



RICHMOND
INTERNATIONAL AIRPORT

Airline De-Ice Plan 2021-2022

American Airlines 

 **allegiant**

 **Breeze**

 **DELTA**

jetBlue
AIRWAYS[®]

 **SOUTHWEST**[™]

spirit[®]

UNITED 



Airline De-Ice Plan 2021-2022

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RIC GENERAL DE-ICE PROVISIONS

•De-Ice reporting is REQUIRED per RIC Storm Water Discharge Permit
•FAX All Reports to: **(804) 226-8075**
•DO NOT USE PREVIOUS YEARS FORMS!

Out of plan de-icing locations must be approved in advance by Airport Operations.
Airport **MUST** be notified of de-icing activity regardless of location for GRV pickup!

DO NOT:

- Deice in movement areas (runways & taxiways)
- Deice in any common use locations such as uncontrolled taxi lanes that block other aircraft or tenant access
- To avoid ramp congestion, do not push aircraft or allow aircraft to de-ice unless they can immediately be de-iced or enter the de-ice location.

AIRPORT OPERATIONS DEPARTMENT	
SUBJECT: WINTER 2017-2018 GLYCOL RECOVERY PROCEDURES	
	
Date: October 31, 2000	Revision: October 15, 2017
PURPOSE:	To give the employees of CRAC and Airlines a general guideline on what procedures to follow during glycol recovery during winter weather operations at Richmond International Airport.
BACKGROUND:	These procedures were established because the Airport operates on a twenty-four hour, seven day-a-week schedule. Despite weather conditions, certain departments are required to be manned around the clock.
POLICY:	This procedure sets forth procedures for implementing personnel to recover glycol based deicing and anti-icing fluids during winter weather operations and on Airport property.
I. GLYCOL RECOVERY	
1.	AIRCRAFT OPERATORS: Aircraft operators will CALL Airport Communications Center by phone, PRIOR to applying glycol to their first aircraft of the day, at (804) 226-0001. This will initiate the glycol recovery process. They should also call if there has been a long time-lapse since their last deicing. They shall FAX deicing activity fax sheet upon COMPLETION of their daily deicing operations to (804) 226-8540. A monthly total usage report is also required at the end of the month. This report can be faxed to (804)226-8540 or sent via e-mail to CSobrito@FlyRichmond.com
2.	AIRPORT DISPATCH: The Airport Dispatch Department will notify the Airport Utilities and Grounds Department to handle the glycol recovery. If the glycol is sprayed during Utility/Grounds Department non-operating hours, the "Callback" person will be notified, if the evening or weekend shift is not available to remove the glycol.
3.	AIRPORT UTILITY/GROUNDS: The Airport Utility/Grounds Department will set the Basins, the Collection Points Valves, and the Storm Water Valves based on the prescribed recommendations. See attached diagram. <ul style="list-style-type: none">• LOW PRECIPITATION: The Utility/Grounds Department will open the Collection Point Valves (orange) and close the Storm Water Valves (green) see attached diagram.• HIGH PRECIPITATION: The Utility/Grounds Department will close the Collection Point Valves (orange) and open the Storm Water Valves (green) see attached diagram.
4.	AIRPORT UTILITY/GROUNDS: The Utilities/Ground Section will vacuum/sweep and remove the glycol by pumping the glycol into the storage tanks. Based on the amount of fluids at the Collection Points and the capacities of the storage tanks, the Utilities/Grounds Section will contact a company to pump the fluids out of the Collection Points and storage tanks and properly dispose of the collected materials.



Attention airline OPS personnel:

Call Airport Communications

at (804) **226-0001**

to report start of deicing operations.

Deicing Fluid Usage Reports – REQUIRED!

DAILY REPORT



2018/2019 FAX COVER SHEET

To: Airport Operations Department Fax #: 804-226-3075

From: _____ Phone #: _____

Subject: Daily Deicing Activity

RICHMOND INTERNATIONAL AIRPORT DAILY DEICING STARTING AT

DATE: _____

TENANT NAME: _____

TIME	LOCATION

FAX COMPLETED FORM TO (804) 226-3075

Capital Region Airport Commission
Richmond International Airport
1 Richard E. Byrd Terminal Drive
Richmond International Airport, Virginia 23220-2450
804-226-3000
<http://www.flyrichmond.com>



END OF MONTH REPORT

2018-2019

Richmond International Airport Monthly Deicing Applications

Month:		** Complete a separate sheet for each deicing material used in the month. Return completed sheets to the Capital Region Airport Commission by the 3rd of the following month. FAX TO: 804-226-3075
Tenant Name:		
Location:		
Type of Deicing Material (Chemical):		

- > All tenants must report the type and quantities of deicing materials used to the Capital Region Airport Commission monthly. This data is sent to the Virginia Department of Environmental Quality (VDEQ) as part of the storm water permit requirements for Richmond International Airport. This form should be used to report each month.
- > Dilution factor is simply the amount of deicing material diluted by water (a 40 glycol/60 water mixture should have .4 in the column).
- > A form must be submitted for each type of deicer used.
- > This information is for state submission only and will not be distributed without prior permission.

(multiply the amount used of deicing material by the dilution factor to obtain the total quantity of deicing chemical used)

Date Used	Used (gallons)	Dilution Factor	Total Quantity of Deicing Chemical Used (gallons)
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0
	X	=	0

CRAC Deicing reporting contacts, for forms and information:

Airport Operations

Larry Hamilton
Operations Officer
(804) 226-8590
lhamilton@flyrichmond.com

Utility and Grounds

Jeremy Niles
Grounds Foreman
(804) 226-8541
jniles@flyrichmond.com

Deicing Truck Operations



- Trucks must be maintained and monitored for leaks. Spilled glycol must be reported for clean-up.
- Trucks may not be parked under jetways or structures due to hot exhausts.
- Operators must remain alert for other vehicle and aircraft movements.
- Operators must always give way to moving aircraft.
- Operators must be authorized and trained by their companies to operate the truck or equipment they are using.
- Operators must have a valid state driver's license, and the RIC "N"on-movement endorsement.
- Clean up following deice fluid/flow testing must be coordinated with CRAC Utility and Grounds. (804) 226-8534 or (804) 226-0001

De-Icing Truck Water Supply

- Located next to carwash
- 2 1/2" fill hose
- Do not over tighten valve!
- Do not use fire hydrants!
- This location special equipment with required backflow prevention device.
- Drain hose after each use!
- The "dog house" is insulated and heated to prevent freezing.



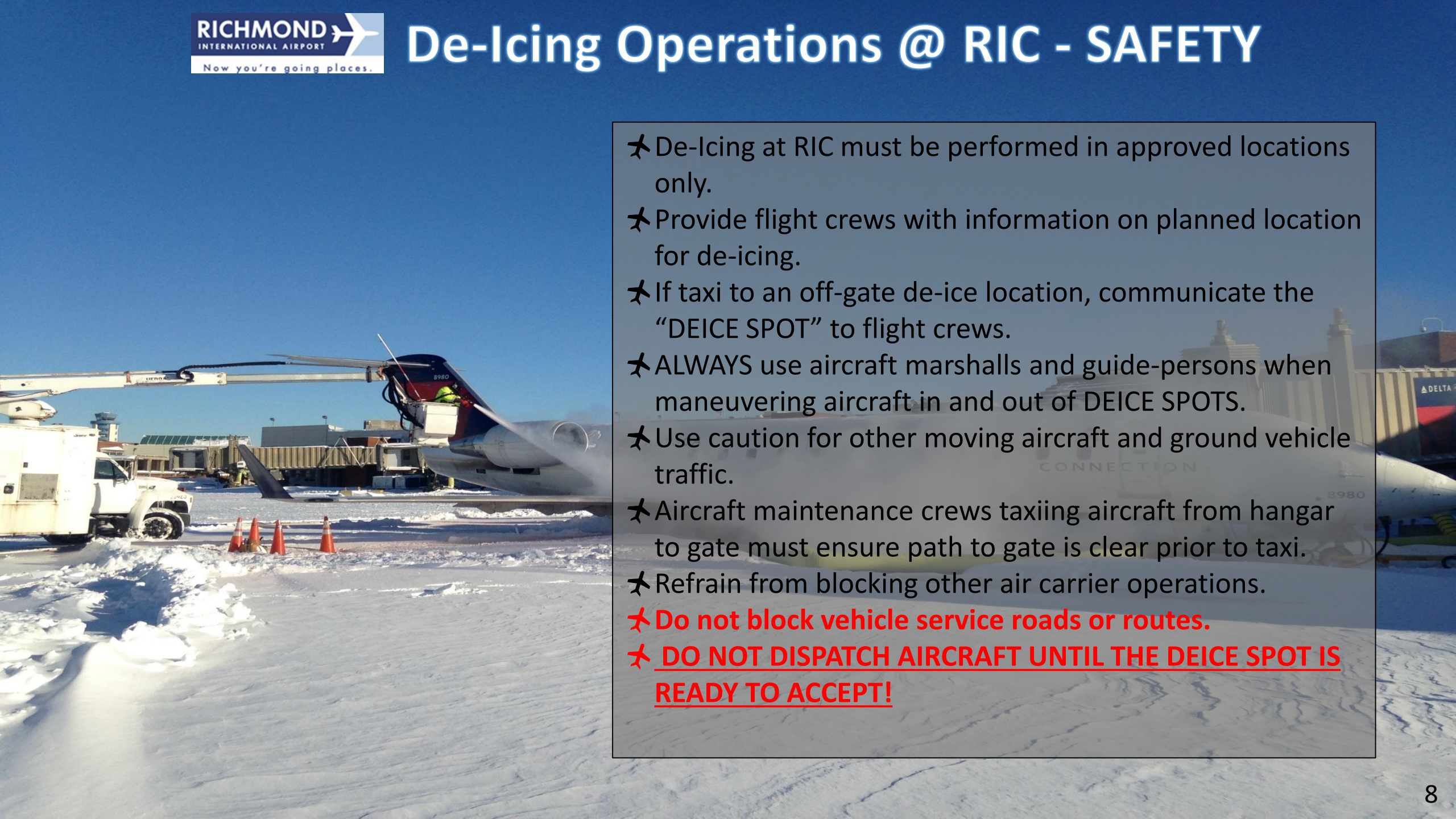
Deicing operations at RIC must be carefully coordinated to ensure efficiency, and most importantly safety!

Airline ground crews, flight crews, and maintenance operations, Richmond Air Traffic Control, Airport Operations, and snow removal crews all play a role in a safe transition from the gate to take-off when deicing is in-progress.



Safety first @ RIC

De-Icing Operations @ RIC - SAFETY

- 
- A photograph of a Delta airplane on a snowy tarmac. A white de-icing truck is positioned to the left of the aircraft, with its long boom extended towards the wing. The ground is covered in snow, and several orange traffic cones are visible in the foreground. The sky is clear and blue. The aircraft has the number 8980 visible on its tail.
- ✈ De-icing at RIC must be performed in approved locations only.
 - ✈ Provide flight crews with information on planned location for de-icing.
 - ✈ If taxi to an off-gate de-ice location, communicate the “DEICE SPOT” to flight crews.
 - ✈ ALWAYS use aircraft marshalls and guide-persons when maneuvering aircraft in and out of DEICE SPOTS.
 - ✈ Use caution for other moving aircraft and ground vehicle traffic.
 - ✈ Aircraft maintenance crews taxiing aircraft from hangar to gate must ensure path to gate is clear prior to taxi.
 - ✈ Refrain from blocking other air carrier operations.
 - ✈ **Do not block vehicle service roads or routes.**
 - ✈ **DO NOT DISPATCH AIRCRAFT UNTIL THE DEICE SPOT IS READY TO ACCEPT!**

Airside Winter Operations Safety

- Jet blast in slippery conditions
- Vehicle movement
- Safe Driving Speeds
- Regional aircraft single engine operating during deice



Airline Specific Deice Plans 2021/2022 season

American Airlines 

 DELTA

jetBlue
AIRWAYS[®]


SOUTHWEST[™]

UNITED 

allegiant 

spirit

Breeze 



← TAXIWAY ALPHA →

Deicing on Taxiway Alpha is prohibited!

VEHICLE SERVICE ROAD



B7

B9

B5

B3

Allegiant aircraft using Gate **B5** will deice at the gate. Aircraft may be pushed back 10 to 20 feet from parked position for deicing. The vehicle service road must not be blocked. **Deicing on Taxiway Alpha is prohibited!**

DEICING VENDOR - MillionAir

DEICING FREQUENCY – 130.30

Earth

TAXIWAY ALPHA

Deicing on Taxiway Alpha is prohibited!

American Airlines



Gate A16

SPOT D5

TAXI-LANE

SPOT A WEST



American mainline and regional jet aircraft will deice at either of three designated locations on the north end of the Air Carrier Ramp, spots A-WEST, D5-EAST or Gate A16. Aircraft pushing from Gates A6, 8, 10, 12, 14 taxi to one of the designated deice spots. **DEICING OPERATIONS MAY NOT BLOCK ACCESS TO AND FROM GATES A1, A3, A5, A11, A13, or A15.**

DEICING VENDOR – Piedmont

DEICING FREQUENCY – 129.325

A5

Breeze aircraft using Gate **A5** will deice at the gate. Aircraft may be pushed back 10 to 20 feet from parked position for deicing. The vehicle service road must not be blocked.

DEICING VENDOR -

DEICING FREQUENCY – 131.425

← TAXIWAY ALPHA →

Deicing on Taxiway Alpha is prohibited!
VEHICLE SERVICE ROAD

TAXI-LANE

VEHICLE SERVICE ROAD

B5

B11

B13

B15

B10

B12

B14

B6



VEHICLE SERVICE ROAD

Delta mainline and regional jets will be deiced primarily at their parking positions at the gate. Aircraft may be pushed 10 to 20 feet but must remain clear of vehicle service roads, taxi-lanes, and Taxiway Alpha.
DEICE VENDOR - DGS/Unifi DEICE FREQUENCY – 131.450

Google Earth

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VEHICLE SERVICE ROAD

VEHICLE SERVICE ROAD

TAXI-LANE

B15

B14

Some Delta regional jet aircraft may pushback and taxi to approved deice spots at Gates B14 and B15.

- **Guide-person required for taxi in and taxi out!**
- **Aircraft must not block vehicle service road or impede vehicle traffic.**
- **Aircraft should be parked "nose east" for engine running deicing operations.**
- **Flight crews to request taxi to B14/B15 deice pad.**

← TAXIWAY ALPHA →

Deicing on Taxiway Alpha is prohibited!

VEHICLE SERVICE ROAD

VEHICLE SERVICE ROAD

A4

A2

jetBlue aircraft parked at Gates A2/A4 will be pushed back to the asphalt area of the ramp. Deice operations must not impede vehicle traffic on the service road. **The aircraft must be pushed back in a manner that it does not block arrivals or departures at Gates A6, B1, B3 or B5.**

DEICE VENDOR – Aero Industries

DEICE FREQUENCY – 131.425

← TAXIWAY ALPHA →

Deicing on Taxiway Alpha is prohibited!



VEHICLE SERVICE ROAD



B7

B9

B5

B3

Southwest aircraft using Gate B9 will deice at the gate. Aircraft may be pushed back 10 to 20 feet from parked position for deicing. The vehicle service road must not be blocked. Deicing on Taxiway Alpha is prohibited!
DEICING VENDOR - Aero Industries DEICING FREQUENCY -131.425

spirit

Deicing on Taxiway Alpha is prohibited!

VEHICLE SERVICE ROAD

B7

B9



B5

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B3

Spirit aircraft using Gate **B7** will deice at the gate. Aircraft may be pushed back 10 to 20 feet from parked position for deicing. The vehicle service road must not be blocked. **Deicing on Taxiway Alpha is prohibited!**
DEICING VENDOR - Aero Industries DEICING FREQUENCY – 131.425

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TAXIWAY ALPHA



Deicing on Taxiway Alpha is prohibited!

FLIGHT CREWS MUST BE REMINDED TO USE LOW POWER SETTINGS ENTERING AND EXITING RAMP PARKING POSITIONS! →



VEHICLE SERVICE ROAD

VEHICLE SERVICE ROAD

B3

B1

United and United Express aircraft will utilize the ramp space behind Gate B3 for deicing operations. Aircraft parked at Gates B1 and B3 will be pushed in to position by the company ground handler. Aircraft parked at Gates B2 and B4 will taxi to deicing spot near Gate B3.

THIS SPOT ACCOMODATES ONE AIRCRAFT AT A TIME! THE COMPANY GROUND HANDLER MUST CONTROL AND COORDINATE AIRCRAFT NEEDING DEICING.

DEICING VENDOR – United Ground Express DEICING FREQUENCY – 130.175

TAXIWAY ALPHA

Deicing on Taxiway Alpha is prohibited!



B3

B1

B4

B2

TAXI ROUTE TO SPOT B3



VEHICLE SERVICE ROAD

UNITED



VEHICLE SERVICE ROAD

TAXI-LANE

VEHICLE SERVICE ROAD

Gate B15 may be used as an alternative to Spot B3. Since this spot is also used by Delta, please call Airport OPS to coordinate.

B15

B14

- **Guide-person required for taxi in and taxi out!**
- **Aircraft must not block vehicle service road or impede vehicle traffic.**
- **Aircraft should be parked "nose east" for engine running deicing operations.**
- **Flight crews to request taxi B15 deice pad.**



Google Earth



Deice vendor contacts 2021-2022



AIRLINE - GROUND HANDLER	OPERATIONS PHONE CONTACT	PRIMARY DEICE VENDOR	PHONE NUMBER	BACK-UP DEICE VENDOR	PHONE NUMBER
AMERICAN AIRLINES - PIEDMONT	804-614-3730	PIEDMONT	804-614-3730	AERO INDUSTRIES	804-222-7211
ALLEGiant AIR - TREGO-DUGAN	702-830-5897	MILLION AIR	804-222-3700	N/A	N/A
BREEZE AIRWAYS GAT		AERO INDUSTRIES	804-222-7211	N/A	N/A
DELTA AIRLINES - DGS/Unifi	804-236-2140	DGS/UNIFI	804-236-2140	N/A	N/A
JETBLUE AIRWAYS – GAT	804-222-3621	AERO INDUSTRIES	804-222-7211	N/A	N/A
SPIRIT AIRLINES GAT	804-404-9422	AERO INDUSTRIES	804-222-7211	N/A	N/A
SOUTHWEST AIRLINES- GAT	804-663-5065	AERO INDUSTRIES	804-222-7211	N/A	N/A
UNITED AIRLINES – UNITED GROUND EXP	804-484-1727	UNITED GROUND EXPRESS (UGE)	804-484-1727	AERO INDUSTRIES	804-222-7211