# RELATIVE WIND

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


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Harold Vavra
Box 5020
Bismarck, ND 58502


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# Ground broken at UND for starting aerospace and atmospheric center

Ground was broken on the University of North Dakota campus on June 26, 1982 marking the start of construction of a $4,300,000 Center for Aerospace and Atmospheric Studies. Paul Bohr, Director of the Great Lakes Region of the Federal Aviation Administration turned over the first spade of soil in the ceremony.

Presiding at the ground breaking was Thomas J. Clifford, President of the University of North Dakota. An official welcome was given by John D. Odegard, Chairman of the Department of Aviation of UND.

Paul Bohr, FAA Regional Director, Chicago, U.S. Senator Mark Andrews (R-N.D.) and State Senator Bryce Streibel, Fessenden all made short speeches giving the background which resulted in a rare opportunity for the University of North Dakota to solidify its lead in aviation instruction and research. The ground breaking kicked off construction of the nation's first academic center solely devoted to aerospace and atmospheric studies.

Among the 100 guests attending the event were Harold G. Vavra, Director of the North Dakota Aeronautics Commission and Roger Pfeiffer, Assistant Director. Attending the event were staff members of the Grand Forks FAA control tower and flight service station, officials and students of the Department of Aviation of UND and Mark Foss of Foss Associates, Fargo, who are the architects on the project.

The University of North Dakota, Department of Aviation building committee members are: Dr. Patrick Brady, Aviation, Chairman, and members Gordon Kroeber, Assistant to the President for Facilities, Prof. Donald Smith, Prof. Rick Molenaar and Bob Reis all from the Department of Aviation and Russ Reinbold Aviation student, who is President of the student council.

### Coincidence of Needs

Planning for the new building began in the spring of 1981. UND's aviation program, which has grown from 12 students when it was established in 1969 to some 750 majors, is one of the most popular programs in the University. With this dramatic increase in enrollment, and as aviation expanded its role in atmospheric research and added new programs in weather modification and meteorology studies, department chairman John Odegard and State Sen. Bryce Streibel of Fessenden paid several visits to U.S. Sen. Mark Andrews in Washington, D.C. to advise him of the department's growth and subsequent needs.

With the strike of air traffic controllers last summer, the need for trained control tower and center personnel became acute. The Federal Aviation Administration began looking at universities with aviation programs to help fill the gap. U.S. Sen. Andrews turned this situation into an opportunity for UND as well as the FAA. Sen. Andrews is Chairman of the Senate Subcommittee on Appropriations for Transportation. A $4 million federal appropriation for a training facility for air traffic controllers soon followed.

When this building is completed in the fall of 1983, UND will be one of a handful of institutions nationwide engaged in providing well educated individuals to enter the FAA air traffic control training program. The Center for Aerospace and Atmospheric Studies will also provide aviation and meteorological instruction, and will house atmospheric research facilities. This will provide one of the most versatile and sophisticated educational facilities in the United States.

### Building Facts

The three-story building will contain more than 55,000 square feet of space, including classrooms, lecture halls, offices and teaching as well as research laboratories. Among its special features are two large atriums, which will provide illumination and heat, and an atmospherium (a modified planetarium) seating 200, which will be used educationally and will also offer programs for the general public. The brick and concrete building will be 112 feet wide and 220 feet long. It will be located at the corner of University Avenue and Tulane Drive.

The building will house an expanded aviation program, with classrooms and labs for instruction in aviation with special rooms and simulators for air traffic control instruction and facilities for flight planning and atmospheric research.

The U.S. Department of Transportation has appropriated $4 million for the facility with another $300,000 to come from the estate of the late Arthur Anderson.

Persons pictured from left to right at the recent ground-breaking of the new aerospace and atmospheric study center at UND were: Sen. Bryce Streibel, Fessenden, Thomas J. Clifford, president of UND, Sen. Mark Andrews, John D. Odegard, chairman of the UND Aviation Department, and Paul Bohr, director of the FAA Great Lakes Region. (man shown with shovel)

# Schroeder named to NORAD post

Major General Darrol G. Schroeder, well known in North Dakota and Minnesota aviation, is special assistant to the Commander-in-Chief of the North American Air Defense Command (NORAD). Acting as a direct liaison between the National Guard Bureau and NORAD, General Schroeder's duties will include regular visits to the many units which are part of the overall NORAD defense network.

General Schroeder joined the North Dakota Air National Guard while in high school and served as a mechanic. He attended North Dakota State University and was commissioned in the U.S. Air Force. As a pilot with the USAF he flew jets in Germany and France. When discharged from active duty he returned to re-join the Air National Guard as a pilot. He was the commander of the North Dakota unit, and his final assignment was Chief of Staff of the North Dakota Air National Guard.

As special assistant to the commander of NORAD, General Schroeder replaced Major General John R. Dolny from the Minnesota Air National Guard.

Mr. Schroeder is also a member of the North Dakota Aeronautics Commission.

-Minnesota Flyer Mag. - June, 82 Issue

# Grand Forks Air Wing sponsors safety seminar

By Nancy E. Johnson

Spotting camouflagued B-52 bombers is one of the challenges of flying in North Dakota airspace. It has to be a really difficult challenge, since a slide shown as part of a recent safety seminar was supposed to show five of the giant bombers. Comfortably seated on the ground, with no distractions, spotting more than three of the planes was possible only after an extended viewing. There isn't the chance to do that while flying near the B-52 low altitude bombing runs or near the Air Forces Bases where the planes are based.

Pointing out the difficulty of spotting such planes, which could be hazardous to the health of small plane pilots who get too close, was just one of the topics of the safety seminar sponsored by the 319th Bombardment Wing, headquartered at the Grand Force Air Force base this past spring.

During a well-rounded program, participants in the safety seminar, part of the Safety Week observance on the base, had the opportunity to see some of the B-52s launched. Seeing the giant aircraft lifting off 12 seconds apart and the speed with which they were soon far down range was an additional reminder of the danger these craft can pose to small planes if the pilot is not observant.

The safety seminar was hosted in the comfortable quarters of the Officers Club. This seminar gave pilots from the area and from Canada the opportunity to learn more about the military aircraft. Such information as the average age of a B-52 bomber crew is 30 and the average age of the plane is nearly as old, explain some problems unique to the planes. The H model B-52s have a range of 10,000 miles, a cruising speed of 650 mph and a crew of six. To keep the 488,000 lb. planes in the air for one hour requires about 45 hours of maintenance.

The proximity of the base to the Grand Forks International airport creates some questions about the air traffic control in the area. The functions of the various components of the aerospace system, from the centers to approach control to the tower were reviewed.

A number of the helicopters based at GFAFB were also viewed by participants. Major Dave Myers, commander of the helicopter unit, explained the rescue capabilities of the unit. He noted these rescue operations are not as frequent in North Dakota as in more mountainous areas or near large parks where there are large numbers of persons doing things they are unfamiliar with, such as rock climbing.

However, the helicopter unit's primary job is supporting the missile wing at the GFAFB. The turbine-powered helicopters have a maximum speed of 120 knots, 9,500 pounds gross vehicle weight and a cruising time of two hours. The helicopters are set up with six stretchers for use at accident scenes.

The effects of hot, humid weather on flying were also reviewed, along with ground effects. Films were shown on the various safety procedures which can be taken to make automobiles and aircraft safer in the event of a crash.

# Aviation should resume strong growth rate

Aviation is expected to resume a relatively strong growth rate in Fiscal Year 1983, according to the Federal Aviation Administration's annual long-range forecast.

Airline revenue passenger enplanements, which peaked at 310.7 million in FY 1979 and then began to slide, will bottom out in the current fiscal year at 277.8 million and grow at an annual rate of 4.6 percent through FY 1993. The total is expected to be 332.8 million in FY 1985, 431 million in FY 1990 and 492.2 million in FY 1993.

Even more significant gains are projected for the commuter airlines as they pick up additional routes dropped by the larger carriers and develop new markets in smaller communities. Commuter aircraft operations are expected to almost double during the forecast period, reaching 8.1 million in FY 1993. Revenue passenger enplanements will jump in the same time frame, going from 12.9 million in FY 1981 to 34.8 million in FY 1993.

The forecast report points out that despite a soft market for light general aviation aircraft, production of business turbo-prop and turbo-jet aircraft increased in 1981 and total dollar value was higher than the 1980 level. The report shows that the long term outlook for general aviation remains optimistic and that the number of hours flown by private and business aircraft should increase from 43.9 million to 71.5 million over the FY 1982-1993 forecast period.

The size of the active general aviation fleet, meanwhile, is expected to increase from the January 1982 level of 214,000 to 332,900 in January 1993 with large, sophisticated aircraft accounting for an increasing share of the total inventory. For example, the report says the percentage of turbine powered aircraft in the fleet will rise from 3.4 percent to 4.7 percent and attributes this to "increasing business use of general aviation."

Civilian use of helicopters is also increasing significantly. The active fleet is expected to grow from 6,500 in 1982 to 11,900 in 1993 and hours flown will rise from 2.8 million to 5.5 million.

These growth trends will be reflected at FAA's air traffic control facilities in the Fiscal Years 1982-93 forecast period, with tower operations increasing from 52.6 million to 110.4 en route center traffic from 27 million to 43.4 million, and total flight services at flight service stations from 61.2 million to 106.4 million.

"In summary," the report concludes, "aviation activity will experience a decline in 1982 but is then expected to grow faster than the general economy. Aviation will continue to dominate all other transportation modes in the commercial intercity passenger market. Commuter operations and business use of general aviation are expected to experience greater growth than the larger airlines and personal use of general aviation."

The "FAA Aviation Forecasts — Fiscal Years 1982-1993" is based on improved models of general aviation and air carrier activities used in previous forecasts and on projections of economic variables provided by the Office of Management and Budget. It includes three alternative scenarios, ranging from economic expansion to stagflation, to give planners additional perspectives.












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EDITOR
Patricia J. Estes
EDITORIAL ADVISORS
Larry Linrud, William Beeks, Fred Andersen, Jack Daniels, Arnie Widmer, Mike Hohl and Dan Thompson.
ADVERTISING MANAGER
Richard K. Estes
ADDRESS ALL CORRESPONDENCE TO:
Prairie West Publications
Box 1018
Wahpeton, ND 58075

# New flight service station in N.D.?

The Great Lakes Region of the FAA, Chicago, has advised the N.D. State Aeronautics Commission it will meet with interested airport managers, airport authorities, and city officials to solicit offers from potential lessors of a building on an airport to house a new FAA automated flight service station (AFSS) in North Dakota.

The FAA meeting for potential lessors will be held on August 25, 1982 at 10:00 a.m. at the Ramada Inn, Highway 83 North, Minot, N.D., according to Ronald C. Janecek, Contracting Officer of the FAA, Chicago (Tel-(312)-694-7170), who selected the location and date of the meeting. Invitational letters will be mailed by the FAA to about 100 airport managers and airport authorities operating public use airports in North Dakota.

Communities interested in providing leased space to the FAA for an automated flight service station (AFSS) on their local airport in return for tangible economic benefits to be realized from such a facility can learn about the FAA's leasing procedures in a briefing meeting to be held at Minot.

**National Program to Modernize FAA Flight Service Stations**

A key element to the FAA's air traffic control system is the Flight Service Station (FSS). At present there are 317 FSS's throughout the U.S. and its possessions. Although the FSS does not normally control traffic, their staff of 4,900 specialists provide general aviation with all the essential services and necessary information with which to plan and conduct operations efficiently and safely. In North Dakota FSS's are located at Dickinson, Grand Forks, Jamestown and Minot.

In the past 20 years, the FAA has recognized the need to modernize these FSS's. As a result of numerous studies and surveys, the FAA has devised a total new systems approach to the problem of modernizing equipment, facilities and techniques to meet essential needs of general aviation and at less cost to the taxpayer.

To implement this new automated system, the FAA is now preparing to consolidate 317 existing facilities into 61 Automated Flight Service Stations, which according to the FAA, will save the taxpayers an estimated $1.5 billion in reduced personnel requirements by 1995.

The FAA announced in November, 1980, the selection of 14 sites where AFSS's would be constructed around the nation, and tentatively identified 47 other sites, as well. Since that time, there has been a refinement in plans and as a result, the FAA is now seeking to involve local communities in providing space for these facilities. At the Minot meeting solicitation for offers (SFO) packages will be distributed and explained.

# There were more air passengers in June

Airline passengers in the month of June increased an average of 13 percent at seven North Dakota cities compared with May this year, according to Harold G. Vavra, director of the State Aeronautics Commission.

Airline passengers in to and out of seven North Dakota cities totaled 71,037 in June compared with 62,783 in May this year, an increase of 8,254 in one month, Vavra said.

All North Dakota cities with air service registered passenger increases in June compared with May this year. The one month increases are: Bismarck, 9 percent; Fargo, 15 percent; Grand Forks, 21 percent; Minot, 11 percent; Jamestown, 10 percent; Devils Lake, 10 percent and Williston, 10 percent.

Vavra said these increases took place while Northwest Airlines was providing partial air service to three North Dakota cities during part of the month of June.

Vavra said he expects July to be much better with full air service in North Dakota.

It is normal for airline passenger business to increase in North Dakota in June compared with May, but an average increase this year of 13 percent is substantially greater than a 7 percent average increase that occurred last year in June compared with the month of May.

Airline passenger business is considered one of the leading indicators of future business trends if it continues upwards, Vavra said. It most always turns positive well in advance of other business conditions, Vavra added. If airline passenger business in North Dakota continues positive in July and August this will be a good sign, he added.

# Grand Forks airport is in the top 15

According to a survey released by the Airport Operators Council International (AOCI), the Grand Forks Municipal Airport is one of the top 15 in terms of general aviation operations. It is hard to believe a small airport in the sparsely populated state of North Dakota can have this activity and still have an excellent safety record. This high level of activity depicts the need for the new general aviation runway which is being constructed presently.

The 15 airports reporting the most general aviation aircraft operations during the survey period were:

| Airport | Total |
|---|---|
| Long Beach, CA | 580,647 |
| Van Nuys, Ca | 553,979 |
| Santa Ana, CA | 425,046 |
| Tamiami, Fl | 392,781 |
| Seattle-Boeing Field | 392,636 |
| Oakland, CA | 365,207 |
| Opa Locka, FL | 356,717 |
| San Jose, CA | 297,372 |
| Melbourne FL | 270,481 |
| Houston-Hobby | 268,895 |
| Pontiac, MI | 256,458 |
| Fresno, CA | 221,372 |
| Teterboro, NJ | 213,483 |
| **Grand Forks, ND | 212,616 |
| Dallas-Love Field | 211,088 |

# Spending plan is key to air traffic control

Opponents of the FAA's 20-year Air Traffic Control (ATC) Modernization Plan frequently criticize the need for its tremendously increased capacity levels. They claim that air traffic growth will not meet the agency's projections and thus make such a sophisticated system unnecessary. Although they recognize that the current system is approaching obsolescence and must be updated, these people believe that FAA's proposal goes too far.

This viewpoint may be valid, because the FAA's long-term traffic estimates — the statistical basis for the Plan — are difficult to validate. History shows, however, that the agency is quite capable at making short-range projections.

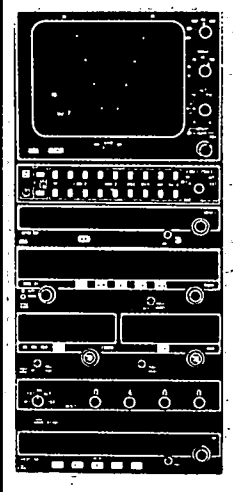
It is important to understand that the ATC Plan is a combination of these projections. The short-term goal is to replace the current hodge-podge of old ATC computers with a common, consistent system.

Replacement components are no longer manufactured for these obsolete computers. Additionally, the present IFR system is extremely labor-intensive. In six or seven years, an estimated 27,000 controllers would be needed to operate today's equipment. Considering that this manpower level is 150 percent of the controllers working on August 2, 1981, a highly automated system appears especially cost-effective.

Only after the basic computer replacement is accomplished will the ultra-sophisticated components of the system be installed.

With this in mind, Congress will approve only a five-year spending plan, not the full 20-year program.





# Aeronautics Commission mails spray apportionment checks to county treasurers

The North Dakota Aeronautics Commission has mailed checks to 53 County Treasurers for a total disbursement of $26,996.93, which represents the Counties' apportionment of aircraft and aerial spray license fees collected in the State during 1981. A total of 1,724 airplanes and helicopters were licensed in North Dakota last year.

Cass, Grand Forks and Ward Counties registered the largest number of airplanes with Cass registering 229 airplanes, Grand Forks 168 and Ward 127 airplanes.

The County apportionment of funds amounts to 75 percent of each resident aircraft registration and 50 percent of aerial crop spraying fees collected, as provided in the State Aeronautics Act. The County treasurer in turn must pay the county share to municipalities and airport authorities within the county owning and operating public airports.

The funds are specifically earmarked for airport maintenance or improvements.

Aircraft registration fees are based on the maximum gross weight and the manufacture year of each plane.

The top counties with the number of aircraft and amounts paid the county treasurers follow:

| County | Number of Airplanes | County Payment |
|---|---|---|
| 1. Cass | 229 | $3,732.77 |
| 2. Grand Forks | 168 | 2,502.88 |
| 3. Ward | 127 | 1,772.33 |
| 4. Burleigh | 113 | 2,171.01 |
| 5. Williams | 91 | 1,496.14 |
| 6. Richland | 58 | 989.75 |
| 7. Stutsman | 56 | 1,015.13 |
| 8. Pembina | 54 | 1,276.47 |
| 9. McLean | 44 | 480.61 |
| 10. Walsh | 42 | 725.40 |



# Calvin Pitts: Enthusiasm helps make progress

By Kris Smith

"The very thing we must not do is direct our young people away from aviation."

Air travel is the transportation mode of the future, according to Calvin Pitts, a project officer for the Aeronautical Information Center at the NASA-Ames Research Center in Moffet Field, Calif. "Every day a half million people will board commercial aircraft . . . Over 200,000 pilots fly their own airplanes—this means there are over one million people involved," he said.

In his talk at the University of North Dakota's spring aviation seminar, Pitts discussed futuristic types of travel, and said, "it all starts in a research facility—behind the scenes.

"We tried to incorporate all the technology into a single concept: a space transportation system, or as you know it—the space shuttle," he said. "Unlike Saturn V, these engines have to be able to fire up to 100 times . . . The shuttle is going to prove space transportation is economical."

Pitts said space travel is a direct spin-off of past technologies and dreams, saying "we are now living the stories dreamed by science fiction writers 20 to 40 years ago."

Space travel can be used to help problems on earth, he said. "The shuttle is the new transportation system. Would you have dreamed an airplane could be vital to space technology? This is directly how our transportation system is going."

Pitts referred to the 1903 flight of the Wright brothers at Kitty Hawk as the first step in aerodynamics. . . "And there was (Charles) Lindbergh and Amelia Erhardt. This left open the door for many serious and not-so-serious designers, such as the flying wing concept by Jack Northrup.

"We have been able to make progress because of the enthusiasm of these men and women," Pitts said. "Many people have dreams, but you need to convince a skeptical public to get the reality."

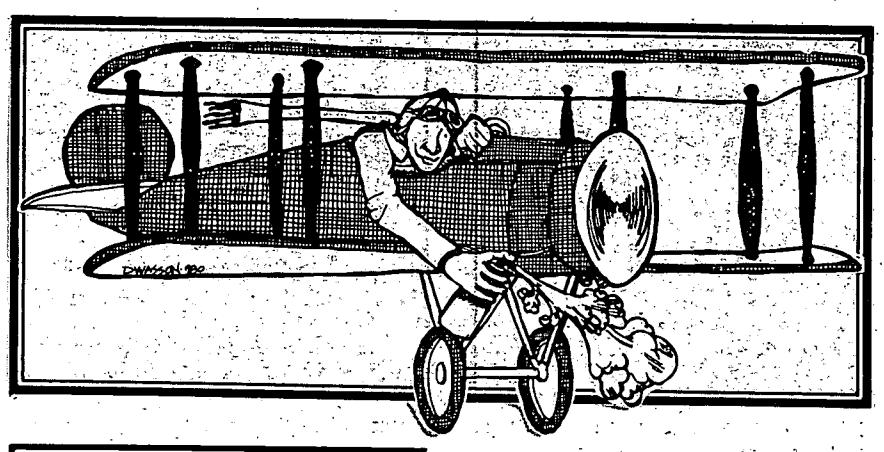
He said research is the key to future developments: "The door for researchers is continually open with women becoming technically qualified," he said. "Be careful, I would say to these women, because what you dream may come to pass." He also stated that "if cost-benefit ratios had governed our society . . . Einstein would have given up and gone back to Germany.

"We stand today at a critical crossroads, with impossible solutions," Pitts said. "Impossible, that is, if we don't have the will . . . Consider DaVinci's dream: Do you realize how lucky we are to be realizing that dream?"

The key to dreams is research, he said.

"They dared to be free. Our ultimate desire is to be free," Pitts said. "It was common people, in a common cause, who stepped into the open and opened the door."

Pitts' current flight test projects include GAW Winglets on light wing-loading aircraft and aircraft icing. He has also done flight test work that has appeared in Plane and Pilot and AOPA magazines. Pitts is a member of the American Institute of Aeronautics, Society of Air Safety Investigators, International Aerobatic Club and the Soaring Society of America. A former FBO chief pilot, Pitts has accumulated over 8,000 hours of pilot-instructor flight time.



# Jones announces applicator certification grant

Commissioner of Agriculture Kent Jones announces the North Dakota Department of Agriculture has been awarded $20,000 by the Environmental Protection Agency to administer the State Applicator Certification Program.

Jones said, "I am glad to see this program being continued. It is necessary for our farmers to be knowledgeable about pesticide use and to be trained in how to apply them safely and effectively."

"These funds will be passed through to the Cooperative Extension Service at North Dakota State University so training sessions can be conducted for North Dakota farmers, dealers, and commercial applicators," said Jones.

The grant is awarded in accordance with the Federal Grant and Cooperative Agreement Act of 1977.

# Shearer turns her attention from 2, 4-D to picloram (Tordon)

Dr. Ruth Shearer, a self-proclaimed health researcher (from the state of Washington) who in the past has lectured audiences on the dangers of 2,4-D, has turned her attention to picloram (Tordon).

"What I am seeing with picloram poisonings are patterns of chronic symptoms: headaches, problems with vision, weakness and fatigue, skin ailments, enlarged livers, respiratory difficulties, extensive kidney damage. I know Dow says picloram is three times less toxic than salt, but salt doesn't cause cancer. The EPA says it is safe, basing their assumption on a group of nonsense reports. They ignore these cases around the country; they allow the company to conduct its own research. The more you get inside this thing, the more you see it stinks," Dr. Shearer said.

Shearer's comments appeared in an article slamming picloram, titled "Agent White" which appeared in the March issue of Inquiry Magazine and an April issue of a leading Washington paper.

(Reprinted from North Dakota Agricultural Association newsletter).

# Farm facts

••One farmer or farmworker creates jobs for more than 5 (5.2) nonfarm men and women, who produce the items farmers need and who process, transport and merchandise the crops that farmers harvest for sale.

••American agriculture is the world's largest commercial industry, with assets exceeding $1 trillion. This industry employs nearly 23 million people, a full 22 percent of America's total labor force. The agricultural industry encompasses manufacturing, farming, transportation, processing and merchandising.

••How times have changed: fifty years ago, there were 6.5 million farms in the US., the average-sized farm was 145 acres, and there were 13 million farmers and farmworkers, each of whom produced enough food and fiber for 11 people. Today, there are 2.3 million farms, the average is 450 acres, and 3.7 million farmers and farmworkers each produce enough food and fiber for 78 people. The major reason for the vast change? Highly productive agricultural research and technology and highly efficient farmers.

••In the last 20 years, agricultural productivity per hour has increased more than 3 times as fast as the nonagricultural productivity rate.

••Twenty years ago, the farmer's share of the consumer's retail food dollar (for food grown on U.S. farms) was 38 cents. Today, the farmer's share is 37 cents.

••Today, one hour of farm labor produces 14 times as much food and crops as it did 60 years ago.

••Farmers pay about $3.5 billion in farm real estate taxes annually, $606 million in personal property taxes, $3.8 billion in Federal and State income taxes, and about $344 million in sales taxes.

••Annually, farmres spend about $131 billion for goods and services to produce crops and livestock. In addition, they spend up to $46 billion for personal taxes, investments, and for consumer things that city people buy.

# . . . more farm facts

••Like everyone else—and even more so, as both businessmen/producers and consumers—farmers feel the pinch of inflation.

The average cost of commodities, interest, taxes, and farm wage rates has climbed 153 percent in the last 10 years. In the same period, the consumer price index for urban consumers (CPI) has climbed about 125 percent.
••How did the farmer's pocketbook fare during this 10-year period of inflation and rising pirces? What purchasing power did he or she derive from the investment, risk and effort of farming? In 1967 dollars, net income from farming per farm family dropped 20 percent, from $4,126 to $3,314.

For the population as a whole, per capita disposable income increased by nearly the same proportion. While the majority of farm families, reliant on off-farm income for a significant proportion of their incomes, shared in this gain, the industry-leading 7 percent—who generate more than 56 percent of the sales—were hurt because they depend on farm income for 97 percent or more of family income.

••These percentages include spending for food consumed both at home and away from home. Spending away from home on food has increased from 4 percent to 4.4 percent of after-tax income since 1960; spending on groceries consumed at home has declined from 16 percent in 1960 to 12.2 percent in 1977-80, according to Commerce Department figures. Labor Department surveys indicate that consumers in different income groups spend from 39 percent (under $5,000 reported annual income) of before-tax income, excluding public assistance, to 10. 2 percent (above $20,000 a year).

In 1972 dollars, U.S. per capita disposable (after-tax) personal income rose from $3,860 in 1972 to $4,530 in the third quarter of 1981, a gain of 17.4 percent. In 1978, 93 percent of the farms collectively received nearly 39 percent of their incomes from off-farm jobs or investments; these farms, with gross sales of less than $100,000 a year, accounted for almost 44 percent of cash receipts from farming.

## Big bucks

More than 50 percent of the combined assets of farming and all corporations in the U.S. are involved in agribusiness, says Sperry New Holland. It employs one out of five American workers and accounts for about 20 percent of all consumer expenditures.

## Promotion

Eagle Aircraft Company, a Boise based agricultural aircraft manufacturer, has announced the promotion of Brad Brown to Vice President of Operations. Brown is in charge of manufacturing, engineering, service and nationwide leasing and rental programs.

Brown joined Eagle Aircraft in January, 1981, as director of Manufacturing.

## New director

Eagle Aircraft Company, Boise, Idaho, has announced the promotion of Roger W. Kirk to Director of Manufacturing. His responsibility includes the agricultural aircraft manufacturing facilities in Alexandria, Minnesota, and the nationwide service network.

## Teacher needed

More than 60 vocational-agricultural departments in U.S. high schools were forced to close last year because of a lack of trained vo-ag teachers, according to the National Vocational Agriculture Teachers Association.

# Big city increases less severe thanks to airline deregulation

**Reprinted by permission from The Bismarck Tribune — Friday, July 9, 1982**

**By Scott Stapf**
**Tribune Staff Writer**

While the average cost of an airline ticket in Bismarck has more than doubled since 1978, air fare increases in larger Midwestern cities, particularly Minneapolis and St. Paul, have been far less severe.

The reason?

Airline deregulation, according to a new study from the Upper Midwest Council, a non-profit research group headquartered in Minneapolis.

Confirming the suspicions of many an airline passenger, the council's eight-month study places Bismarck on the list of Midwest cities that have not benefited from air decontrol.

"As long as air fares are deregulated, small cities seem likely to be at a disadvantage," the report concludes.

Airline fares, the study points out, once were a crude yardstick of the distance between airports. The greater the distance, the greater the cost of the ticket.

It worked this way: a one-way ticket from Bismarck to San Francisco cost about $145 in January 1978, prior to the onset of airline decontrol. If the starting point of the trip was moved farther east to Minneapolis, the average fare went up slightly to $150.

Under airline deregulation, the air fare has come to rival the cubit as the least used unit of measurement. The reason is simple: airline ticket costs no longer mirror the distance flown.

According to the council's study, the same Bismarck-San Francisco ticket had climbed to an average of $317 by January 1982, an increase of nearly 119 percent.

For a passenger embarking in Minneapolis, though, a flight to the same city cost just $169, reflecting a $19 increase, up less than 13 percent from the 1978 level.

Nationwide, air fares have increased an average of 71 percent since 1978. In Bismarck, the increase has been steeper, with an airline ticket priced an average of 102 percent higher than in early 1978.

But as the San Francisco fare suggests, the same rocketing prices have not prevailed in Minneapolis-St. Paul, where airline fares edged up 23.5 percent over the four years.

The Upper Midwest Council study notes that the rise in the Consumer Price Index for the period was 43 percent — accounting for less than half of the increase in Bismarck air fares.

"The Upper Midwest is perhaps less likely than other parts of the nation to reap benefits from the airline system that deregulation is creating," the study found.

Paralleling similar developments in rail, energy, broadcasting, trucking and banking, the movement to free U.S. airlines from federal control began in earnest with the federal Air Transport Deregulation Act of 1978.

Decontrol boosters argued airlines would be better off left to themselves. In a free market setting, they claimed, air service would increase and prices would drop.

While air decontrol has turned into a bonanza for high-volume flight centers, including Minneapolis-St. Paul and Milwaukee in the Midwest, the benefits have been sparser, if not altogether nonexistent, for smaller air hubs, among them Bismarck, Billings, Mont., and Rapid City, S.D.

"The air service solutions promised by deregulation proponents have not appeared in many cities, and may never appear at some cities," the study concluded.

One factor influencing the leap in short-haul flight charges, which includes the majority of Bismarck departures, is the "inequity of discounts, many of which go far beyond any real cost savings achieved by the airlines since deregulation," the study noted.

Reflecting the hold airline fare wars have on larger air traffic hubs, a 1981 Civil Aeronautics Board study reported the air fares in 100 major markets were 87 percent of the ticket prices that would have prevailed under airline regulations.

How is the difference recovered?

Lending credence to speculation that short-haul flights are used to subsidize cut-rate transcontinental fares, the CAB survey of small markets found air fares were 12 percent higher than they would have been if air decontrol had not ended.

But if the news on prices is grim, there is a glimmer of hope for North Dakota in the Upper Midwest Council report.

Using a method measuring the likelihood of continued air service in the absence of CAB subsidies in some small markets, the study concludes that Bismarck, Grand Forks, Fargo, Minot, Jamestown and Williston will continue to have airline coverage.

# Big Sky reduces fare

Big Sky Airlines has reduced round trip passenger fares 20 percent between Devils Lake or Jamestown and Minneapolis and between Bismarck and Devils Lake or Jamestown effective immediately, according to Harold G. Vavra, director of the State Aeronautics Commission.

Round trip reduced fares were filed this week with the State Aeronautics Commission and travel agencies and are effective until September 15, Vavra said.

Big Sky Airlines' reduced round trip fares carry several conditions which are:

1. A round trip reservation must be made and ticket purchased at least 7 days prior to departure.

2. A $10 fee will be assessed if the reservation is cancelled or changed.

3. All travel must be completed by midnight October 31.

4. No child discounts.

Big Sky Airlines' reduced round trip passenger fares including federal tax follows:

1. Between Devils Lake and Minneapolis — $189.00, a reduction of $61.00.

2. Between Jamestown and Minneapolis — $157.00, a reduction of $39.00.

3. Between Bismarck and Devils Lake — $90.00, a reduction of $22.00.

4. Between Bismarck and Jamestown — $94.00, a reduction of $24.00.

# Around the State

**TIOGA . . .** is looking at plans to expand the apron and taxiway. Plans are also being designed to reroute drainage flows on airport land causing the spring flooding. Crosswind runway development and runway extension projects are presently underway.

**LAMOURE . . .** Airport Authority is concerned about a new tower located north of the runway. Pilots please be aware of the new unlighted tower if you plan to use an approach or departure of Runway 16.

**OAKES . . .** is constructing a new 6-plane 80' X 100' hexagon hangar. This innovative design has a rotating floor and needs only one door. Should be completed in two months for inspection by any Airport Authority interested in this design for their airport.

**FESSENDEN . . .** Airport Authority is considering developing an Airport for their community. They haven't had an airport for numerous years and are looking into land purchases and layout plans.

**VALLEY CITY . . .** is completing the paperwork for getting a NDB established. The unit will allow for an IFR approach in the future.

**CANDO . . .** has a new chairman on the Airport Authority whose plans are to rejuvenate the community's airport. Runway lights, beacon, lighted windsock and new hangar construction are being planned.

**WALHALLA . . .** is considering an overlay of the existing apron and a seal coat on the runway. Coordination with a pavement contractor in the area will reduce the project costs.

# Make sure authority controls airport land

**Situation:** A local airport authority created in the early '70s to manage city airport. They levy a four mill tax and apply with the N.D. Aeronautics Commission for grants to build up their airport to meet the needs of the community. Everything is fine and management through the airport authority works out great. The city council is not bothered with crack filling, grass mowing, windsocks, broken runway lights, vandalism, and all the headaches to manage and maintain a safe and efficient airport.

**Problem:** However, in 1982, a firm comes along and offers an oil, gas, or coal lease. The register of deeds office says the owner of the airport is the city and not the airport authority, so the city will take the $10,000 lease bonus from the airport land and build a swimming pool or new fire station. Warranted these items may be needed, but the airport authority is left out in the "cold" so to speak. They sure could have used this money to seal coat the worn out pavement or expand the runway to meet the needs of the oil industrial transient traffic and large business aircraft. The lease money could have been used to fund expansion based on this energy impact need.

**Solution:** Recommend to the City Council members to transfer title of the airport land and mineral rights over to the airport authority in fee simple and get this document recorded in the county register of deeds office. If a energy company or broker wants to lease the airport for oil, gas or coal rights, such a company will negotiate with the owner as shown in the County register of deeds office. If the airport authority is shown as the owner, then the energy company will negotiate a mineral lease with the airport authority relating to terms, conditions and bonus payment. If the City owns the land and minerals, then the lease will be between the City and the energy company and may be entered into without knowledge of the airport authority, with the upfront lease bonus money paid directly to the City. By doing this now, it may prevent a future

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## North Dakota Aviation Association Officers

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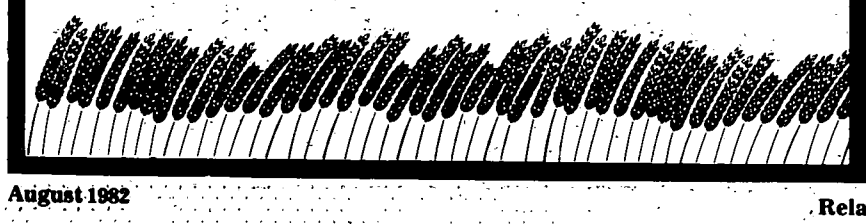



# Mineral bonuses can be substantial

from page 7

battle between the city council and the airport authority on who should get the mineral lease and bonus money.

At several western airports in North Dakota, the upfront mineral lease bonus has been running between $100 and $200 per acre on a three to five year lease with equity in any future oil and gas production of one barrel out of six produced.

Any mineral lease proposal should have a subordination agreement clause as a part of the lease which provides that drilling or production of oil or gas or extraction of minerals shall be done in a manner not to interfere with the safe and efficient use of the land for an airport and for aircraft landing and taking-off at such airport.

Another benefit to having title to the land and minerals transferred to the airport authority is that under the past FAA ADAP bills with their 90 percent federal-aid grants, a sponsor such as an airport authority must produce a lawyer's "Title Opinion" which shows that the airport authority (the sponsor) owns the land in fee simple, and if it owns minerals under the land which have been leased, that such lease has a subordination agreement in which the extraction of minerals, oil or gas is subordinated to the safe and efficient use of the real property as an airport.

The transfer of ownership to the airport authority must take place before a federal-aid grant may be assured. We recommend your airport authority find out who owns the land and work on it getting transferred in fee simple to the airport authority. Call or write the N.D. Aeronautics Commission if you need any help or assistance in this matter. Tel. 224-2748.

Practically all land in the western one-third of North Dakota is under lease for minerals or oil or gas. Energy companies are now beginning to lease land in the central part of North Dakota and may continue to do so in the decade of the 1980s.

# Recession may help transpacific cargo

By Gerri L. Sayler

Few industries expect to profit from a recession — but transpacific air cargo service may be one exception.

Its tremendous growth in the last decade can be attributed to the 1974 recession according to Reginald Jenkins, Northwest Orient Airlines Vice-President.

Often called the "grandfather of air cargo," Jenkins returned to the United States recently after 33 years with Northwest's air cargo operations in the Orient.

While speaking at the University of North Dakota aviation seminar on April 29, he predicted the current recession will benefit transpacific air cargo in the same way.

"When the consumer came back into the market in late 1975, retail inventories were depleted to a point where there was simply not enough time to wait 30-45 days for delivery of new merchandise by sea," Jenkins said. "Buyers had to go to the air to avoid running out of stock."

This rush to replenish inventories caused a 100 percent increase in Pacific cargo in six months, Jenkins said.

"As startling as this may sound, all it takes to produce a 100 percent increase in air tonnage is another 10 percent penetration of existing air commodities — the majority of which still move by sea."

The dock strike in 1971 had a similar effect, he said. Maritime traffic was brought to a halt except through ports in Mexico and Canada. As a result, large amounts of surface freight moved to air. Within six months, air traffic on the Pacific had doubled.

Following these "upside breakthroughs" in 1971 and 1975, air cargo service in the Pacific held its gains. A new plateau was established each time at 100 percent above the previous level, Jenkins said.

There is a parallel, he said, between conditions that existed in 1974 and today's U.S. and world economy. Air cargo traffic "is turning soft." Inventories are again being liquidated as retailers and wholesalers adjust to the reduced sales.

"Now if this script plays at all like the 1974/75 upturn—if there is a sharp turnaround in consumer spending—there could be another upside breakthrough of import air cargo on the order of 100 percent," Jenkins said.

"What I am suggesting is a minority view, as the Boeing Aircraft Company which is one of the most respected forecasters of cargo traffic does not project that kind of increase until 1990.

"It is our feeling that the longer the recession lasts, the more likely the upside breakthrough. If it does occur, it will probably come without warning when pessimism is widespread," Jenkins said.

The size of the transpacific air cargo market is smaller than the transatlantic market, but it's growing at a much faster rate according to Jenkins. For example, while the transatlantic market made up 24 percent of the world total in 1970, it dropped to 19 percent by 1979. During that same period, transpacific air cargo grew from 9 to 13 percent.

Transpacific air transport is gaining largely because imports from Asian countries have increased, Jenkins said. In the process, an imbalance in the east-west flow of air cargo has developed.

This is because Asian countries are producing quality consumer goods at prices that are taking a larger slice of the U.S. consumer market, he said. Eastbound freight from countries like Japan, Taiwan, Korea, the Philippines is almost twice the volume of westbound air freight.

"Although Japan is running a trade surplus of over $16 billion with the United States—and there is talk of this country taking some sort of protective measures to restrain imports from Japan — I don't think this will affect air commodities to any great extent.

"I can see some impact on U.S. air exports — as well as a long-term source of trade friction — in the computer/microcircuit market which were previously exclusive U.S. exports. We are now seeing the Japanese move into the manufacture of these items with the same aggressiveness they have demonstrated with their entry into the color television and automobile markets."

Jenkins said air cargo generally consists of commodities that either have a high per pound value or will be marked up high enough to warrant air costs. Transporting by air costs 12 times more than surface — $1.30 per pound compared to 11 cents per pound by sea.

For example, a single lens reflex camera, valued at $45 per pound or more, can afford to go air. The shorter transit time is also an incentive because carrying high-priced inventories for a month at sea is expensive.

On the other hand, tank tops and T-shirts, with a per pound value of less than $5, are also worth the expense of air. Not only do they generally bring a 300 percent mark-up, air travel will permit two or three inventory turnovers during one season.

## Lorsban 4E cleared for sunflower

Effective June 16, 1982 a tolerance level was issued for Lorsban 4E for sunflower. This means that the state label for this special local need has now been activated and Lorsban 4E application for cutworms is 1 to 1½ pounds actual ingredient per acre, according to Dennis Kopp, extension entomologist at North Dakota State University.

The label suggests the following to achieve maximum results: For ground application use 10 to 20 gallons of water per acre; for aerial application use at least 2 gallons of water per acre. "In our opinion 3 or 4 gallons per acre would be better," Kopp points out. Treat when the soil is moist and worms are active on or near the soil surface. If needed, a second treatment may be made 7 to 10 days later, but do not treat after bud development. If ground is dry, cloddy, or crusty at time of treatment, worms may be protected from the spray and effectiveness will be reduced. If such conditions exist, shallow cultivation using a rotary hoe or equivalent equipment before or soon after treatment may improve control, Kopp advises.

Lorsban 4E is also registered for grasshoppers, stem weevil and sunflower moth at ½ pounds actual ingredient per acre.

Restrictions for Lorsban 4E on sunflower are: Do not apply more than 9 pints of Lorsban 4E per acre per season. Do not apply within 42 days before harvest. Do not allow livestock to graze in treated areas.

## Review records

In 1977, the FAA issued Airworthiness Directive 77-12-06 which affected the Hartzell Propellers installed on many single and light twin engine aircraft. In addition to an initial inspection and rework, this AD required repetitive inspections at intervals called out in Hartzell Service Letter 61. This service letter indicates that this repetitive inspection must be conducted at an hour or calendar interval, whichever occurs first. The calendar time on all of the propellers listed in Service Letter 61 is four years.

Since initial compliance with this AD may have been in 1978, and many aircraft have not accumulated the hour requirements, the calendar interval will be reached this year. If you own or operate an aircraft with one of these affected propellers, your aircraft records should indicate the due time of this AD.