

# Behind the scenes of de-icing planes at the Des Moines International Airport

DES MOINES, Iowa — From October through April, deicers help keep airports across the world open.

Deicers help clear airplanes whenever there is a buildup of contamination, which can be frost, snow, or ice. The Des Moines International Airport's Integrated Deicing Services (IDS) worked on around 400 planes between October 2024 and January 2025.

Amanda Barry is the IDS general manager at the airport. She says frost can typically be taken off of aircraft in minutes. However, ice conditions are more difficult.

The ice storm that hit Central Iowa in December 2024 resulted in long delays for travelers, but that was because there were thick ice layers frozen onto the aircraft. According to Barry, it took their crews about 45 minutes to defrost those planes.

“[Deicing] is super important to have just for the safety of the passengers and the pilots to get to their destination safely,” said Barry.

The Des Moines International Airport is equipped with JVC Tempest 2 deicing trucks. They have 10 trucks in total and around 40 deicers.

The truck has a “bucket” where the deicer can lift themselves to 45-feet to deice aircraft. There are two joysticks in the bucket, one controls the fluids the deicer can spray and the other controls the movement of the bucket.

The JVC Tempest 2 is a single-operator truck. While the truck can be driven like any normal vehicle, deicers are also able to operate the truck from inside the bucket, even when they're elevated.

There are two different fluids that the deicers use. The first is Type 1 Deicing Fluid, which Barry says essentially cleans the plane. The other is Type 4 Anti-icing Fluid, which Barry says keeps accumulation from building. The fluid is between 140 and 180 degrees Fahrenheit.

Each truck holds 1,800 gallons of Type 1 and 400 gallons of Type 4. However, Barry says it varies how much fluid is used on planes. Deicers can fill up their trucks when needed.

The airport has two tanks that store these fluids. They call this area the fluid farm. The Type 1 tank stores 20,000 gallons of fluid, and the Type 4 tank stores 15,000 gallons of fluid.

Next to the fluid farm is the airport's new deicing facility. The Des Moines International Airport is undergoing construction for its new terminal, and part of this project includes constructing a facility for deicers.

Barry started her role as general manager in July 2024, and at the time, her entire crew worked out of one room. The new facility now provides more space.

IDS now has an area for training, which typically takes around a week. They also have a maintenance area that can fit two deice trucks. Before this facility was available, they would work on their trucks outside in the cold, and sometimes snowy, conditions.