EMERGENCY!

Crews at Cleveland Hopkins Airport are schooled in immediate mobilization, for times when hundreds of airline passengers' lives depend on the snow removal job they do.

By Carl Kovac

ew things are as useless as snow-bound airplanes sitting on the ground when there are passengers and freight to be hauled and schedules to be met. Even fewer things are as disturbing as not being able to land, particularly if the lowfuel lights start flickering. The alterative could be trying to put a very large airplane down on an ice-slick runway at a relatively high speed. A loaded 747, for example, has a landing weight in excess of 300 tons and touches down at around 140 miles per hour.

At Cleveland Hopkins International Airport, a highly-trained field maintenance team keeps the airlines flying when the snow falls. About the only things that will close the sprawling airport 14 road miles southwest of downtown Cleveland are zero-zero visibility and high winds, over which the maintenance crews obviously have no control.

Normal snowfall at Hopkins is 53 inches a year, according to the National Weather Service. The record for one month was 42.8 inches in January 1978.

Fickle weather

Greater Cleveland is known for its fickle weather. Because Hopkins is a mere five miles due south of Lake Erie, it can fall prey to what the weather forecasters call "lake effect."

What happens is that a cold flow of air blowing over the lake from the north picks up moisture from the warmer water. This rising moisture condenses at altitude and comes down as snow. Ordinarily this precipitation is carried to higher elevations east of Cleveland—the so-called snow belt—but a wind blowing directly from the north will occasion-

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ally dump an awful lot of the white stuff on the airport in a very short time.

On the other hand, a storm can sneak in the back door, as happened March 30-31, 1987. A jet stream swinging down from Canada through the deep south picked up moisture-laden air in East Cleveland around evening rushhour time and dropped 16.4 inches of snow within 24 hours, the largest one-day accumulation in the area in 74 years.

Hopkins was shut down twice for a total of 12 hours because of high winds and low visibility. Some 200 flights were reportedly diverted or cancelled. It was the longest shutdown since January 1978 "when we were closed for a couple of days because of high winds—up to 50 mile an hourand blowing snow," recalls airport commissioner Nick Bogas.

Expensive equipment

Keeping Hopkins' some 3.4 million square feet of runways and taxiways clear for arriving and departing aircraft is the job of a 40 on the field maintenance staff using \$4 million worth of snow removal equipment. "We have 51 pieces of equipment, including trucks, snow blowers, highspeed brooms, front-end loaders, road graders and truck-mounted plows," says Bogas. In addition, four graders, four front-end loaders and six trucks are leased from an outside contractor, but garaged at the airport, ready for instant use.

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At Cleveland Hopkins Airport, 28-foot plows clean the runways and taxiways.

the runways and taxiways; and 12footers are used for roads on airport property. Hopkins also has about 35 acres of parking lots; six-foot and eight-foot plows mounted on Bombardier tracked vehicles are used to keep them clear.

At the first hint of snow, the highspeed brooms begin sweeping the runways. "If that doesn't work, we'll put down urea, which is a standard fertilizer that melts snow. If we get ice, we'll use ethyl glycol, used to deice airplanes," Bogas says.

To keep the main runway, the first priority, clean, a team of four 28-foot plows and two blowers are deployed to work in tandem. A second team is deployed to keep the secondary runway, parallel to the main one, clean. At the same time, other crews are busy clearing taxiways, ramps and other runways.

Ordinarily, Hopkins' maintenance crews work normal eight-hour shifts. There are two shifts a day on duty, seven days a week. If a big storm hits, everyone gets into the act.

"The crew on duty will begin clearing the runways and taxiways while the second crew is being called in," says Bogas. "The crews will sleep and eat at the field until things are back to normal. We'll work 12-hour overlapping shifts. We try not to work them longer, but if need be, we will."

By "we," Bogas means everyone. "In addition to the regular crews, we have a dozen supervisory personnel, including me, plus 10 mechanics who can operate the equipment. We're all checked out on it."

Just how good his people do their jobs is evidenced by the fact that Hopkins was shut down only once this year, "and that," says Bogas, "was because of poor visibility. We had blowing snow and 40- to 50-knot winds. There's not much you can do about that."



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