

# NORTH AIRFIELD DEICING FACILITY

## HARTSFIELD–JACKSON ATLANTA INTERNATIONAL AIRPORT

During the winter of 2011, a fierce four-day winter storm stranded aircraft on the tarmac at Hartsfield-Jackson Atlanta International Airport, costing airlines approximately \$60 million per day of inactivity. To prevent this in the future, the City of Atlanta hired Prime Engineering's team to design and develop a state-of-the-art deicing facility. This facility needed to be able to get aircraft off the ground in even the worst winter conditions – and it needed to do so in a profitable way.

The Prime Engineering Team's final design not only increases passenger safety and reduces flight delays, but the \$38 million North Airfield Deicing Facility also pays for itself in less than a day of inclement weather.

The facility offers users a variety of innovative features including:

- Onsite burners and heat generation to ensure fast-track delivery of hot water and Types I and IV glycol, on demand, for the deicing process
- An aircraft movement plan using 3-D computer-generated graphics in a virtual facility simulation
- Electronic Virtual Tower observation platform taking up a fraction of a physical observation ramp tower's space
- Environmentally friendly stormwater collection system featuring an 80-foot-diameter, 53-foot-deep, 2,000,000-gallon glycol reclamation tank (+70% margin of error for environmental mishaps)
- 15 aircraft parking positions in a confined space, usable during summer and winter operations



The finished North Airfield Deicing Facility.



This “virtual tower” uses cameras and monitors to simulate a physical observation ramp tower.



Placing the 2,000,000-gallon+ reclamation tank.

## COST

\$38 million (construction)

## RECOGNITIONS

The facility’s economical design and innovative features propelled it to win the American Council of Engineering Companies of Georgia’s 2016 State Award

