starting at 11:00 a.m. The airport will be closed between 12:00 noon and 5:00 p.m. except for period between about 2:00 to 2:30 p.m. when Big Sky Airlines arrives and departs Devils Lake. During the event prizes will be drawn for two round trips between Devils Lake and Bismarck for two couples and for five free airplane rides to be given by each fixed based operator on the airport by Foss and Meier Flight Service and Wakefield Flight Service.

The new airport terminal building will be dedicated at 1:00 p.m. in a ribbon cutting ceremony and speeches by officials. At 1:30 p.m., the North Dakota National Guard will make a jet fly-over Devils Lake Airport.

Events scheduled include Gene Ellen of Leeds, N.D. who will fly a novelty act, Wakefield Act which will be flown by pilot members of the Wakefield Flight Service and aerobatics flown by Stewart Lucke, Jr., of Inkster, who flies a Chipmuck. During the event the Elks Band will be on hand to strike up the music. On the ground Bob Rindt of Minot will do a whip and lariat act. During intervals there will be model airplane flights. The Devils Lake fire department will put on a demonstration.

For those who come to the event on Saturday preceding the Sunday activities and go fishing at Devils Lake, prizes will be given Sunday for the largest walleye, northern and perch.

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# Fatalities on the increase

By HAROLD VAVRA

North Dakota through June 8 this year has five general aviation accidents which resulted in a total of 13 fatalities. In the past ten years, only 1978 resulted in 13 fatalities for the entire year in general aviation. In 1981, North Dakota has tied 1978 for fatalities during less than six months.

1. The first fatal accident of the year occurred on February 17 with one fatality and involved a mid-air collision in the traffic pattern between two training aircraft at the Grand Forks International Airport. One aircraft was flying an upwind leg over the runway. The other aircraft, after a touch and go landing, climbed straight out and into the aircraft over head. Grand Forks Airport has an FAA Control Tower.

2. The second fatal accident occurred on May 1, when a Bell Model UH-1B Huey turbine-powered helicopter, which was owned by Blain's Helicopter Sales and Service of Billings, Montana, crashed with a pilot and seven passengers, with a total of eight fatalities. The helicopter crashed and burned in rugged badlands territory about 20 miles southeast of Williston, North Dakota. The helicopter was carrying members of a seismological crew who were employed by Consolidated Georex Geophysical, whose main headquarters are in Massey, France and which has a U.S. office in Denver. Representatives of the National Transportation Safety Board (NTSB) investigated the accident. The remains of the turbine engine was examined by NTSB at Stratford, Conn. NTSB gave a preliminary report that indicated that the gas producer turbine section in the engine came apart and in effect destroyed the engine. NTSB said that it was trying to chase down the history of the engine to find out where the last major overhaul was made. NTSB also indicated that it plans to ship the helicopter's transmission to the manufacturer, Bell Helicopter, in Fort Worth, Texas, for examination.

3. The third fatal accident occurred on May 31 resulting in two fatalities, the pilot and owner of the plane in the left front seat and one passenger in the rear seat. The accident involved a Cessna 182 with three rated pilots aboard, one in the left front seat, one in the right front seat and one in the rear seat. A fourth person aboard was a passenger in the rear seat.

The aircraft was searching for two youths who had been reported missing in a boat on Lake Sakakawea. The

aircraft observers spotted the two youths on the ground in an area about 14 miles west and 9 miles north of Mandaree, N.D.

The aircraft attempted a landing on a gravel road to seek help. Aircraft made a hard landing and crashed during an attempted go-around. Aircraft burned. The pilot in the right front seat was thrown clear of the aircraft and pulled the third pilot, whose clothes were on fire, from the burning aircraft.

Authorities were uncertain whether the two victims died as a result of the plane crash or the fire. Autopsies were planned.

The pilot in the right front seat suffered a broken ankle and a broken wrist. The second surviving pilot in the rear seat suffered burns and was flown to the St. Paul, Minn. Burn Center where he was hospitalized in serious condition.

4. The fourth fatal accident occurred on June 5 resulting in one fatality. This accident occurred near Langdon, N.D. in a wheat field. The aircraft involved was a Bellanca Model 8KCAB (Decathlon).

The pilot was a fixed base operator at the Langdon Municipal Airport. Records of the Aeronautics Commission show that the pilot had about 9,000 hours total flying time and 400 hours flying time as pilot in command in the past year. The pilot had owned this Bellanca Decathlon about a year previously when he sold it. The Bellanca was borrowed from its owner for the purpose of practicing aerobatics in order to perform in an air show the following Sunday at Oakes, N.D. The purpose of aerobatic practice was to get current proficiency in aerobatics and to renew FAA authorization to perform in commercial aeronautics. The pilot had made prior arrangements with FAA inspectors from Fargo to observe his aerobatic proficiency on this day. The crash occurred as the FAA inspectors were arriving at the practice area. Apparently the Bellanca crashed while the pilot was making a slow roll at about 50 feet above the ground.

5. The fifth fatal accident occurred on June 6 resulting in one fatality in an aerial spraying accident. The accident

occurred near Sterling, North Dakota at about 7:30 a.m. while the farmer pilot was aerial spraying his own farmland. Aircraft involved was a 1958 year Piper PA18A Super-Cub with a 150 HP engine. The pilot owner acquired the PA18A in 1969, according to records of the Aeronautics Commission, and was using it for aerial spraying his own land. The pilot held an FAA Private pilot's license.

The aircraft burned on impact. The fire consumed all the fabric on the aircraft except the rudder. The flagman witnessed the crash about ¼ mile from impact. The aircraft was making a turn when it impacted the ground in a nose down position. The flagman indicated that the aircraft exploded into a fire shortly after impact. Because of the intense fire, the flagman could not get to the pilot. The Sterling rural fire department was called to hose down the smoldering wreckage so that an ambulance could remove the body. The accident was investigated by the FAA. A preliminary report indicated that it was unlikely that the pilot had any physical impairment.

## Agricultural Aircraft Accidents Involving Fire

The records of the Aeronautics Commission show that in 1981 over 260 aircraft and helicopters have been licensed for aerial spraying in North Dakota. Out of this total figure, there are 24 Piper PA18 and PA18A ag aircraft in the fleet operated by 21 commercially licensed ag spray operators, or about 9 percent of the total.

At one time in the early 1960s there were nearly 200 Piper PA18's used for aerial spraying in North Dakota.

Accident records of the Aeronautics Commission, over a span of 20 years, show a substantial number of Piper PA18 and PA18A aircraft used for aerial spraying, which became involved in major or minor accidents, have had fires associated with the accident.

The new line of agricultural aircraft which began to come on the market in mid-1965 and beyond designed for aerial spraying do not have this characteristic. About 90 percent of ag aircraft now used in North Dakota fall

in the new design category.

A Piper PA18 and PA18A in an accident will usually involve a fire if the engine is impacted or if even the bottom of the engine cowl is impacted as a result of an accident. In most cases, the fire will start before the aircraft comes to a stop.

There is a reason for this happening. The early model Piper-Cub and Piper PA-11 were powered by a Continental engine which does not have the fire exposure compared to the Piper PA18 which is powdered by a Lycoming 150 HP engine. When the Piper PA18 and PA18A was brought out, the aircraft manufacturer switched to a Lycoming engine in order to get 150 horsepower from a four cylinder engine at that time.

Ninety percent of the Piper PA18 fires start at the bottom of the Lycoming engine where the gasolater is located near the exhaust stack, which is near the bottom of the engine cowl. We have had accident reports in the years past, where a hard landing, which caused collapse of the landing gear on the Piper PA18, which in turn caused the bottom of the engine cowl to impact the ground, resulted in a fire before the aircraft came to a stop. The impact broke off the gasolater near the bottom of the cowl, resulting in gasoline pouring onto the hot exhaust stack.

In many cases this has happened while the engine is still firing. A fire from this source spreads rapidly, being fed with gasoline and will easily penetrate the fire-wall. In addition, a smoldering fire may burn fabric and plastic which will very quickly fill the cockpit with fumes which displace oxygen. In one accident where the gear collapsed and while the aircraft slid 300 feet, the pilot did not have serious injuries but was stunned and remained in the cabin and died of asphyxiation (lack of oxygen).

This happens fast. Even if a flagman is used and was ¼ mile away, it is unlikely that he would arrive in time. Most operations use an automatic flagman in today's operations.

We have had accident reports in a PA18 in which the pilot was able to get out of the Piper PA18 with a collapsed gear in time, but could not extinguish the fire which started around the engine, which resulted in complete loss of the aircraft.

The Piper PA-11 does not have this problem because it is powered with a 90 HP Continental engine with a fuel

Continued On Page 5

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# Dropping in on Hank & June

**Editor's Note:** Relative Wind readers. Hank and June Fietzek forwarded this article for reprinting. It originally appeared during April in the Jamestown Sun.

By WAYNE NELSON  
Sun News Editor

MILLARTON, N.D. — Balloonist Ben Abruzzo, known for his pioneering balloon trip across the Atlantic Ocean in 1978, dropped in on Hank and June Fietzek Monday afternoon.

Abruzzo and Rocky Aoki landed their helium-filled balloon in a field near the Fietzek farm around 4 p.m. after drifting 1,300 miles during the Gordon Bennett balloon race, one of the premier gas balloon races in the world. Abruzzo and Aoki began their flight from Fountain Valley, Calif., on Saturday afternoon.

The Benihana, piloted by Abruzzo, was Japan's entry in the 11-balloon field. And the duo not only won the race, they set a distance record for the event which dates back to 1906. Abruzzo and Aoki, who encountered rough weather near Salt Lake City and the last 500 miles of their journey drifted from ground level to 20,000 feet at the peak of the flight.

"We could have made maybe another 40 or 50 miles before dark, but we didn't have enough ballast left for another night in the air," said Abruzzo, who, with Maxie Anderson, piloted "The Double Eagle" across the Atlantic.

"It was a great flight," added the balloonist. "We flew the plane to its maximum and we're happy."

## A lot can be said for fire resistant clothing

From Page 4

system which is located differently. In summary, most major accidents with Piper PA18's used for aerial spraying will involve immediate fire and even minor accidents resulting in impact to the bottom of the engine cowl will result in immediate fire.

### Stall Characteristics

The Piper PA18 and PA18A also have a stall characteristic which can mean big trouble, if an aggravated stall occurs, while turning a spray plane at low altitude. In executing a recovery from a turn-type stall while at low altitude, if excessive power is applied too quickly or if excessive power is being used before the nose is dropped to pick-up flying speed (if air space is available), the wing lift may be too low to balance out the rotating torque of the engine at high power settings which can rotate the wing into a near vertical attitude which allows no recovery at

## To the Editor: Fietzeks submit clipping

Dear Patricia,

After reading Relative Wind, I thought maybe you would have some interest in an event that happened on our farm April 27th. I am sending you a news clipping that appeared in our local newspaper. After Ben Abruzzo returned to Albuquerque, New Mexico, he sent us an autographed copy of the book "Double Eagle." We also had a nice letter from Rocky Aoki. My husband and I had to witness the

certification of the balloon landing, this report will be sent to the National Aeronautic Association at Washington, D.C.

P.S. We come to Wahpeton quite often as we have a daughter, Lucinda, Mrs. Scott Johnson, living there.

Sincerely,

June Fietzek

When the Benihana landed, it had no ballast left at all. And the landing in the Fietzek field was anything but smooth.

"Ben wound up outside the gondola and Rocky was trapped inside after the landing," noted David Slade, a pilot of the chase plane which accompanied the Benihana.

Also in the plane was comedian Flip Wilson, who hopes to get his hot air balloon license some day.

The Fietzeks saw the balloon descending and immediately went to help.

"We saw they were coming down so we went to try and give them a hand in landing the balloon," said June Fietzek, adding Abruzzo became tangled up in the ropes after the landing.

"We were picking up logbooks, glasses, cameras, billfolds — just about everything they threw out before the landing," she added.

"I'm glad we had our wheat planted, or else we'd have been out in the field and wouldn't have seen them," she

added.

Abruzzo is a ski company executive in Albuquerque, N.M., the hot air balloon capital of America. Aoki is the president of the Benihana restaurant chain.

The Gordon Bennett race was named after newspaper publisher James Gordon Bennett. It was first held in Paris in 1906 but was discontinued during the war years. It was revived in 1979.

Race officials told The Associated Press that Abruzzo's flight broke the previous record of 1,057 miles set by a Russian in 1948.

The balloon, filled with 35,000 cubic feet of helium, carried a small gondola, measuring four feet by six feet. Total weight of the balloon and gondola was between 2,000 and 2,500 pounds, said noted balloonist Ron Clark, another member of the chase crew.

Despite the smallness of the gondola, Clark said it contained about 1,000 pounds of ballast including a bed, chair and radio equipment.

Six American and five foreign balloons entered this year's race. By Sunday, about 24 hours after the race started, only the Benihana, and two U.S. entries, the Rosie O'Grady and the Destiny, were still drifting. The Rosie O'Grady landed Monday afternoon in Utah after logging 624 miles and the Destiny landed Sunday night in Arizona.

The Benihana racing team is planning a trans-Pacific flight from Japan to the U.S. for this November. Abruzzo and Aoki had scheduled the flight in March but the flight was aborted before takeoff due to a balloon malfunction, said Clark.

The Fietzek residence was "launch control" for about three hours after the balloon landed, said Wilson, who rarely showed a serious side to the friends and relatives who showed up to see the balloonists and comedian.

In addition to signing autographs and joking with everyone, Wilson said he would someday like to pilot a balloon. "I will be racing soon," he predicted. "I'm training with the world's greatest."

Naturally, he was asked the whereabouts of Geraldine, his best known

comic creation.

"Geraldine couldn't make it," he said. "She has to be in Las Vegas Wednesday night for a Lola Falana special. I tell you, there will be a fight in the dressing room."

Wilson and the flight crew appreciated the Fietzeks for their hospitality.

"You know, we picked the best field in town to land in," he added. "Where else would there have been sunflower peanut butter, beer and congenial hosts to greet us?"

Before boarding the Cessna 421 for the crews return trip to Albuquerque, Wilson gave Mrs. Fietzek a small, stuffed chipmunk. "It's not much but at least it was in the balloon," he laughed.

Aoki also gave Mrs. Fietzek a pin commemorating some of the balloon voyages he has taken.

Hank Fietzek still has the deflated balloon and gondola sitting in his garage.

He'll receive some instructions where to ship it today.

## Jet Blast

Taxiing behind a jet with its engines running could be a hair-raising experience. The wind velocities 25 feet behind a DC-10 at takeoff power, for example, exceed 500 mph. Even as far away as 1,000 feet, the DC-10 produces wind velocities of 50 mph. Even as far away as 1,000 feet, the DC-10 produces wind velocities of 50 mph. Not surprisingly, the high by-pass engines on today's wide body jets produce higher velocities at greater distances than do the older low by-pass engines. Note the jet blast comparison between a Boeing 727 and a DC-10 at 75 feet:

|                  | Boeing 727 | DC-10   |
|------------------|------------|---------|
| Idle thrust      | 44 mph     | 60 mph  |
| Breakaway thrust | 80 mph     | 130 mph |
| Takeoff thrust   | 230 mph    | 300 mph |

Needless to say, if taxi operations must be conducted behind running jets, the pilot should first determine that the jet in question is at idle, will stay that way, and is far enough away to allow the jet blast wind velocities to dissipate.

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# Yes, you can use the road

By Harold Vavra, Director,  
Aeronautics Commission

Several aerial applicators inquired recently about the state laws relating to aerial applicator aircraft use of county or township roads for operating spray aircraft.

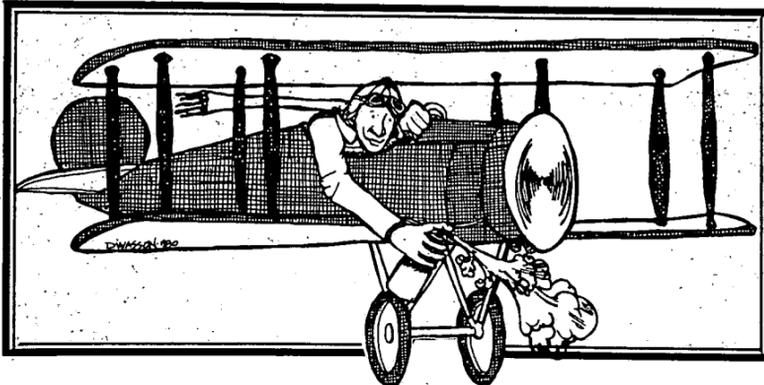
The 1979 Session of the N.D. Legislature completely re-wrote state laws pertaining to overwidth vehicle use of roads and highways in North Dakota.

State laws pertaining to this subject are:

The maximum width of vehicles on a road or highway is eight feet with the exception that:

1. A vehicle width in excess of 8 feet is allowed on roads or highways for the movement of implements of husbandry by farmers, ranchers or dealers between sunrise and sunset, provided all vehicles in excess of 8 feet in width shall be preceded and followed by a flagman.

The N.D. Legislature defined a "Vehicle" to include every device in, upon, or by which any person or



property may be transported or drawn upon a public highway, except devices moved by human power or used exclusively upon stationary rails or tracks.

The Legislature also defined "Implement of Husbandry" to mean every vehicle designed and adapted exclusively or carrying an implement of husbandry and in either case not subject to registration if used upon the highway.

An interpretation of the above law

appears to mean that an airplane is a vehicle within the legislative definition of "Implement of Husbandry."

#### Conclusion

It is therefore concluded that an agricultural aircraft is a vehicle and an implement of husbandry and apparently can legally use a county road or township road provided:

1. The operator of the aircraft is a farmer, rancher or dealer of implements of husbandry and the use is between sunrise and sunset, provided a

flagman shall precede and follow the aircraft used for aerial application, provided the aircraft is designed and adapted exclusively for agriculture.

In the interpretation of a dealer of implements of husbandry, this appears to mean a dealer in agricultural aircraft, which the definition says is a dealer in implements of husbandry. The other qualifications which can be substituted for dealer is being a farmer or rancher.

The practice of using county roads or township roads is not recommended, except in dire emergencies. Therefore use of roads by aerial applicators should be constrained to a very minimum. There is always exposure to an accident between automotive traffic and aircraft. Aircraft should not block a road. The law specifically provides for a flagman preceding and following the vehicle. Under no circumstances should a road be used which has a hill in the vicinity. There should be clear approaches for about a mile in each direction without intervening hills.

About ten years ago an accident

Continued On Page 7

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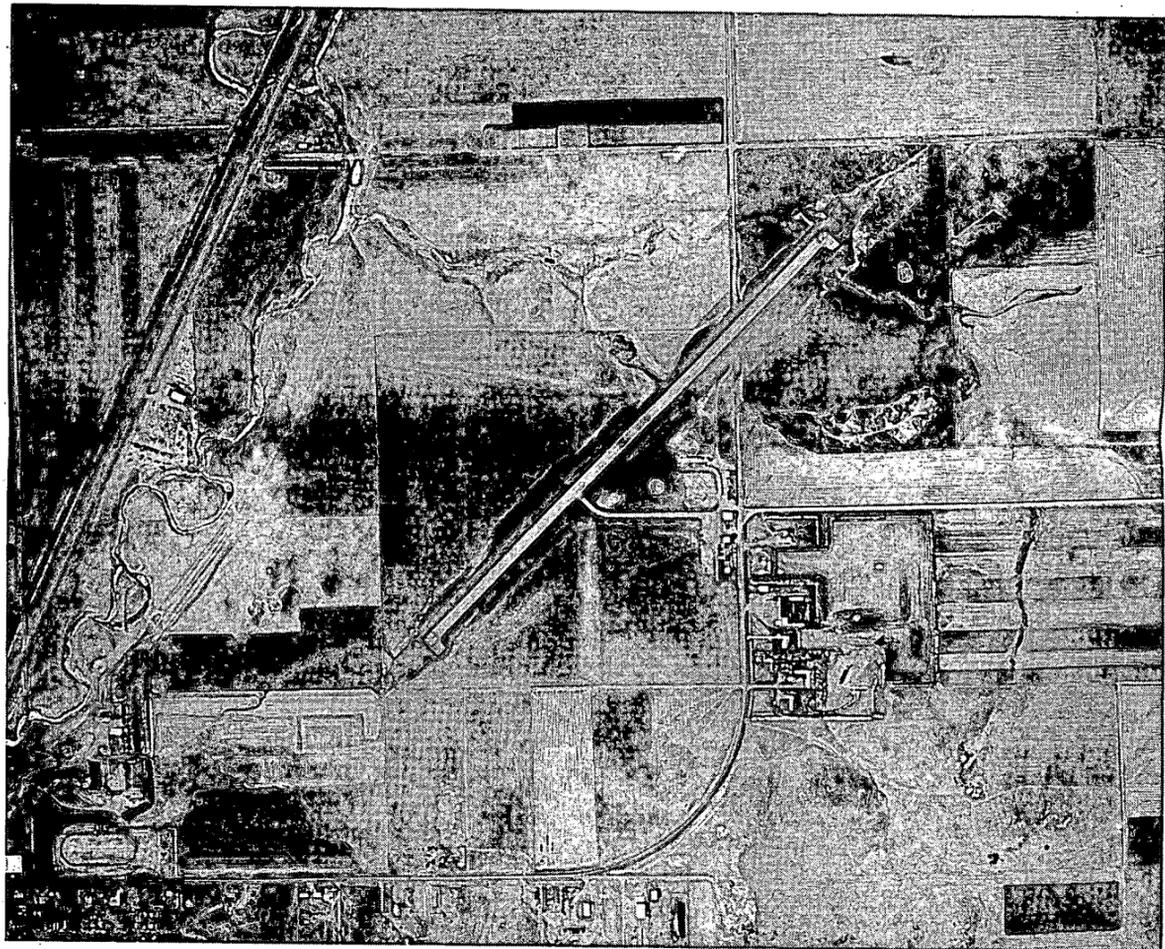
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# The chemical game very competitive for Dewey Ostlund

By Nancy Erickson Johnson

Farmers have battled pests for the fruits of the harvest since the first seeds were planted. With varying degrees of success, farmers battled the bugs and weeds, getting help from some naturally occurring materials and then from synthetic compounds.

After World War II, the promise of effective pest control was first seen when synthetic compounds gained worldwide attention. One of the first pesticides used after the war was dichloro-diphenyl-trichloroethane or DDT. It was soon hailed as a miracle chemical.

Development of chemical compounds to control weeds and insects has continued since the days of broad-spectrum sprays like DDT. Dewey Ostlund of Ostlund Chemical Co. of Fargo has seen many of those developments occur since entering the chemical business in 1954.

The Pelican Rapids, Minn., native started in the business with a Fargo-based seed and chemical wholesaler and stayed with them until 1970. After that, he worked with two other chemical companies helping them establish a base in the area.

By 1976, Ostlund decided to go out on his own in the business. "I had worked for other companies and I just wanted to do it on my own," he recalls.

The business became a reality in

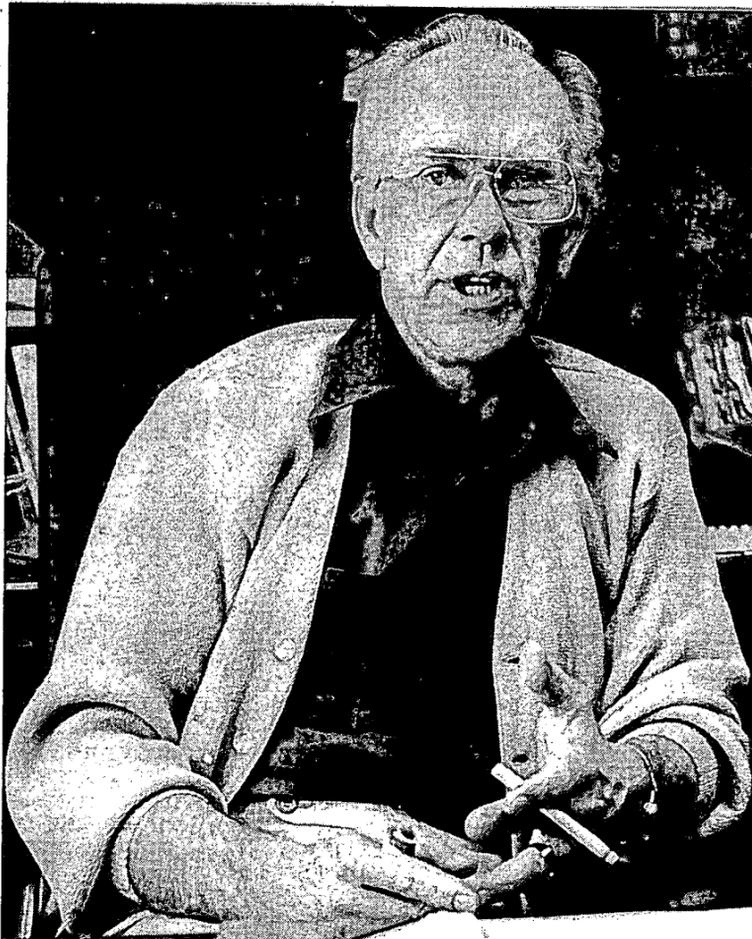
September of that year, organized by Ostlund and two partners. The partners, Phil James of Fremont, Neb., and George Doering of Greeley, Colo., has their own wholesale chemical firms, complete with formulation plants.

"They provided the means to get going," he continues. The partners had the distribution systems, products, credit and the name brand plants. These formulating plants mean the opportunity for more gross profit for Ostlund Chemical and the wholesaler's dealers, he adds.

The rapidly expanding business started out with an office in the Fargo Mills building. By March of 1977, the new offices and some warehouse space were built in the 12th Avenue Industrial Park in Fargo. That office was expanded in 1978 and warehouse space was rented in two other locations around town.

By 1979, the operation was in need of more space and the logistics of loading trucks for delivery from three points had gotten very complicated. In October of '79, the new warehouse and office space was started, also in the industrial park.

"We decided to sell the old building and put everything in one place. We got more storage and it is more efficient for loading and unloading trucks," he points out.



Dewey Ostlund is an industrial member and a booster member of NDAA.

To keep an eye on the operation, Ostlund has a window from his second floor office overlooking the warehouse. Shipments from that warehouse are delivered in nine company-owned trucks and several trucks leased for the busy spring season. There are about 25 members of the Ostlund Chemical staff which make the sales and deliveries possible.

The wholesale chemical operation has dealers in the valley ranging from the South Dakota border to Canada, east to Highway 59 in Minnesota and west to Highway 281 from Jamestown to Devils Lake. Products available include a wide range of agricultural chemicals from various suppliers, as well as about 20 products under the "Clean Crop" label. This is the label for non-patented chemicals formulated for Ostlund.

The formulation plants which make chemicals for Ostlund are called Platte Chemicals. These are the plants formerly owned by the Ostlund Chemical partners. Several other companies are also in partnership with James and Doering, but each stands on its own, he says. They do work together to help disburse out-of-balance inventories, and help each other out, he adds.

Ostlund says one reason his business and others in chemical sales has increased is higher usage of chemicals by farmers. "That's not because there are more farmers, or more dealers, but each farmer is using more chemicals." This higher usage has also translated

into some shortages of inventory, this year especially. "The farmer is taking a lot better care of each area this year than last year," he maintains. This is the reason for the shortage.

About two-thirds of the Ostlund Chemical dealers selling to those farmers are elevators or fertilizer businesses. The rest are custom applicators, mostly aerial applicators.

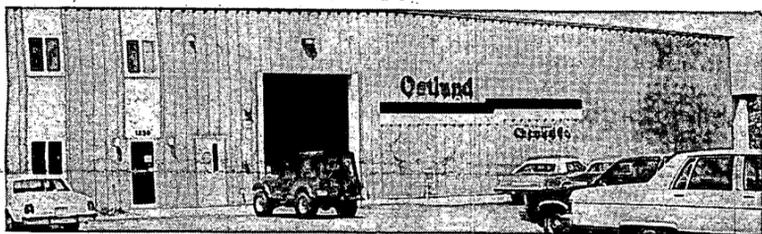
Ostlund says his business has been built on service and a complete line of products. Changes in the business come quickly, he points out, and "you have to keep up with the competition."

One of the "right services" offered by the firm is long hours. During the peak spring season, the warehouse comes to life at 5 a.m. and is open until 9 p.m. or later. "People know we are in about 5, so the phone starts ringing then. Most wholesalers are not here" so early in the morning.

Providing the service and keeping up with the game makes the business interesting to Ostlund. "The intrigue of things changing," also makes it interesting, he says. "The business today is completely different than the one we planned in 1976. The business is never dull. The business changes so rapidly, it is hard to get out for three or four months. If you do, you have lost the product trends."

When Ostlund started, the chemical business kept people busy for six months of the year. "Now it is a 12-month job" with the budgeting and

Continued On Page 8



The Ostlund Chemical Company

## Taxi it off, please

From Page 6

occurred when a spray aircraft was using a county road with a hill nearby. The aircraft was loading in the middle of the county road blocking it during the loading process. A passenger car came over the top of the hill on the gravel road at high speed. The driver figured he could not stop in time on the gravel and took to the ditch, went through a fence into a field. One of the vehicle's doors flew open which pitched a passenger out of the vehicle. The passenger suffered a fractured back. Substantial damage resulted to the vehicle. The aerial applicator firm was

sued by the owner of the vehicle and the injured passenger on the basis that the road was blocked and there was no warning in any manner of the fact the road was blocked by a spray aircraft parked on the road. The State District Court entered a judgement, after a jury trial, against the aerial spraying firm in the amount of about \$17,000.00 for injuries to the passenger and for damage to the vehicle. Under no circumstances should aircraft be parked in the middle of the road, but must be taxied off to an approach to clear the road while loading chemical.

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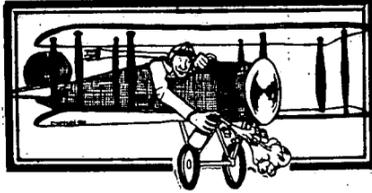
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# No. 1 blackbird controller

By Cleo Cantlon  
Freelance Writer  
Balfour, N.D.



**Editor's Note:** Probably the most frustrating scene for a grower is to helplessly stand by and watch his fields devoured by thousands of hungry blackbirds. Although the percentage of overall damage in the growing region is generally small, the damage is usually concentrated in a small area which is devastating for those growers.

This article describes one unique way of attacking the problem which could have potential in other problem areas of the producing region.

Even though he works in only one of the major flyways of blackbirds through North Dakota, Gene Ellan of Leeds has earned the title of North America's Number 1 blackbird controller.

Ellan, who became involved in the use of the bird control chemical avitrol in 1975, has a trophy from Ostlund Chemical to prove his "number one"

status, but more important to him are letters from satisfied customers and a waiting list of sunflower producers wanting to hire him.

"A few flowers were planted around Leeds in 1974, more in 1975 and more in 1976," the pilot recalled. "I started with about five farmers seven or eight miles southeast of Leeds and six to eight miles northwest of Leeds, maybe under 1,000 acres the first year. By 1977, I'd made up my mind to find out all I could about blackbird migration routes, habits and so on."

Ellan's personal studies and discussions with William K. Pfeifer of the U.S. Fish and Wildlife Service, which conducts the training for the use

of Avitrol led him to a significantly different service than that offered by most pilots. He offers a monitoring service in which he, rather than the farmer, takes on the primary job of spotting the birds, since early control is of major importance. Ellan does not spread Avitrol over an entire field and he advises farmers about which fields will have the biggest bird problems if sunflowers are planted...

"He offers a monitoring service in which he, rather than the farmer, takes on the primary job of spotting the birds, since early control is of major importance."

Ellan's business has grown to over 80 customers who spent an average of \$3.75 to \$4 per acre last year for his service. (Broken down on a per-mile rate, there is a monitoring charge only for trips in which no Avitrol was spread; otherwise farmers are charged according to flight-time and chemical.) He tries to cover each field every other day during the heavy bird migration season.

Ellan, a Minnesota native has been an aerial applicator for 31 years, 27 of that in North Dakota, also does weed-spraying, has seeded rice in California, sprayed for insects in East Cost parks, served as an aerial fire fighter, and operated flight schools in eastern North Dakota.

When it came to blackbirds, however, Ellan says, "I went to college out in the middle of a sunflower field." In 1977 even the Fish and Wildlife staff couldn't tell him much about patterns of birds despite experiments with Avitrol in Fargo and different parts of the world. He explained the chemical is used to treat one of 100 kernels of corn, cracked to a size to appeal to blackbirds. The birds eat it and, after a few minutes, become ill, flutter around, cry out and finally die, usually frightening fellow birds away from the field.

The Leeds pilot concluded after observing the use of Avitrol, that much of the bait was used ineffectively if dropped from a high altitude or over a

Continued On Page 9

## 'It is a continual battle'

From Page 7  
ordering.

The game of intrigue starts for the company when orders are planned in the fall. From September to November, past orders are examined and projections made about the future needs of a particular business. Farming trends are also guessed at, as well as possible farm chemical needs.

The goal of those months is to order enough of the right chemicals to satisfy

customer needs without overbuying, which the company has been able to do during the past years.

While explaining his business, numerous calls were answered and many employees stopped in with a question. With all the demands, Ostlund points out, "You have to love the business. Nobody in their right mind would be doing it if they didn't like it."

"We have the best crew ever, so far

as dedicated people," he continues. "They are hard to come by. A company is no better than the people employed there. You need people that enjoy their work. If they are happy, they do a good job and work hard."

One of the frequent visitors is Roger Ivesdal, corporate secretary. He was offered the opportunity to buy into Ostlund Chemical and Dewey says that is the best thing he ever did.

Ivesdal produced some promotional material the company has had printed which shows the staff and the type of products available. The growth of the company has been so rapid, however, the new brochure doesn't list some of the new employees.

Ostlund says the business will continue to go up if agriculture holds its own. "There is no choice. Farmers can't get the production they need out of the land with out chemicals" as mechanical cultivation and labor become more costly.

Changing crop emphasis in the valley has influenced the type of chemicals used, but 2,4-D "is still the backbone of this company," he explains. Small grain chemicals are really the largest part of the business, followed by sunflower, corn, sugar beets and beans.

2,4-D is one of the products for-

mulated by Platte Chemicals and with the other "Clean Crop" brand chemicals makes up about one-third of the dollar volume of the business.

While Ostlund is optimistic about the future of the chemical business, he is not encouraging his son Brad, who drives truck for the company, to enter the field. "It is a tough game, with the Environmental Protection Agency, the Audubon Society and others, it is a continual battle."

Ostlund now estimates the industry is spending as much time staying out of trouble as selling products. "We got out of our way to avoid trouble," he said. He explains the company knows how to handle accidents such as traffic accidents transport so people aren't involved.

Young people trying to enter the chemical business "have to be willing to work more than 40 hours a week or they will never be successful. That is hard on wives and families," he adds.

Dewey and Ginger Ostlund also have two daughters in high school.

"It is a very competitive, low margin, high volume game. You have to be there all the time or you will never make it." Ostlund says his employees have been competing together for a number of years, now, and are a "great bunch of guys."

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# Avoid the turkey farms . . .

Commissioner of Agriculture Kent Jones joined the State Aeronautic Commission in an appeal to small aircraft and helicopter pilots to steer clear of turkey operations in the state. Harold Vavra has made maps of the areas where farms are located and posted lists in airports as well.

"Turkeys are very high-strung creatures. They react to loud noises by 'jumping in a pile' and at the worst

asphyxiating themselves and at best damaging themselves to the detriment of their marketability," explained Jones. The most sensitive times in turkey raising are in the spring and during July. "The turkey farmer who has quite a lot of investment tied up in his birds does not call Harold Vavra, or my office, in a very good mood after a helicopter has just excited his flock," Jones went on to say.

The problem as Vavra explains it is not with the North Dakota pilots nor the Air Force pilots. The Air Force bases in Minot and Grand Forks are being very cooperative according to Vavra in keeping their low flying aircraft away from the northeastern area around Devils Lake where most of the operations are located. "What we're running into," Vavra said, "is Canadians who don't know where the

sites are and increasingly oil exploration helicopters which are also from out of state and not yet appraised of the situation."

Jones joins Myron Halvorson, Turkey Federation President, in his appeal to petroleum company pilots and pilots throughout the state to be informed as to locations of these turkey operations.

## He won't take some areas

From Page 8

wide area. Concentration of the treated kernels in one area was necessary to really scare the birds. Ellan also concluded they like low spots, with or without water, and that weed seeds helped draw them to fields. Migrating flocks move in waves and when a second wave moves into an area, they can pick out the "good picnic areas" by seeing bird droppings and empty husks from previous bird visitors!

Ellan pointed out the local birds are here about the first part of August when the flowers are blooming and begin to attack heads. The first migratory wave, mostly redwing males, and the first yellow heads come at the end of August. The bird wave, with a lot of grackles, come Sept. 10 to 25, depending on Canadian feed and temperatures.

So Ellan began to spread his bait selectively, in areas where good roosting and weed seeds attracted birds, dropped it flying low so it stayed close together to get a fast result, and told customers they paid twice for weeds "in lost yields because of the weeds and sunflowers lost to birds attracted by the weeds."

Ellan believes more potent bait, with 3- or 3½-percent-treated-kernels-rather than 1 percent would be better because of quicker reaction but he doesn't guarantee any quick improvements. He said the 1 percent bait "will do it in 80 or 85 percent of the fields I monitor but when birds are too many in numbers it doesn't work, especially later in the season as flocks are larger and include the noisier females and juveniles, they often do not seem to hear distress cries of birds affected by Avitrol." He thought 3 percent bait would be best because it seemed to take three coverages with 1 percent to get them to move.

Ellan noted migration routes have changed 10 to 20 miles from one year to

another in the five years he has been involved, which affects how many birds a farmer can expect. But general patterns can be predicted. He noted a second large migratory route from northeast of Devils Lake to Edmore, going south-southeast. The birds normally move 12 to 20 miles a day in their southerly journey if weather doesn't hurry them. He gives customers and prospective customers such information, looks over their land for brush and low-growing tangled trees, weedy areas and the cattail marshes.

"Every year I have a couple guys I tell I don't want to work for them if they plant a particular area," he notes. "I just can't protect it."

Despite help from daughter Trudy, his book work is a considerable job; dividing up flying time and bait costs among customers, planning routes to minimize time and maximize coverage.

Bill Pfeifer of Fish and Wildlife, who praised the work of Ellan and Lynn Larson of Fargo who also provides a monitoring service, noted increasing acreages and changing farming techniques for sunflowers makes it ever harder to control the wily blackbird. The crop, high in protein and oils, is highly desirable to the adult birds who have just molted and find it the best food possible to produce new feathers. Pfeifer noted the male redwings move in just a few days behind the snowline in the spring, set up a territory and start housekeeping with 5 or 6 wives. Males also leave first in the fall, moving from nesting to staging areas. Most crop damage is done in the first 18 days when the crop is most vulnerable or when about 10 percent of the petals have fallen. The most damage is done by the males.

The preferred nesting area is in small grains and shelterbelts while the staging or gathering area is usually a

cattail marsh. It is in these areas that the temperature is less varied and there is protection from wind and the predator hawk.

There are about 600 million blackbirds in the nation, actually only a slight increase in the past few years, according to Pfeifer, but now the birds tend to come and stay.

Avitrol, properly applied, gets about a 75 percent control, Pfeifer says, because about 12 to 15 minutes after a bird eats a treated particle, he flops around and cries out. The birds in that area, if they see him, fly up and split up. Half go to another field and the remainder to another type of food.

However, those who go to another field include some birds who ate Avitrol-treated kernels and fall ill in the second field, where the same scene is repeated, **EVEN IF THAT FIELD IS NOT BAITED.** "However, when there are 50 to 100,000 birds in a field, it just doesn't work" Pfeifer said, "because they don't notice the affected birds."

Any control, Avitrol or scare cannons or any device, must be used as soon as birds enter a field, Pfeifer stressed. "Each day you double your problems on a field," he noted.

The FWS official discussed problems in developing Avitrol or other pesticides. It requires from \$13 to \$15 million to register a new product. Sterilization of male blackbirds has been tried, tracking birds with radio to determine flight patterns has been done, and still the problem continues.

"Any control, Avitrol or scare cannons or any device, must be used as soon as birds enter a field."

"The rate of sunflower growers attending meetings drops off because we have nothing new to tell them except that we're trying," Pfeifer said. He did stress that new sunflower producers, however, should check with the FWS for possible new techniques, ask experienced area growers, and

carefully consider planting areas. If flowers are planted, hire a monitoring service or attend to bird problems immediately yourself. If you use mechanical scare devices, use a variety and move them often since blackbirds are smart and adapt easily. A gas exploder covers 10 to 15 acres. Shut it off when birds are not in the field; leave a row unplanted in the field so you have room for such devices.

The blackbird problem is magnified by new farming practices, Pfeifer said. Growers once produced 800 pounds per acre in 48-inch-spaced rows. Now they have increased production to 30-inch rows and 1,600 pounds of product. This has produced an umbrella or canopy over the ground which makes it difficult for birds to see the Avitrol-treated bait. Also after a treated seed is eaten, it is difficult for a sick bird to fly up through the leaves to be spotted by his fellow birds. Leaves are usually gone by natural or chemical means when the females and juveniles come through, but the damage has mostly been done by then.

The problem is real. Over the last several years, a survey of over 500 flower fields showed bird damage in the state was only about 1 percent. Most producers would consider even 3 or 4 percent acceptable. While 83 percent of the fields had less than 1 percent damage, 2 percent of the fields had damage in the range of 42 percent, a whopping \$4 million damage concentrated in small areas.

With a crop of this promise, more study on the problem is a sure bet. Consider the bird nesting and resting areas before you plant; hit'em with a variety of weapons the earlier the better. Blackbirds unquestionably find sunflower seeds habit-forming.

(Reprinted from the N.D. Sunflower Council News)

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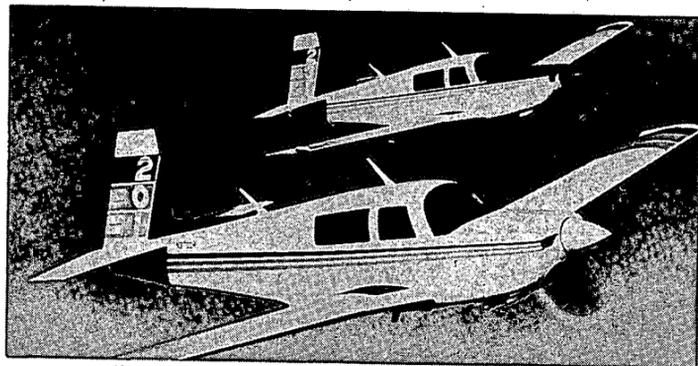
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# Watch out for those shady tree sprayers

Reports of questionable tree spraying operations have been brought to the attention of Commissioner of Agriculture, Kent Jones. "Spring somehow brings out the best in nature and the worst in some people," Jones said in discussing the problem of itinerant, disreputable tree sprayers. The guise used by these operators is to approach the owner of the trees, saying the trees are infested with borers or disease and must be treated immediately. The conscientious owner

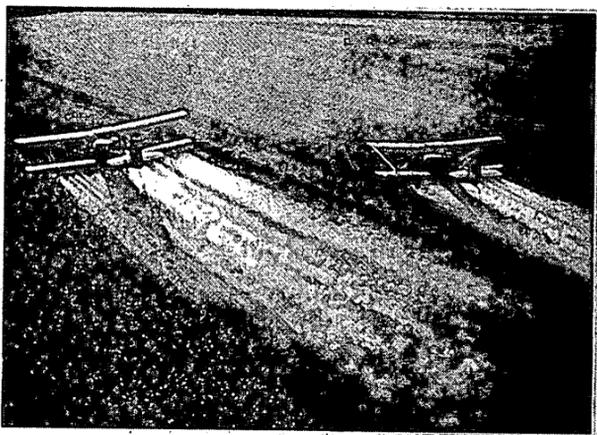
takes their word for it and pays for what is an unnecessary treatment for a nonexistent condition. For the protection of reputable sprayers and for the tree owners' protection as a consumer, Jones advises getting a second opinion. "Call your county extension agent or your locally known sprayer for a second opinion." If citizens are aware of such operations they may also contact the Attorney General's Consumer Fraud Division in Bismarck.

## Maybe we can carry him the rest of the way

Once upon a time . . . there was a dealer who had never joined his association. All his life he took the benefits won for him by the association but refused to join. Then on his death-bed he told his wife: "Dear, please do something for me. I want the association members to be my

pallbearers." "But you never belonged to the association," his wife objected. "Why do you want the members to be your pallbearers?" "Honey," he replied, "they've carried me this far . . . they might as well carry me the rest of the way." Courtesy of the Oklahoma Automobile Dealers Assn.

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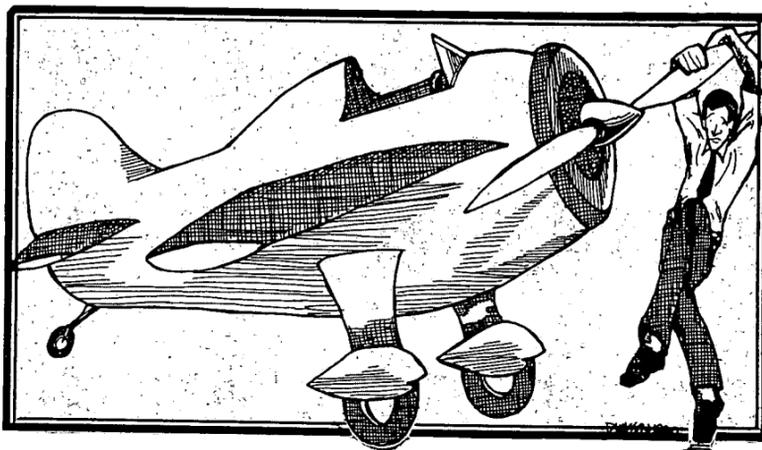
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### Accidents in April

| Accidents       | April | 1981 |
|-----------------|-------|------|
| Accidents       | 1     | 4    |
| Fatal Accidents | 0     | 1    |
| Fatalities      | 0     | 1    |

The accident occurring in April involved a floatplane on a long cross-country ferry flight. The pilot stated the engine stopped after running out of gas and there was no water to put the floatplane down in. After touchdown in a field, the aircraft nosed over and came to rest inverted. It is interesting to note that only minutes before the engine quit, the aircraft had crossed Lake Sakakawea which offered an unlimited area for making a floatplane landing — emergency type or otherwise.

### Exam-o-grams

Brief, timely and graphic articles developed and published on a continuing basis, Exam-O-Grams are non-directive in nature and are issued as an information service, particularly to individuals interested in FAA Airman Written Tests. They relate to concepts, practices, and procedures critical to aviation safety, common misconceptions among pilot applicants, and areas which cause difficulty in written tests.

Exam-O-Grams are available by subscription from: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402; Subscription price is \$13.00. When ordering, list ID: IVPEG.

### Non-compliance

During the past 90 days FSDO investigated 19 alleged violations of the Federal Aviation Regulations involving the following:

|                                 |   |             |   |
|---------------------------------|---|-------------|---|
| Air Taxi                        | 6 | Weather-ATC | 4 |
| Careless or Reckless Low Flight | 3 | Other       | 5 |

Of considerable concern is the relatively high portion of air taxi

related investigations. The majority involved the use of unqualified pilots or the carriage of persons for compensation without compliance with FAR Part 135. Please note the high number of weather-ATC related incidents. Many of these involved operating into a control zone without a clearance when the weather conditions were less than 1,000 foot ceiling and/or the visibility less than 3 miles. Some of the pilots in these incidents did not have current medical certificates or biennial flight reviews.

### Altitude alert

Pilots on IFR flight plans in aircraft with a MODE C transponder will have additional "eyes" checking their altitudes this spring. Beginning in May, all 20 air route traffic control centers began testing En Route Minimum Safe Altitude Warning, similar to the system used at airports with automatic radar tracking. If an en route aircraft is projected to go below a minimum IFR altitude, an alert will flash on the center controller's radar scope, and he will take appropriate action.

### Visibility . . .

There is a possibility that a takeoff or landing attempt could be made at an airport when it is below IFR minimums even though the pilot received weather conditions from the ATC controller and believed the weather to be at or above minimums. This situation actually happened to an air carrier here in North Dakota recently. The weather was reported as "visibility one eighth mile in fog, tower visibility one quarter mile". In this case, the carrier's minimums for the runway being used was one quarter mile. Since this value was reported, he departed. The problem is that tower visibilities are often reported as part of the remarks section of the official weather report. The tower visibility is the official visibility when it is the lower of the two.

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# Desiccant drift under study by universities

FARGO—Paraquat and sodium chlorate are used as preharvest drying agents on sunflower in North Dakota and Minnesota where over 3 million acres are planted.

Inevitably, some of the nearly 400,000 acres of sugar beets in the two states will be adjacent to sunflower fields, causing a potential for desiccant drift, points out Alan Dexter, extension sugar beet weed control specialist for North Dakota State University and University of Minnesota.

Dexter, Darrell Cole, USDA-SEA research physiologist stationed at NDSU and Galen Schroeder, former NDSU sugar beet research associate, conducted studies during 1979 and 1980 to determine the effect of various rates of paraquat and sodium chlorate on sugar beet yield and storability.

Sodium chlorate was applied to beets at rates varying from 4.5 pounds per acre down to 0.56 pounds both years. Paraquat rates varied from 0.25 down to 0.03 pounds per acre in 1979 and from 0.12 to 0.01 pound in 1980.

Sodium chlorate tended to reduce beet yields at all rates in 1979 and reduced yields at all rates in 1980. Paraquat reduced sugar beet yields at all rates both years. Paraquat at 0.01 pounds per acre caused nearly two times the yield loss caused by sodium chlorate at 0.56 pound per acre even though 0.01

pound per acre is 4 percent of the normal paraquat rate and 0.56 pound per acre is 12 percent of a normal sodium chlorate rate, Dexter points out.

Sugar beet yield losses were greater in 1980 than the year before. September rainfall in 1979 was 0.3 inches while a year later it was 2.8 inches. The untreated sugar beets probably grew more in 1980 because of the greater rainfall. So the desiccants had a greater effect in 1980.

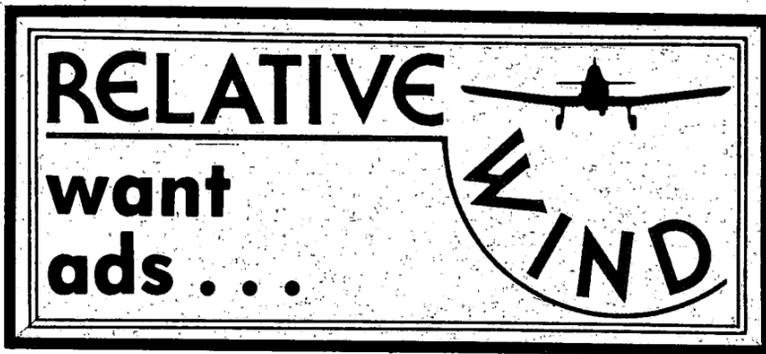
Sodium chlorate did not affect sugar beet storability as measured by sugar loss during a 110-day storage period. Paraquat at 0.25 and 0.12 pound per acre reduced sugar beet storability as sugar loss during storage was 38 and 28 percent, respectively, compared to 13 percent for the untreated check.

## Mail watch

The State Aeronautics Commission has mailed airman applications to over 2600 pilots. The new certificate will be valid for two years, expiring on June 30, 1983. The present certificate expires on June 30, 1981.

The fees for registration are unchanged — \$3.00 for private, commercial or mechanic ratings; \$1.50 for Students.

A current airman certificate entitles you to the subscription of "Relative Wind". Please advise the Aeronautics Commission Office at any time you have a change of address so that you will receive your subscription.



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# The 'non-smoking' flight . . .

CHICAGO — The day may be approaching when you can select a non-smoking airline flight to your destination.

Airline deregulation and the resulting competition may bring this about.

But, points out an editorial in American Medical News, the newspaper for physicians of the American Medical Association, there is another side to this coin: You may soon fly on planes in which the smoke is as thick as it used to be. Deregulated airlines would be free to abolish existing non-smoking sections.

The AMA has sent a letter to the Civil Aeronautics Board, saying that it is concerned that total deregulation "could result in airlines actually retreating from the current standard of separating smokers from non-smokers."

Studies should be conducted, directly related to the health effects of passive smoke on passengers, the AMA said.

In the meantime, existing airline standards should be maintained. As an alternative, the AMA would favor a total ban on smoking in aircraft.

While competition may induce airlines flying popular routes to offer non-smoking flights, many air routes are only serviced by a single airline, James H. Sammons, M.D., executive vice-president of AMA, pointed out in a statement submitted to John Golden, director of the CAB's Bureau of Compliance and Consumer Protection.

"The AMA is concerned that a total deregulation on the issue of smoking could result in airlines actually retreating from the current standard of separating smokers from non-smokers," Dr. Sammons said.

"It is our position that a total ban of

smoking, or in the alternative a firm policy to significantly limit smoking, will help lead to safer air service. We would also suggest continued studies on the health effects of smoking aboard aircraft," the AMA executive said.

Dr. Sammons pointed out that the AMA banned tobacco advertising from its publications in 1953 and in 1968 adopted a "strong stand against smoking by every means at its command." In 1970, the AMA called for the separation of smokers from non-smokers when the size of the aircraft permits.

In 1979 the AMA further urged the

CAB to ban cigar and pipe smoking on commercial aircraft, ban all smoking on all scheduled flights of one hour or less and on all small planes of less than 60 passengers, allow a smoking area on longer flights only after all nonsmokers are accommodated, encourage establishment of both smoking and non-smoking flights, and hang curtains or partitions between smoking and nonsmoking areas, he said.

The proposed rulemaking sets out two additional alternatives to be considered by the CAB in spite of their long term review of smoking on board

aircraft, that are on opposite ends of the smoking-nonsmoking spectrum: banning of smoking, or an end to regulation entirely.

"In our view, a 'middle ground' would effectively serve the public interest pending completion of specific investigations into the quality of air in passenger cabins of commercial aircraft."

Dr. Sammons cited a number of scientific studies showing that non-smokers suffer ill effects from the smoke of those around them, particularly in confined spaces.

## Garbage operations stopped

WASHINGTON, May 17 — U.S. Department of Agriculture officials have suspended approval of foreign-origin garbage disposal operations handled by Dobbs House Airline Catering at New Orleans International Airport and by Sky Chefs division of Flagship International, Inc., at Honolulu International Airport.

USDA has also notified Sky Chefs managers at Los Angeles International Airport of its intent to withdraw approval of their garbage handling and disposal operation.

"Suspension of USDA approval means the operation as presently handled must stop," said Harvey L. Ford, deputy administrator of USDA's Animal and Plant Health Inspection Service.

"The violations at Honolulu and New Orleans are serious enough to pose an imminent risk of introducing foreign agricultural pests and diseases. For this reason, we have had to shut them

down immediately," Ford said.

"These actions are being taken because of repeated violations of federal regulations requiring the safe disposal of food and food wastes entering the United States on international flights."

Agricultural inspectors, at the two airports have reported violations within the last two weeks, he said.

Dobbs House and Sky Chefs are entitled to hearings to respond to the allegations contained in the formal complaints and to show cause why USDA should not withdraw approval, Ford said. Such approval, contained in a compliance agreement between USDA and the operator, is necessary to handle and dispose of foreign-origin food and food wastes.

Safe disposal under federal regulations must include sterilization, incineration or grinding garbage into an approved sewage system for disposal. Most of the violations in-

involved removal of garbage to landfills, without sterilization or incineration, Ford said.

"Garbage can be, and in some countries has been, the source of disastrous disease outbreaks and pest introductions," Ford said. "In the Dominican Republic and Haiti, swine production has been devastated by an outbreak of African swine fever, which we are almost certain was introduced by garbage from ships or planes."

"In addition to African swine fever, we are constantly concerned about many other pests and diseases that can easily be carried in food, foreign souvenirs, cargoes and other materials," Ford said.

USDA officials administer agricultural import regulations to prevent the entry of products containing such pests or diseases. USDA inspectors are stationed at about 80 ports of entry.

# Glass cockpits demonstrated

FT. LAUDERDALE, FLORIDA — A new medium for presenting visual data to the general aviation pilot, "The Glass Cockpit," is featured by the Bendix General Aviation Avionics Division at the Paris Air Show.

"The Glass Cockpit" refers to a complete presentation of attitude, navigation, weather and flight instrumentation using cathode ray tubes, CRTs, instead of the traditional array of mechanical instruments and gauges.

The Bendix EFIS concept, Electronic Flight Instrumentation Systems, represents the latest advances in CRT application and digital technology.

Included in the Paris exhibit is an operating instrument panel which

demonstrates the almost unlimited capabilities of the new instrumentation, including attitude, navigation and weather with navigation and weather displayed together at the pilot choice, similar to the current use of multi-function weather radar systems.

Bendix went a step further in utilizing these displays to present engine instrumentation as an example of the concept's versatility. This display is called EICAS, or Engine Instrumentation and Crew Alerting System.

Over 14 regular instrument functions are combined within the one CRT

display to provide the pilot with an instant recap of engine performance. In the event of warning situation, such as an over temp, the Bendix EICAS signals the alert in flashing red on the appropriate scale.

The displays present the pilot with high resolution viewing through a combination of raster scanning, similar to a regular TV presentation and stroke writing. With stroke writing, anything which could be drawn with pencil, for example, can be presented in sharp detail on the indicator. This includes symbols, alpha- numerics or designs.

At least 13 vividly distinctive colors

maintain their brilliance values throughout the entire brightness range to insure high resolution viewing.

Bendix is preparing to market these advanced systems in the business and commuter fleets and has begun extensive evaluation and flight testing of the EFIS-EICAS concepts. Field availability of the "Glass Cockpits" will be in the 18 to 24 month period.

The expanded instrument requirements of the new business aircraft fleet and the ability to better adapt to changing in-flight information requirements are distinct advantages of the EFIS-EICAS, "Glass Cockpit", systems.

## ... Around the state

**Maddock** . . . . . Due to extreme soft runway conditions at the airport (36 inches of rain in the last 6 months), the center 25 ft. is the only remaining stable surface. The shoulders are very soft and must be avoided. Work is being done to rewire the airport lights.

**Walhalla** . . . . . needs runway markings to clear the roadway south of the airport. A row of 85' trees also start 125' laterally from the centerline at the north end of the runway. Possible wind turbulence may be experienced.

**St. Thomas** . . . . . has new runway surface built last year. Additional apron and a new hangar is being constructed presently. The crop spraying activity is heavy at this small eastern community.

**West Fargo** . . . . . will plan to expand the new airport in terms of apron and taxiway formation. This airport is located north of the community and they have been settling land zoning problems.

**Rolette** . . . . . is expanding the apron area and seal coating the runway. They have installed a wind tee and done some earthwork to improve drainage problems near the hangar.

**Bottineau** . . . . . is hoping the passage of the new ADAP bill is soon. This would allow them an opportunity to reconstruct the airport runway and extend it to the southeast before the snow falls.

**Ashley** . . . . . may have ironed out some land problems and are looking at a NW-SE runway development this year. They will also relocate some hangars and the beacon tower located too close to the runway edge.

**Minto** . . . . . Due to the heavy rains, the north end of the airport runway is flooded. The turf runway needs a crown and a ditch developed to drain the water from the area.

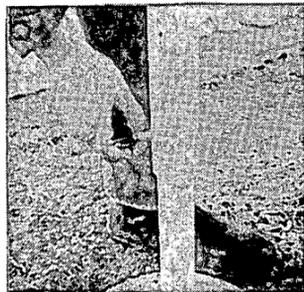
**Mott** . . . . . plans to seal runway cracks with a rubberized sealant. May also look at a seal coat for the runway since a highway project is nearby.

## Regs for over water flights . . .

When is a pilot required to make emergency over-water equipment available to his passengers? If you answered, "Any time he flies over water", you are almost right. By regulation, a pilot (or operator) must provide life rafts, signaling devices, survival kits, etc. when carrying persons or property for compensation or hire on extended over-water flights. Federal Aviation Regulation Part 1 defines extended over-water with respect to airplanes as: operation over water at a horizontal distance of more than 50 nautical miles from the nearest shoreline.

The natural reaction at this point is to conclude that any flight not over 50 miles from shore does not require over-water equipment. Not so! Part 91, paragraph 33(b) (11) requires that an aircraft operated for hire beyond gliding distance from shore have approved flotation gear readily available to each occupant and at least one pyrotechnic signaling device.

## DOES SNOW BURY YOUR RUNWAY LIGHTS? DOES REPLACING LIGHT STANDARDS COST TOO MUCH? IF SO, GET LIFT-A-LITE!

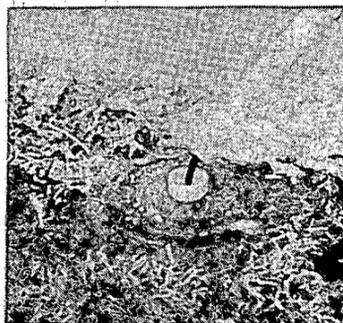


Lift-a-lite telescopes from standard height to 35' height for our snow country.

Lift-a-lite is used with stake or base plate mounting.

Lift-a-Lite is constructed of non-corrosive material making it impervious to rain, snow, salt and any adverse soil conditions.

Lift-a-Lite adapts to most light heads. Tools are not normally needed to install or replace.



Specially fabricated nylon coupling & pop-out press in feature

Lift-a-Lite pops out of its base upon impact of snow plow, aircraft, or any contact.

Simply press stand back into nylon base.

Lift-a-Lite meets FAA approval for height and pop-out release pressure.

Same Features On Taxi & Runway Signs

## LIFT-A-LITE INC.

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