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Jim Morten: Helicopters are suited to more than spraying

By Tina Evans

When Jim Morten started flying helicopters in 1969, he did it because he thought they would be useful in agriculture in his crop spraying business. Since that time, the Larimore, N.D., pilot has used his helicopters for more than agriculture — on ventures from rescue missions to a film spot for Wild Kingdom.

Morten owns Larimore Air Service and is part-owner of Dakota Helicopter, Inc. of Beulah, N.D. He has been a fixed-based operator for 23 years. According to Morten, helicopters are well-suited to the spraying work he does.

"They're much better. You can work in more wind, which in this country is a real factor. They're a lot safer, and there is better coverage," he said.

"People seem to like them better, because we can work close to cities and towns and we don't have to turn over the towns. They're ecnomical, because a helicopter uses about 30 percent of what an airplane would use doing the same job — in an airplane you're wasting gas doing your turns. A helicopter turns in about six seconds, so all the fuel you burn is over the area you're spraying."

He has found helicopters are well-suited to other work, too, though. When the producers of the television program "Wild Kingdom" wanted to film a moose census around Thief River Falls, Minn., in 1971, they contacted Morten to carry crews in his helicopter.

"We carried Marlin Perkins and Stan Brock from the show, as well as the forestry people doing the darting and tagging of moose," he said. "They did the filming from the helicopter."

That was something he had never experienced. "We hadn't done anything like that before, but there is nothing else that could have done the job better than a helicopter," he said.

"It went really smoothly and we had a lot of fun. Stan Brock and Marlin Perkins were ordinary people — at first I was nervous because they were big celebrities, but they're just like everybody else. Real nice guys."

Morten has also gone on winter rescue missions searching for people who have abandoned their vehicles in blizzards.

"Unfortunately sometimes we find a body instead of a live person, they've frozen to death. If they've been lost over five or six hours we're assured to find a body," he said.

"It's not pleasant — but there's always the hope you'll find them alive. You always hope they'll be protected someplace. But generally if you start on a search, as it progresses you lose that hope."

He has also used his helicopters to haul hay out of wet or snowed-in fields, to do steel work on the top of power plants, to set generators on tower tops and to put cyclone cleaners on the tops of elevators where cranes can't reach.

"We have several helicopters, from a small one that will lift 600 pounds to ones that lift a ton of weight. This is all special equipment to do things that you can't do any other way," he said. "They are costly to run and maintain — as high as $1200 per hour, so if you can do it another way it's best to do it the other way because it will be cheaper. But there are some things that can't be done any other way."

Morten said he has four or five helicopters in his business. He also buys and sells helicopters, fixing them up in his shop and selling them.

Morten started in flying in 1958. After serving in the Korean War until 1955, he started farming, then decided to concentrate on crop spraying. He went to Jim Montgomery's school of aviation in Grand Forks, then when he got settled in crop spraying in 1960, he gave up farming.

He flew with the Minn-Kota powerline patrol for four years, flying over lines looking for deteriorating lines and poles and broken insulators.

"I did that right after we did the fliming for Wild Kingdom," he said.

Photo by Tina Evans
Jim Morten

Early in his career, he instructed on contract for TWA, training crew members to be pilots. "I built up a lot of time doing that," he said. "I also did mosquito spraying near Tampa for six years."

Morten has some near-future changes planned for Larimore Air Service. He plans to incorporate it, including one son, Shawn, also a pilot, and two other men in the business.

"The work load here has gotten to where I can't handle it. So rather than hire help, I'd like to work them into the business. I'm 50 years old, so I'll be getting out of the chemical business in about five years."

He said he'll work more alone with Dakota Helicopter, Inc., to build that business. "It takes experience to build a business, and that's a new business just established out there. Fixed-based operation is a poor man's business these days. You can't take someone who's new at it and develop a business."

He said Larimore Air Service will also increase services to their agricultural customers.

"We're going to offer ground spraying as well as aerial spraying. We'll streamline our services and offer the farmer services for less money, to get them through these hard times," he said.

"The farm economy is at an all-time low, and I think the next few years are going to tell the story. Unless we get behind the farmers and try to help them — they feed us — if we don't give them a break and suffer with them, there won't be anything for anybody."

He said they'll offer ground spraying whenever possible, since aerial spraying is more costly.

"By consolidating our business, we can bring the costs down on aerial spraying and offer it at a cheaper price."

He also wants to work his helicopters into contracts, spraying to control weeds on right of ways. He has done similar work, controlling leafy spurge in terrain where only a helicopter is effective.

When in doubt land it

By Carol Bidon Pogatshnik

"Private pilot safety records leave a lot to be desired," FAA official Mike Beiriger told a group of North Dakota and Minnesota pilots recently at an agency-sponsored seminar in Wahpeton.

It is training which could make the difference and complacency which is contributing to the high accident rate. "You're only as good as your last training session," he told the group, underscoring his concern with the reminder that "afterall, we do all share the same air space."

The best type of training is a 'hands-on' type of experience with training devices where a pilot can be critiqued and can practice aircraft manuevers in a simulated situation.

After training to improve competency, Beiriger said, the next best action to reduce accidents and accident damage is for general aviation pilots to make more precautionary and less forced landings. In other words, when in doubt, take your craft down and check out the situation, whether it be suspicious looking weather or a suspected engine or aircraft problem.

In 1982 so far there have been twenty-seven accidents in North Dakota. Causing serious or substantial damage to the

more on page 2

Overconcern to save aircraft

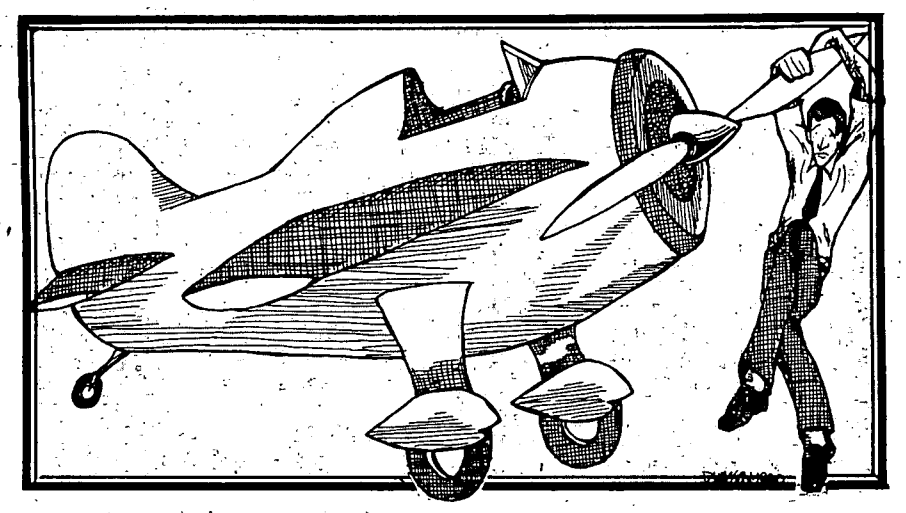
from page one

aircraft. These included three accidents involving five deaths.

Beiriger uses those figures to emphasize his concern for safety. He had some important tips to be aware of just in case a forced landing is the only way out in an emergency.

First of all, he said, be aware of the psychological hazard involved when things get so bad a landing is forced in an unplanned area. Pilots who are reluctant to accept the fact of an emergency situation can suddenly become "mind-paralyzed" and lose crucial moments needed to plan for the landing.

Another unhealthy attitude is an overconcern to save the aircraft. An undamaged aircraft does not insure an unhurt pilot or passenger. In fact, concern for the aircraft may cause a loss of control in landing which will only compound the damage," Beiriger said.



In any forced landing, the important points to remember are control of the aircraft and "energy absorption". The two go together: the more of the brunt of the landing that is absorbed by the craft, the less damage to plane and the greater is pilot control. The trick to achieve this is to make efforts, as the plane is coming down, to sacrifice expendable structures like the wings and underside of the craft. Be aware also, that natural vegetation and man-made objects will slow down descent and cushion the landing.

Small trees and bushes make a good cushion for landing aircraft, especially if the pilot angles it so that lower parts of the craft get the first impact.

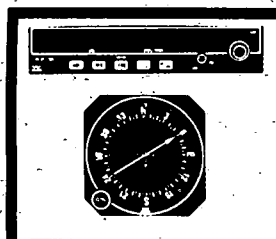
Cultivated fields, especially sunflower fields, make good emergency landing areas if the pilot lands with the rows to minimize the potential for nosing over.

When landing in snow, if there is a foot or more, keep flaps up. If wheels are down, the plane will more likely flip in snow. In rugged terrain however, gears down will absorb more energy.

Generally speaking, Beiriger said, land into the wind, up slope, with flaps down. And, unless you know the area quite well, he said, avoid landing on roads.

Too often wires across a road, not visible to a pilot, cause more harm than the good contributed by a hard landing surface.

To avoid what Beiriger calls "straining your face through the instrument panel," pilots are reminded to use their seat restraints. He admitted that few flyers wear helmets but told the group 88 percent of head injuries could be eliminated with their use.



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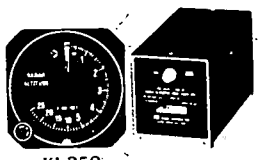

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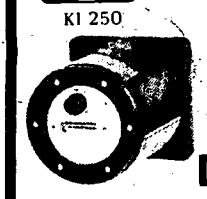

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Workers' comp dividends approaching $1.5 million

WASHINGTON, D.C., November 3, 1982 — The National Air Transportation Association's (NATA) Workers' Compensation Program has declared a 1982 dividend of $200,000. This dividend brings the total dividends paid by the Program to almost $1.5 million since the first payment in 1976.

Currently, approximately 200 FBO, air taxi and commuter airline Member Companies participate in the program, which pays dividends based on the group's loss performance record.

"Equally important as the dividend payment is the long-term stability of our Workers' Comp Program," said Lawrence L. Burian, president of the Association. "At a time when insurance is a major cost for aviation companies and the choice of programs is difficult, we're proud to offer a Program that has paid dividends every year since 1976."

Burian also indicated that NATA has made a number of improvements to its Workers' Comp Program that should yield higher payments to participants in the future.

The NATA Workers' Compensation is underwritten by USAIG and administered by Bayly, Martin & Fay.

For information on the Program, contact NATA at (202) 965-8880.

The National Air Transportation Association represents the interests of fixed base operators (FBOs), on-demand air taxi services and commuter airlines across the United States.

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Columbus airport receives low cost marking, lighting system this summer

An experimental new low cost marking and lighting system for unpaved runways has been constructed at the Columbus Municipal Airport, Columbus, North Dakota this past summer.

The system was developed as a cooperative effort of the North Dakota Aeronautics Commission, the Columbus Airport Authority and the FAA Technical Center in Atlantic City, New Jersey.

There are more than 13,000 airports in the U.S. About 8,000 of these or over 60 percent have unpaved runways and are uncontrolled. This system was developed by the FAA to possibly be adopted nationwide, if proven successful, on various test sites across the U.S. Columbus site was chosen to analyze its effectiveness at a severe winter climate with strong winds and heavy snowfall.

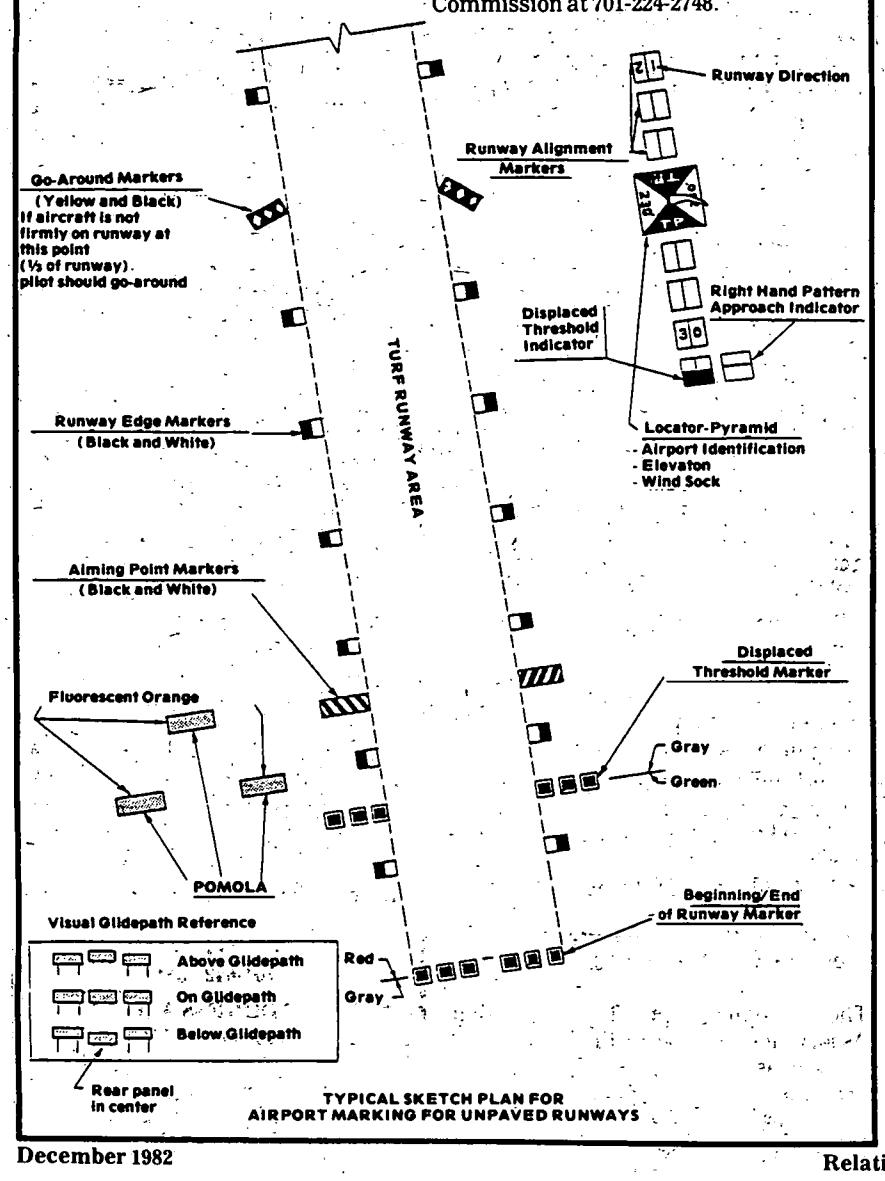
The sketch pictured shows a general marking layout with a brief description of the purpose of the various panels. The runway edge markers are black and white. All markers are fitted with retro-reflectors that bounce back the beam from an aircraft's landing lights from a distance of ¼ mile.

A pyramid shaped 20' tower was selected as the best design for helping pilots spot an airport. The tower area also has a lighted windsock, three letter identifier, elevation and runway direction indicators.

One of the more interesting features of the marking system is the POMOLA, an acronymn for Poor Man's Optical Landing Aid. It consists of three plywood panels and works much like a gunsight. Two front panels are elevated and aligned while a third ground level panel stands behind and slightly off center. To achieve the proper final approach glide slope, a pilot simply maneuvers the aircraft until the three flourescent orange panels appear in a straight line.

Without feedback from the flying public, we will have no way of knowing whether the system is good or bad or what changes may improve it. A questionnaire is located in the terminal pilot office at the Columbus Airport.

Contact Keith Berg, Columbus, N.D. at 701-939-6671 for additional information on this system or the N.D. Aeronautics Commission at 701-224-2748.



TYPICAL SKETCH PLAN FOR AIRPORT MARKING FOR UNPAVED RUNWAYS

Impact statement filed for Grand Forks airport expansion

The Federal Aviation Administration has announced that a finding of "no significant impact" in an environmental assessment for expansion and improvements at Grand Forks International Airport, Grand Forks, N.D., is available for public review at the following locations:

The city auditor's office, 402 2nd Ave. N., the public library at 2110 Library Circle, the county auditor's office in the county courthouse and at the airport, all in Grand Forks; at the FAA Airports Field Office, 2000 Airport Road, Bismarck; FAA Airports District Office, 6301 34th Ave. S., Minneapolis, Minn.; and FAA Great Lakes Region Airports Division, 2300 E. Devon Ave., Des Plaines, Ill.

Included in the proposed project, estimated to cost $3.9 million, are: acquisition of approximately 160 acres of land, construction of a new 3,900 foot runway 17L-35R and associated taxiway for general aviation aircraft, lighting for the runway, improvement of drainage, and various other airport improvements. Grand Forks International Airport has seen a dramatic increase in aircraft operations due to increased activity by the University of North Dakota's aviation program, one of the largest in the U.S.

The finding of "no significant impact" is consistent with existing National environmental policies and objectives as set forth in the Environmental Policy Act of 1969 in that the proposed project will not significantly affect the quality of the environment. An environmental assessment is a prerequisite for approval of Federal Funding under the Airport Improvement Program (AIP) of 1982. The City of Grand Forks, operator of the airport, has submitted an application for Federal funds of $3.5 million.

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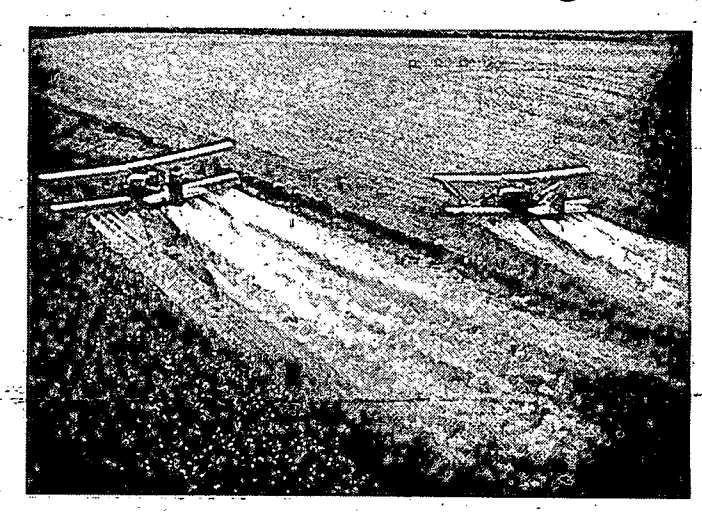

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Preventing weather-related accidents

By Carol Bidon Pogatshnik

Planning to do some flying this winter? Especially if a trip South is on the agenda, we don't intend to be discouraging. However, we do intend with the following information; to help avoid the almost certain death that accompanies weather-related accidents. Because the fact is 90 per cent of weather-related accidents involve fatalities.

According to Mike Beiriger, flight instructor and safety expert with the FAA "pressing the weather" and failure to plan ahead are the major reasons for this dismally high fatality rate.

Beiriger presented an FAA safety seminar to a group of about 35 Red River Valley area flyers who gathered in Wahpeton recently.

Self-awareness, including a bit of psychology, is involved in understanding who is likely to "press the weather". If we know the risks involved in taking off or continuing into suspicious looking weather and we still take the chance, then it's likely our personality needs are overriding a healthier sense of caution, Beiriger said.

Preventing cold weather related flight problems involves being aware of the special winter-time needs of the aircraft. These needs are relatively simple but unless a pilot is convinced of their importance the temptation will be to do as speedy a check of the plane as possible in order to get in out of the cold and get up in the air.

Before taking off in winter weather be certain that baffles and winter covers for engine parts are installed, proper weight oil is in the engine and make a careful check of the crankcase breather to be sure it is free of ice. Icing is likely since water is a natural byproduct of the alternate heating and cooling of engine parts.

In addition, make an inspection of all hose lines, take care to be sure carbon monoxide is not entering the cabin area, adjust for control cable expansion and contraction, check for congealed oil in the propeller system and give the battery the usual attention required in cold weather.

A special problem can develop during thawing conditions when mud and slush can be thrown into wheel wells during taxiing and takeoff. If frozen during flight this gunk could create landing gear problems. If the aircraft does not have retractable gear, it is recommended that wheel parts be removed to prevent the possibility of frozen substance locking the wheels or brakes. Only in emergencies should the gear be recycled after takeoff to prevent this frozen slush condition.

The danger of ice-crystal build-up in the fuel lines of a warmed aircraft parked in the cold, is acute. To make this less likely, make it a practice to fuel up as soon as possible after landing, Beiriger advises. In addition be certain the grade and type of fuel is proper, and filter fuel as it goes in, but not with a chamois cloth, he said.

Before flight, fuel should be checked for contaminants, especially when air temperature reaches the freezing level.

Ice may be in the tanks which may turn to water when the temperature rises. This water may filter down into the carburetor, causing engine failure.

The FAA puts out an advisory circular entitled "Aircraft Fuel Control" with excellent information on fuel contamination. Copies of the circular (No. AC 20-43C) can be obtained by writing to the U.S. Department of Transportation, Publications Section, M-443.1, Washington, D.C. 20590.

Another publication called "Tips on Winter Flying" elaborates on the points Beiriger made during the seminar. It can be ordered from the same address. Ask for circular No. AFS-800 0879.

. . . to press the weather

Some pilots are more likely than others to "press the weather." If we know the risks involved in taking off into suspicious looking weather and we still take the chance, then it's likely one of the following personality needs in overriding our common sense:

—The Expert: "I know my plane, I know my plan and I can cope with whatever happens."

—The Achiever: "I'm in a big hurry — there's too much to accomplish. I can't let a little bad weather interfere with what has to be done."

—The Nice Guy: Damn the risks, people on the other end, or my passengers, are depending on me to get there. I can't let them down.

—Macho-man: "Flying is my ego-trip; what'ya mean it's unsafe to fly? I'm not afraid of nothin'.

Cold start problems can be a pain

By Carol Bidon Pogatshnik

Cold start problems in winter weather are a real pain with land-based engines. The dangers are multiplied for aircraft engines since some remedies can do engines potential damage or can cause problems which don't show up until the craft is in the air.

For a number of reasons, it's especially advisable to preheat engines and cockpit before starting in low temperatures: viscosity of engine oil can change, batteries can lose their effectiveness, instruments can stick and warning lights can stick in the "on" position. These problems and their remedies were outlined for a number of Red River Valley area flyers by FAA official Mike Beiriger at a Safety Seminar in Wahpeton recently.

"If it isn't possible to preheat the aircraft by storing in a heated hangar, then use only heaters in good condition and don't leave them unattended." And of course never place heat ducts directly on any aircraft parts that can burn, Beiriger told his audience.

It is wise, Beiriger cautioned, to anticipate loss of indicators in cold weather, especially if the aircraft has not been pre-heated.

Certain conditions are more likely at certain temperatures, he said. For example at minus 10 degrees F. and lower, the crankcase breather is more likely to freeze up. Pressure in the crankcase caused by moisture freezing in the breather will cause the oil filter cap to blow off or a case seal to rupture. The resultant oil leak will eventually lead to the aircraft coming down.

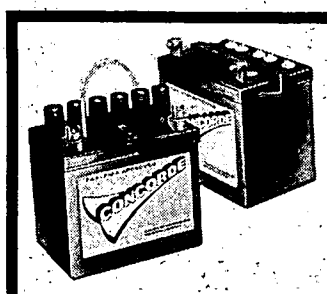
At 32 degrees-37 degrees F throttle icing is more likely and at temperatures between 32 degrees-80 degrees with 50 per cent or more humidity, carburetor icing is the more likely problem.

In less extreme weather, engines are often started without pre-heating. Special care is also recommended for this type of start. Fires can be started by overprime or by backfires through the carburetor.

Another problem when the engine is not preheated is icing over the sparkplug electrodes. If the engine fires a few times and quits the small amount of water in the cylinders can condense on the electrodes, freeze, and short them out.

Frost, snow and ice on the wing surface is a sure accident cause. The best way to get rid of it before flight is by parking the aircraft in a heated hanger. In doing so be sure the water does not run into control surface hinges or crevices to freeze when the plane is taken outside again.

If the plane is parked outside in blowing snow, several openings in the aircraft should be checked, including the pitot tubes, the heater intakes, the carburetor intakes, the anti-torque and elevator controls and the main wheel and tail wheel.



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A cold weather checklist

1. Keep your aircraft in a hangar if possible.

2. Cover pilot tube, wings, and engine(s), if the aircraft is left outside.

3. Remove frost formations on the aircraft with DEICER FLUIDS on mops. Remove any snow or ice, but NEVER USE HOT WATER TO REMOVE ICE of any type. It may freeze and produce a condition worse than before.

4. Check compressor blades for icing prior to starting jet engine(s).

5. Check NOTAMS, especially for snow or ice on runways.

6. Check weather carefully with the FSS; ask the right questions so that you get all the facts that you need.

7. Wear sunglasses if there is glare.

8. Check controls for restriction of movement.

9. Taxi slowly and use brakes with caution.

10. Avoid water and mud puddles on the ramp, taxi strips, and runway.

11. Be alert for icing of jet engine air intake ducts and compressor-inlet screen.

12. Watch for propeller icing if the humidity is high. After runup in fog or rain, check the wings and empennage for ice in the propeller wash area.

13. INSURE that anti-icing and deicing equipment is in operating condition before takeoff.

14. Check carburetor temperature prior to takeoff. If it is near 0 degrees C., use heat to prevent ice formation or to clear the carburetor of ice, but DO NOT USE carburetor heat during takeoff unless it is absolutely necessary. Inflight, preheat carburetor to prevent ice formation; DO NOT WAIT UNTIL AN icing condition exists.

15. Avoid taking off in slush or snow, if possible.

16. Be alert for snowbanks during takeoff and landing.

17. Use pilot heater when flying in rain, snow, clouds, or known icing zones.

Paved runways are falling apart

By Harold G. Vavra,
Director, N.D.
Aeronautics Commission

Paved runways at many small airports in the nation are deteriorating faster than necessary because airport owners have deferred critical maintenance, according to the U.S. General Accounting Office (GAO) in a report to Congress.

The GAO report was a result of its on-site inspection of 46 airports in the states of Connecticut, Idaho, Maine, Massachusetts, New Hampshire, Lousiana, Oregon, Texas, Vermont, and Washington. All airports inspected had received federal-aid funds in their initial construction.

GAO said that the deferral of pavement maintenance on runways, taxiways and aprons shortens the useful life of such facilities.

GAO inspection personnel said they found cracks in runway surfaces ranging from small breaks to extensive cracks up to six inches deep and covering the entire runway. The problem of deferred pavement maintenance was found to be nationwide: Owner representatives of 29 of 33 airports found to be deferring maintenance, blamed the failure to maintain their runways on the lack of funding.

Most of the airports examined by GAO were not self-supporting and owners were required to subsidize any maintenance performed on the runways.

The GAO report of deferred maintenance on federal-aid airports in ten states by type of airport follows:

Type of Airport	Number Airports Inspected	Number of Airports With Deferred Maintenance	Percent
Air Carrier	12	9	75
Commuter	10	7	70
General Aviation	24	17	71
Total	46	33	72

Lack of funds for airport pavement maintenance is not a new development. The report said that in 1974, the U.S. Department of Transportation made an analysis of general aviation airports that had been built with federal-aid and found that:

1. Few general aviation airports inspected had performed maintenance to protect or extend runway life.

2. Most general aviation airports were owned by small municipalities without resources to properly maintain runways.

In 1980, the National Association of State Aviation Officials, concerned over deterioration of a large number of public-use paved runways surveyed its members and determined that "priority emergency funding to preserve existing public-use capacity" was needed. At that time, a very rough estimate placed funds needed for such aid nationwide at $74 million for general aviation and $70 million for reliever, commuter and air carrier airports.

Contributing Factors

The federal report cited money problems as the primary reasons for deteriorating runway pavements. The report said that the "FAA's failure to report unsatisfactory maintenance conditions and practices and to require the airport owners to correct them as a contributing factor." Airport owners who receive federal grants are generally required in a sponsor's assurance agreement, as a condition to receiving a federal grant, that preventative maintenance and repair will be performed as needed, over a 20 year timeframe.

The GAO report says that the FAA has a program to monitor grantees' compliance with these grant obligations. But, according to the report, the FAA has placed little emphasis on runway maintenance.

The report concluded by recommending that the FAA "aggressively pursue airport owners' compliance with maintenance obligations including taking administrative or judicial actions against owners who fail to satisfactorily maintain their runways."

In addition, the report said that the FAA's Regional Offices should contact state aviation officials to arrange financial assistance for small airports. The report said further that there was a need for training airport managers in proper maintenance of runways. The government report recommended that the FAA complete a new advisory circular on pavement maintenance and provide a copy to all airport owners, together with any necessary training on how to apply it.

North Dakota Pavement Maintenance Program

The N.D. Aeronautics Commission beginning in 1981 and 1982 aggressively encouraged airport authorities and cities to get involved in preventative maintenance of paved runways, taxiways and aprons. We believe we have a superior program in this respect. Since 1981, the Aeronautics Commission has assigned a high priority for 50 percent State-aid dollars for assistance to airport authorities and cities in the cost of sealing of runway, taxiway and apron cracks, seal coats over the same surfaces and when required, an overlay pavement. This program included both airports with federal-aid in their initial construction as well as airports paved on a cost matching basis between the local authority and the State Aeronautics Commission.

In calendar year 1982, the Aeronautics Commission assisted on a cost matching basis in the filling and sealing of pavement cracks at eleven public airports located at Bowman, Ellendale, Hettinger, Hillsboro, Kenmare, Mott, Park River, Parshall, Rugby, Walhalla, and Westhope.

Runway, taxiway or apron seal coats were cost matched at eleven airports at Carrington, Ellendale, International Peace Garden, Larimore, Lisbon, Parshall, Rolette, Rugby, St. Thomas, Walhalla and Westhope.

In addition in 1982, the Aeronautics Commission participated in 50 percent of the cost including engineering and construction of nine airports for new asphalt paved runways, taxiway and aprons. Many of these projects were completed in 1982 with a few to be completed in 1983 as follows:

1. Ashley, Gravel base and new paved runway (Pavement to be completed in 1983).

2. Beach, Expanded paved taxiways and apron (Pavement to be completed in 1983).

3. Beulah, Expand aircraft parking apron and taxiway (completed in 1982).

4. Hazen, Grade, install gravel base and pave runway, apron and taxiway (completion in 1983).

5. Kindred, Asphalt pavement on runway, taxiway and apron (completed in 1982).

6. Lakota, Asphalt pavement on runway, taxiway and apron (completed in 1982).

7. New Town, Asphalt pavement on runway, taxiway and apron (completed in 1982). New runway lights being installed.

8. Tioga, Asphalt 800 ft. runway extension, pave taxiway and expand aircraft parking and construct cross-wind runway (completed in 1982).

9. Watford City, Widen paved taxiway, aircraft turnarounds and apron (completed in 1982).

In addition in 1982, the Aeronautics Commission assisted in 50 percent of the cost of an overlay pavement and seal coat on runway, taxiway, apron and entrance road at the International Peace Garden Airport and 50 percent of the cost of an overlay pavement on the runway, taxiway and apron at Cavalier Airport.

Conclusion

In 1982, the Aeronautics Commission was involved in matching costs at a total of 33 airport projects which involved asphalt pavements of which 24 projects are in the category of maintaining and preserving existing paved runways, taxiways and aprons and 9 are in the category of addition of new pavements, where none existed before. About 60% of these projects were at airports that initially had federal aid, while 40% of the total were paved on a local-state cost basis.

North Dakota has an airport system of 64 airports with paved runways, taxiways and aprons of which 57 are publicly owned general aviation airports and 7 are air carrier airports located at Bismarck, Devils Lake, Fargo, Grand Forks, Jamestown, Minot and Williston. Dickinson lost its scheduled air service in early 1982, therefore it has reverted back to a category of general aviation airport.

To maintain this system of 64 public airports with paved runways, taxiway and aprons will mean some minor or major maintenance work on at least 15% of the 64 airports each year or work on at least 10 airports annually. It can be envisioned that if the maintenance is deferred, the problem would become massive and unmanageable.

Big Sky reports earnings

BILLINGS, MT — Big Sky Airlines (Pacific Stock Exchange/BSAP) released its financial results for the three months ended September 30, 1982. Operating profit for the quarter was $98,208 generated on total operating revenues of $1,942,246. Net profit, including net interest expense was $26,870. By comparison, during the same quarter last year Big Sky Airlines experienced an operating loss of $104,574 on revenues of $2,082,562 and generated a net loss of $249,508.

Big Sky's President & Chief Executive Officer, Terry D. Marshall, attributed the improvement in quarterly operating results principally to the airlines' realignment of routes and its intensive cost reduction program initiated last fall. "This brief period of profitability does not materially improve the Company's tight cash position, but the results are nevertheless, extremely gratifying," Marshall said, "and we are hopeful that we can continue to demonstrate consistent profitability throughout the remainder of fiscal year 1983."

Big Sky Airlines serves the North Dakota cities of Bismarck, Devils Lake, Jamestown and Williston.

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FAA proposes new regs

The Federal Aviation Administration has published in the Federal Register a Notice of Proposed Rule Making (NPRM) relating to both small and large aircraft used in air transportation to abolish old Parts 121 and 135 (Air Taxi Rules) and to create a new Part 120. New Part 120 would implement a new concept in aviation safety regulations entitled "Regulation by Objective."

The FAA is considering replacing traditional "how to" regulations affecting Part 135 air taxi and large air carrier Part 121 operators with safety objectives that the previous regulations intended to achieve.

The FAA says that regulations by objective will allow operators now under Parts 121 and 135 to assess their operations and seek more effective and efficient methods of complying with safety objectives.

Major Differences

A major difference under Regulation by Objective (RBO) is that the operator may either continue to use its specific "how to" regulations as now stated in its operating certificate, or it may seek to change these specific methods of compliance.

If an operator wants to revise a specific method for achieving a safety objective, the operator may request a change in its operating document. To do this, the operator submits both the requested change and a validation procedure by which the operator can show that the proposal provides an equal level of safety as that provided under the current method of compliance.

Any proposed change will be reviewed by the FAA and will be approved only if the change is consistent with current safety level and with stated objectives.

One of the primary goals of RBO is to provide regulatory flexibility so that air taxi and airline operators will not be impeded in developing new methods for achieving the minimum safety objectives. Validating a new method will be the operator's responsibility.

Applicability

Proposed new Part 120 titled "Air Transportation" does not affect operations conducted under Parts 125, 129, 133 and 137 (aerial applicators).

Where Obtained

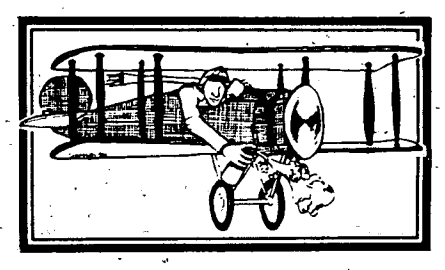
Any person may obtain a copy of proposed Part 120 - Air Transportation Regulations by writing to the FAA, Office of Public Affairs, Attention Public Information Center, APA-430 at 800 Independence Avenue, S.W., Washington, D.C. 20591, or by calling the FAA at (202) 426-8058. All letters or telephone requests must identify the Notice Number 82-13 and Docket No. 22480.

Comments

Any person who wants to comment on new Proposed Part 120 may do so by filing duplicate copies on or before January 20, 1983 with Federal Aviation Administration, Office of Chief Counsel, Attn: Rules Docket (AGC-204), Docket No. 22480 at 800 Independence Avenue, S.W., Washington, D.C. 20591.

Public Forum

The FAA announced a public meeting on Thursday, December 9, 1982 at the Federal Aviation Administration Headquarters, 800 Independence Avenue, S.W., Washington, D.C. for a presentation on proposed Part 120 "Regulation by Objective" and for a question and answer period. Meeting will be held in Auditorium third floor.



Joins Hopkins

Clayton R. Conway has been named Division Manager at Hopkins Agricultural Chemical Company, Madison, WI, according to James Hopkins, President.

Conway will be responsible for the development, manufacturing, and marketing of the more than one hundred Hopkins brand products in the ag chemical and animal health lines. He will also be responsible for contract manufacturing.

The scope of Hopkins brand products was greatly expanded in the fall of 1980 when the firm put the Hopkins brand on 30-plus animal insecticides formerly marketed under the Roberts label of Roberts Laboratories which Hopkins had acquired in 1970. The Roberts brand and firm name have been discontinued.

Conway, for the past three years, was a General Manager outside the agribusiness field. Prior to that, he spent three years with Kalo Laboratories, Inc., Kansas City, first as Product Manager and the last two years as Director of Marketing.

He has also held various marketing positions at Mobay Chemical Corporation, Kansas City, and Merck & Co., Inc., Veterinary Products Division, Kansas City.

New hangar: Revolving floor means fewer doors

By ED MAIXNER
Forum Staff Writer

The Lazy Susan beneath countertops of America's kitchens is the model for an aircraft hangar under construction at the new West Fargo Airport.

"You got it right — it's our Lazy Susan," said Morris Thingstad, member of the West Fargo Airport Authority.

For $48,000, the authority is building its first hangar at the air field it began developing last year.

The hangar will store six airplanes on a revolving floor track. The aircraft owner revolves the floor to bring his craft to the single overhead door. Instead of six doors for six aircraft, the round hangar has one. At $4,000 or more per door, the new design offers a substantial cost savings, Thingstad said.

And the hexagonal-shaped building uses space about 20 percent more efficiently, per aircraft, than a rectangular building, Thingstad said.

A part of the cost savings in building size and overhead doors is lost to the cost of the revolving track. It is rotated with two electric motors.

Thingstad said the airport authority will meet later this month to establish terms for renting space in the hangar. He said the building will be completed by December.

At the center of the hangar, the authority also built three rooms, one on top of the other, to provide bathrooms, storage space, a meeting or operations room, and a waiting lounge. The added costs for the rooms, including extension of utilities to the hangar, is about $7,000 to $9,000. Costs will total about $55,000 to $57,000 when completed, Thingstad said.

Contractor for the hangar, Dale Anderson of Harwood, built his first Lazy Susan hangar at the Oakes, N.D., airport last summer.

Also, the Fargo Airport Authoirty approved plans Monday for H&H Associates of Fargo to build a similar hangar for private aircraft at Hector Airport. Bob Hopman, H&H president, said he expects to rent spaces at $90 to $100 per month.

The first six plane hexagon hangar with electric rotating base was installed in North Dakota at the Oakes Municipal Airport, followed by the one being constructed at West Fargo Municipal Airport. Now a third is being planned for Hector Airport, Fargo, N.D.

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Pesticides save money

According to a National Academy of Sciences report, complete withdrawal of pesticides would result in a 30 percent reduction in crop yields, a 50 percent to 75 percent increase in the price of farm products, and complete elimination of farm exports. So instead of the current 17 percent, U.S. consumers would have to spend at least 30 percent to 40 percent of their incomes for food, the report indicates.

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Airports need insurance

Not long ago, the State Supreme Court ruled that municipalities with city streets and airport authorities operating airports, can be sued for public liability in case of a loss, in which the airport was found to be negligent, resulting in an accident.

Most aircraft owners carry property damage, airframe and passenger insurance. However, if an accident occurs on an airport, even if the aircraft owners' insurance company pays off a loss as a result of an accident, if an investigation of the accident reveals that the accident was caused by some negligence of the airport authority, the aircraft owners' insurance company may sue the airport authority to recover its loss.

A number of airports have asked about airport liability insurance. Contact your city's local insurance agent or check with your City to see if the City has liability insurance for its city operations.

The type of information needed to get a quotation is whether the airport has paved or turf runways, lighted and whether the airport has a manager, how many airplanes are based at the airport, etc. I understand that airport liability insurance cost depends on some of this background information. The cost varies depending on each airport. Here is a general guideline:

Amount of Airport Public Liability Insurance Coverage	Annual Premium Estimated Cost
$ 300,000	$ 400.00
500,000	$ 450.00
1,000,000	550.00

Convo info

March 13-16, 1983
National Air Transportation Association 42nd Annual Convention & Trade Show, Nashville, Tenn.
Opryland Hotel
For Information Contact: Cindy Aloise (202) 965-8880.

Around the State

WIMBLEDON . . . Notam was issued to close airport for public use. Reason was that local officials could not afford airport liability insurance for public use.

RICHARDTON . . . Caution: Airport has cattle grazing on grass runway and neighboring cropland this fall. Local Vo-Ag high school class is working on runway markers for placement on the airstrip.

CANDO . . . is in the planning stages for reviewing sites for development of a longer runway. The present airport is boxed in with roads on both ends and is too short to warrant a paving investment.

NEW ROCKFORD . . . has closed the NE-SW crosswind runway due to the grass growth through the pavement. They are planning to overlay the main runway next summer and have purchased snow removal equipment for this winter season.

KINDRED . . . has a new 2700' x 50' lighted asphalt runway completed this summer. The airport has 14 based aircraft with a large amount of aerial spraying operations. Development of this airport was possible through the regional airport authority containing the Kindred-Davenport communities and surrounding townships.

BEACH . . . has a fixed-base operator on the airport offering fuel sales and flight instruction with future air taxi service intentions. The airport has 17 based aircraft and are developing a new hangar and taxiway system.

KENMARE . . . completed the crack filling project last month. They presently have 10 based aircraft on the 2760' runway with 7 hangars on the airport. Future plans may be an airport beacon and seal coat along with apron paving.

ENDERLIN . . . completed a regrading project and crack filling maintenance work. They are planning to install a radio control unit for runway lights and a seal coat of the asphalt surfaces. They have 5 based aircraft and transient activity visiting the new sunflower processing plant.

LEEDS . . . is planning to relocate the airport due to the new highway two-lane project transversing through the existing airport. A site 2 miles east of town along the highway may be developed in conjunction with the highway construction.

New safety systems for Hector Field

Installation of two new systems to enhance safety and facilitate low visibility landings on runway 17 at Fargo's Hector Field has been completed by the Federal Aviation Administration. They are an instrument landing system (ILS) and runway alignment indicator lights (RAIL).

An instrument landing system is a combination of radio beams which guide aircraft to the threshold of the runway. The Fargo system consists of a localizer beam for guiding aircraft straight to the runway centerline, a glide slope beam for angle of descent, and middle and outer markers to alert the pilot to his distance from the runway. Both glide slope and localizer beams activate a cockpit instrument enabling the pilot to visualize his approach. The lighting system is an additional aid.

The cost of the ILS $120,000 for equipment and $110,000 for installation, while the RAIL cost is $20,000 for equipment and $105,000 for installation.

Hector Field also is equipped with an ILS on runway 35, as well as visual approach slope indicators on runways 17 and 35. Both runways also have approach light systems and there are medium intensity runway lights (MIRL) on runways 13/31 and 17/35. FAA also mans a radar-equipped airport traffic control tower for guiding aircraft to the runways at Fargo and two nearby satellite airports, as well as separating air traffic within a radius of 30 miles.

Crosswind landings: what to consider

The best advice is to avoid them, if at all possible.

Crosswinds acting against the upwind fuselage surfaces and vertical tail create a side force which tends to push the aircraft downwind, and it tends to weathercock the nose into the wind. The only counteracting force available is the friction of the tires on the pavement — and there may not be any if it is wet and/or slippery!

On takeoff you can feel the aircraft yaw into the wind as the tires lose sideways friction and the takeoff may be continued without damaging the tires. Landings are trickier, and your approach should allow you to land on the upwind side of the runway. This makes the full runways width available for any sliding during the transition speed period.

Before landing on a wet or slippery runway, you should consider:

- What is the condition of my tires?
- What is my tire pressure, and where does that put my dynamic hydroplaning speed?
- What are the runway conditions? (length, width, surface texture, depth of standing water, icy, etc.)
- How late can I take a go-around?

Improvement

Copies of the six year federal Airport and Airway Improvement Act of 1982 (Public Law 97-248) may be obtained by writing the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, and requesting a copy of Public Law 97-248 at a cost of $7.50 each.

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GAR controls at seven centers

All restrictions have been lifted recently on flights within the Jacksonville and Atlanta Air Route Traffic Control Centers. Additional flights between airports within these two centers no longer require FAA approval. Flights from airports outside of, to points within, these centers still require FAA Authorization.

To date four other centers are free from controls. These are Washington, D.C., Albuquerque, New Mexico, Seattle, Washington and Salt Lake City, Utah. Controls on the Memphis Center will be removed effective November 22.

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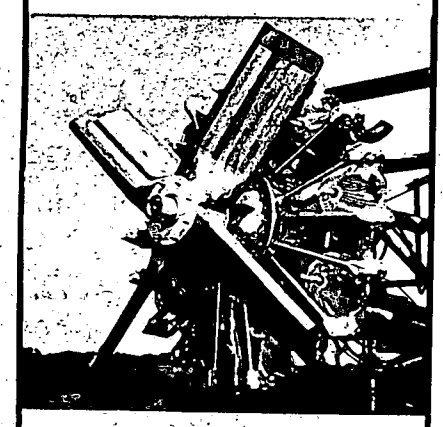

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