



Operations Memorandum

To: CVG Airlines and Tenants

Subject: Revised 2018 Winter Operations Overview to Incorporate Deice Pad 13

Date: January 11, 2018

Effective Immediately

This Operations Memorandum incorporates standard winter operations topics including reactivation of the common-use deice Pad 13. Pad 13 has sufficient capacity to support all passenger scheduled carrier operations plus FedEx activity. As such, Pad 13 will be integrated into the operations in the coming weeks and become the single primary pad for all scheduled carrier operators. The other deice pads will be available for secondary purposes (e.g. major event warranting use, pump failure, etc.) Operators are required to share among all staff for awareness and effective communication, understanding each groups' role for a safe and efficient winter season.

Pad 13

Overview

Common-use Deice Pad (approximately October through April)

- Supports centralized operation of
 - o ramp snow removal personnel and equipment
 - o deice personnel and equipment
 - o containment of spent deice fluid and reclamation processes
- Seven (7) alphabetic line designators, Lines A through G *oriented north-to-south*
 - o 2018 assignments:
 - IDS (Allegiant, FedEx and United): Lines A & B
 - Southwest: Line C
 - Menzies (Air Canada, American and Frontier): Lines D & E
 - Delta: Lines F & G
- All Lines are to be considered common-use and non-exclusive, supporting alternate access in the event a carrier/operator experiences and issue causing a line(s) to be temporarily closed for further use.
- All Lines support Group III aircraft; design based on A321-Neo and B737-800
- Lines A and G support Group IV aircraft (e.g. 767)

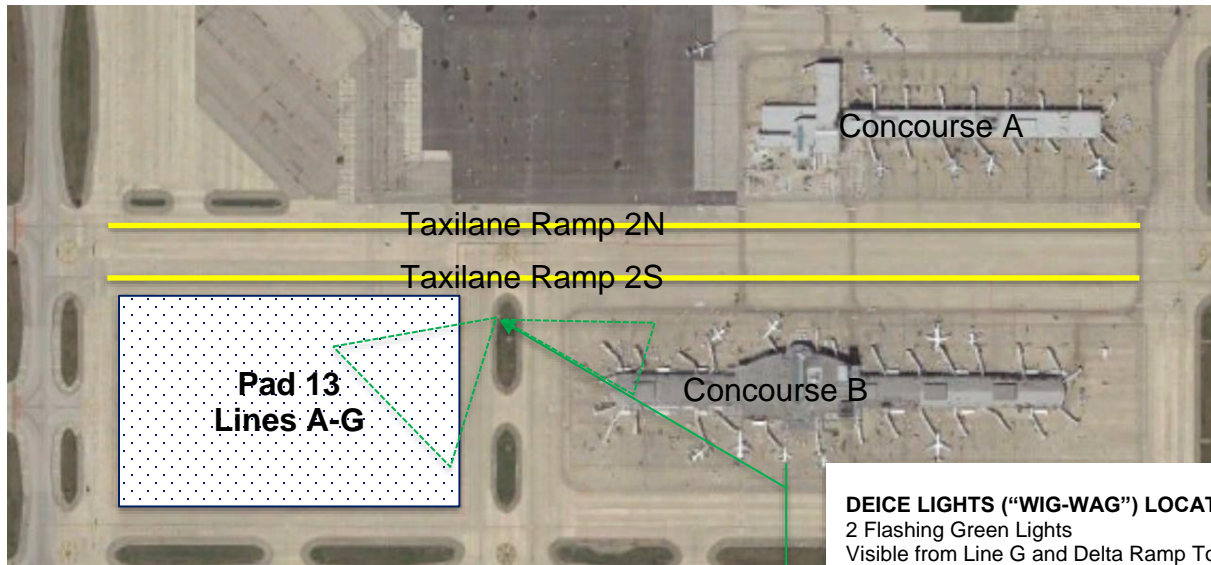
- This design group *must* exit Pad 13 using Lines A or G to use the approved Group IV adjacent taxiways (Line A – Taxiway Foxtrot, Line G – Taxiway Echo)
- The deice operator is responsible for guidance of the aircraft into the final deice position. *Given the size aircraft, and to maximize the use of the corner positions, taxi onto the pad should utilize Line B to angle into Line A stop bar and Line F to angle into Line G stop bar (see depiction)*
 - **NOTE:** Group IV Wide-body equipment and long Narrow-body equipment (MD80), these aircraft may be parked at an angle into Line A and G to support deice fluid containment. Deice operator is responsible for guiding company aircraft into the Deice Zone and directing other company aircraft to hold short until the wide/long-narrow body is in final position. Deice operator is to consider angled jet blast that may result and take corrective action should positioning create a hazard.
- Sufficient north-south distance exists to support multiple aircraft queuing on a single line; aircraft will be prohibited from blocking Taxilanes Ramp 2N and/or 2S.
 - This is critical to allow for arriving aircraft flow from Runway 18C/36C to the Concourses
 - Delta Ramp Tower will primarily communicate **taxi instructions using Taxilane Ramp 2N when guiding aircraft TO Pad 13 and Taxilane Ramp 2S when guiding aircraft FROM Runway 18/36C.**
- Given low light conditions on Pad 13, deice operators may opt to rent/purchase/place their own light plants within the red-hashed Vehicle Safety Zone.
 - This zone provides a width of 25' clearance edge to edge. During a live demonstration using a B737-800 an additional 24.5' clearance from wingtip to Vehicle Safety Zone was measured. There is ample clearance for deice trucks and staged light plant(s) at the sole discretion of the deice operator who will assume all safety responsibilities associated with the same. Should this be optioned, coordination must occur with KCAB in support of any area treatment or expedited snow removal.

Remote Aircraft Parking (approximately May through September)

- In brief, 14 additional remote parking positions *oriented diagonally*

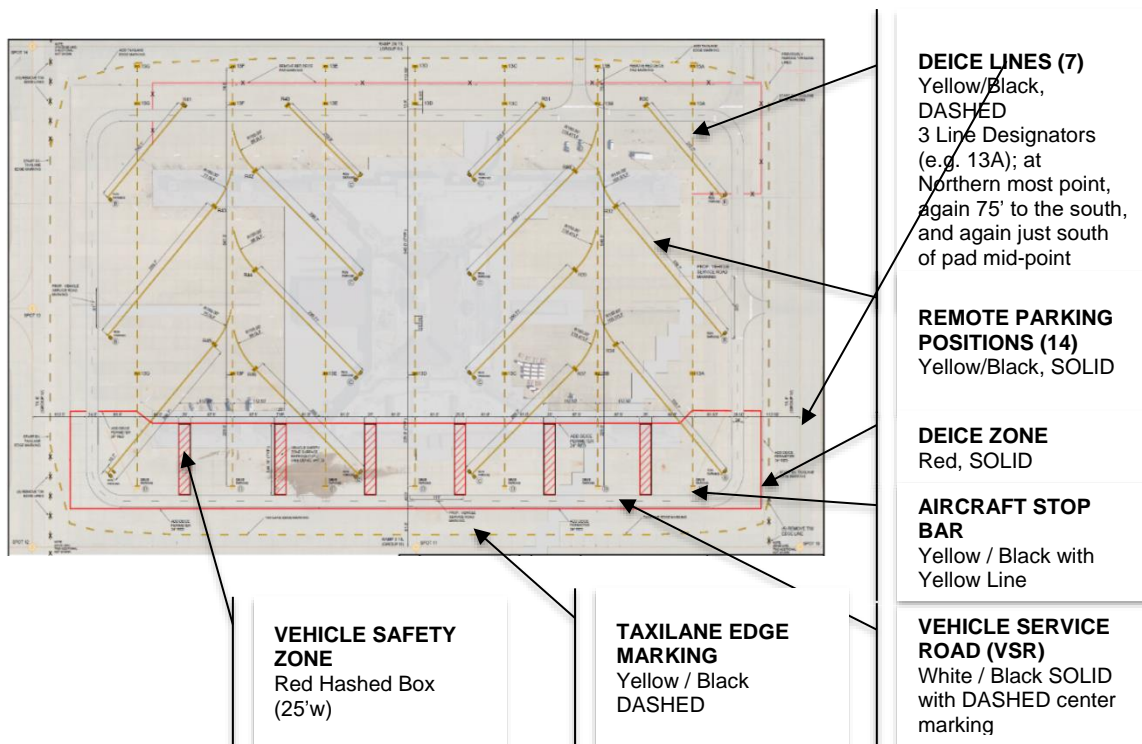
- o Six (6) edge positions supporting Group IV (e.g. B767-4)
 - o Eight (8) central positions supporting Group III (e.g. A321-Neo, B737-800)
- Additional information and use instructions will be issued Spring 2018

Location



DEICE LIGHTS ("WIG-WAG") LOCATION
 2 Flashing Green Lights
 Visible from Line G and Delta Ramp Tower

Layout [full page version depicted later in this release]



DEICE LINES (7)
 Yellow/Black, DASHED
 3 Line Designators (e.g. 13A); at Northern most point, again 75' to the south, and again just south of pad mid-point

REMOTE PARKING POSITIONS (14)
 Yellow/Black, SOLID

DEICE ZONE
 Red, SOLID

AIRCRAFT STOP BAR
 Yellow / Black with Yellow Line

VEHICLE SERVICE ROAD (VSR)
 White / Black SOLID with DASHED center marking

VEHICLE SAFETY ZONE
 Red Hashed Box (25'w)

TAXILANE EDGE MARKING
 Yellow / Black DASHED

Deicing (also applies during training events)

Gate Departure

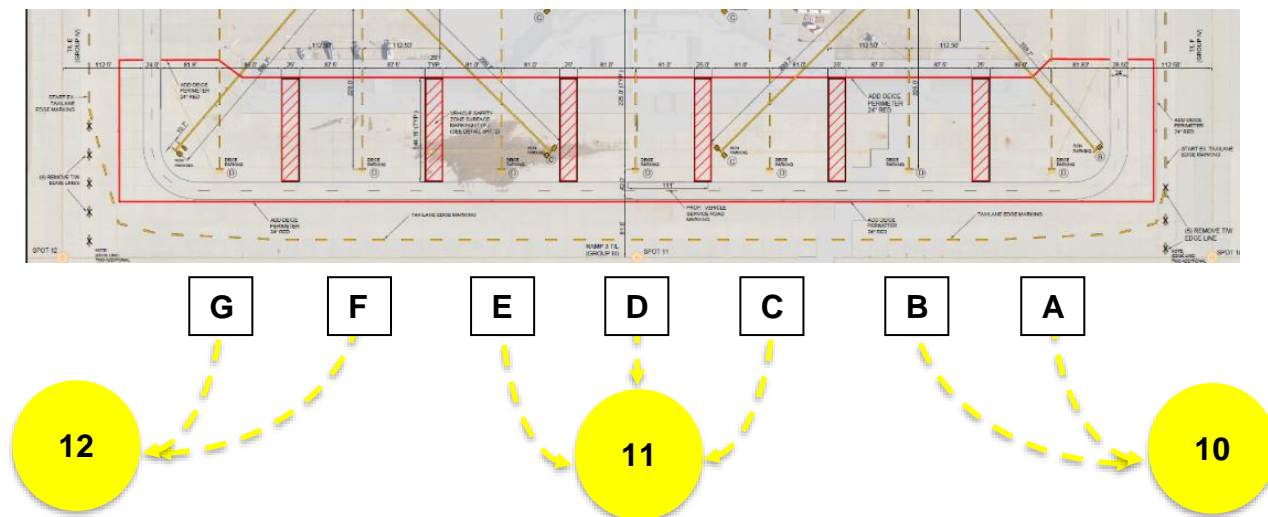
As a reminder to all airlines/ground handlers, airlines and airports are required by law to mitigate extended tarmac delays. We ask that the following procedural steps be used when sending aircraft to the pad.

1. Airline or Contract Ops/Ramp Personnel
 - a. Prior to pushback:
 - i. Relay numeric pad and alphabetic line assignment (Pad 13 only) to flight crew.
 1. Communicating pad and lane assignment, i.e. "Pad 13, Line A", is critical to ensure that other taxi communications with Delta and/or FAA ground controllers are not confused with taxilane names, "Taxilane Foxtrot"
 - ii. Confirm with Deice team that the assigned pad/pad line is clear and able to accept; the airline/ground handler must meter aircraft off the gates and to the assigned pad to prevent extended tarmac delays and deice holdover time concerns.
 1. KCAB has asked Delta Ramp Tower to provide feedback if effective metering is not used resulting in taxilane congestion while waiting for the assigned pad.
 2. KCAB, like airlines, is bound to Extended Tarmac Contingency plans as mandated by the DOT. KCAB will take proactive measures to ensure passengers are not stranded onboard aircraft beyond three hours (domestic) or four hours (international) or greater. KCAB's plan may be found in detail at CVGairport.com.
2. Flight Crew
 - a. Receives numeric pad and alphabetic line assignment (Pad 13 only)
 - b. Communicates numeric pad and alphabetic line assignment (Pad 13 only) to Delta Ramp Tower.
 - c. Receives taxi clearance from Delta Ramp Tower.
 - d. Communicates to ramp to commence pushback.
 - e. Taxis to deice pad via Delta Ramp Tower instructions.
 - f. Remain on Delta Ramp Tower frequency 130.9 at all times until departing the Pad.
 - i. This supports
 1. Radioing emergency conditions (e.g. smoke in the cabin)
 2. Listening for "Pad 13 Emergency All-Stop", if issued by Delta Ramp

Tower to cease all movement on the pad for emergent safety conditions.

- g. Identifies alphabetic line by
 - i. Visually identifying company/contracted deice vehicle acting as a "Follow-Me" guide that will be positioned on line assignment
 - 1. To be used by the first aircraft into the pad
 - a. Also to be used during low visibility operations, upon request to company/contracted deice vehicle; be alert for activation of the Airport's surface movement guidance systems (SMGS) plan that may be in place during extreme low visibility conditions.
 - ii. Visually identifying preceding company aircraft tail and/or other operator(s) assigned to the same contracted deice vendor.
- h. Proceed onto the designated line assignment.
 - i. For the first aircraft on the line assignment, hold short just south of the mid-point (line designator box) until visual confirmation is given by the deice operator to bring the aircraft to a full stop inside the Deice Zone.
 - ii. Wide-body (B767) or long Narrow-body (MD80) may be positioned at an angle to support deice fluid containment. Follow the company marshaller accordingly. The company deice operator is responsible for guiding company aircraft into the Deice Zone and directing other company aircraft to hold short until the wide/long-narrow body is in final position.
 - iii. Multiple aircraft may occupy the designated line. This is at the flight crew's discretion based upon the safe proximity to the aircraft ahead.
 - 1. The last aircraft in line must be inside the north vehicle service road boundary to prevent blocking Taxiway Ramp 2S. The deice operator is responsible for ensuring this standard is maintained or advising last aircraft crew by radio accordingly.
- i. Follow routine company deicing procedures.
- j. Contact Delta Ramp Tower for authorization to depart the pad and taxi instructions to the nearest intersection assignment and subsequent hand-off to FAA Ground. DO NOT contact FAA Ground from Pad 13. Flight crews MUST wait until they reach the designated FAA intersection "Spot" assignment.
 - i. Each deice line designation has an FAA intersection "Spot" assignment. They are (see depiction below):
 - 1. 13A & B – Ramp 3, Spot 10
 - 2. 13C, D, E – Ramp 3, Spot 11

3. 13F & G – Ramp 3, Spot 12



k. Once at the Spot, contact FAA Ground Control for further taxi sequencing.
[Depiction of Pad 13 Aircraft Line Departure Flow to Assigned FAA Intersection "Spot"]

3. Deice Team

- a. Confirms deice pad is open and operational.
 - i. Pad indicator lights ("wig-wag") must be flashing green.
 - ii. Notify 7777 to activate pad containment pumps if pad light is not flashing green. No deicing may occur until the pumps have been activated and lights flashing green.
 - iii. Deice personnel *must not* assume that another deice operator has verified the lights are active and pad ready for deice; if the deice operator is unable to visually see the lights from their assigned position (e.g. blowing snow), they must drive to a position using the vehicle service road where they can visually verify the lights have been activated.
- b. Confirm for Ramp/Ops Personnel that you are ready to accept aircraft.
- c. Monitor two radio frequencies at all times.
 - i. Company frequency for direct communication with the flight crew.
 - ii. Delta Ramp Tower frequency 130.9 to maintain listen-and-avoid situational awareness for taxi instructions for all aircraft departing the pad.

1. Situational awareness for aircraft departing the pad is critical to everyone's safety in consideration for
 - a. Aircraft cleared to cross the vehicle service road
 - b. Jet blast hazards
 - c. Wayward aircraft taxiing in the incorrect departure direction and/or aircraft taxiing along the adjacent taxilane, given the deice vehicles in/adjacent to the vehicle service road (VSR).
- d. Using the deice vehicle, act as a "Follow-Me" guide for company aircraft.
 - i. Stage towards the northern part of the pad on the designated line until the aircraft confirms they have a visual on your vehicle
 - ii. Proceed in a southbound direction on the designated line.
 1. Use the "Follow-Me" steps for the first aircraft into the pad.
 - a. Also to be used during low visibility operations, upon request to company/contracted deice vehicle; be alert for activation of the Airport's surface movement guidance systems (SMGS) plan that may be in place during extreme low visibility conditions.
 2. For the first aircraft in the pad, radio to the flight crew to hold short just south of the mid-point (line designator box) to allow the deice personnel to safely move out of the way and continue routine marshalling practices to the stop bar.
- e. Monitor succeeding aircraft in queue. Multiple aircraft may occupy the designated line. This is at the flight crew's discretion based upon the safe proximity to the aircraft ahead.
 - i. The last aircraft in line must be inside the north vehicle service road boundary to prevent blocking Taxilane Ramp 2S. The deice operator is responsible for ensuring this standard is maintained or advising last aircraft crew by radio accordingly.
- f. Upon completion of deicing the aircraft, radio the pilot to contact Delta Ramp tower for further taxi direction to the assigned intersection assignment and hand-off to FAA Tower.
 - i. Monitoring the Delta Ramp Tower, confirm that the company aircraft has been given the assigned Ramp 3 Spot intersection. For express safety concerns, under no circumstances should the company marshaller give the all-clear to taxi signal without listening for this confirmation.
- g. Upon completion of deicing services, the designated person will update KCAB's

SurveyMonkey data capture tool. The site can be found at:

<https://www.surveymonkey.com/r/DeicingReport2017-2018>

*NOTE: The survey is available from any mobile smart device or desktop computer.

- h. Deice personnel *must* exit Pad 13 using the north vehicle service road.

Delta Ramp Tower

- i. Visually confirm the Wig-Wags are operating for Pad 13.
 - j. Upon request, clears flight crew to commence pushback and taxi to pad and line assignment.
 - k. Maintains orderly flow of aircraft to Pad 13 using Taxilane Ramp 2N.
 - l. Maintains a means of access to the Concourses using Taxilane Ramp 2S.
 - m. Monitor succeeding aircraft in queue that no more than three (3) are on a designated line at any one time.
 - i. One in the Deice Zone and two in queue.
 - ii. The third aircraft in line must be inside the vehicle service road boundary to prevent blocking Taxilane Ramp 2S.
 - n. Be alert for activation of the Airport's surface movement guidance systems (SMGS) plan that may be in place during extreme low visibility conditions.
 - o. Monitors ramp control of Pad 13 and alerting aircraft and deice personnel, who are monitoring ramp control, of any taxi hazards.
 - i. **NOTE: If emergency circumstances are warranted, the call "PAD 13 EMERGENCY ALL-STOP" is to be used for all deice operators to cease deicing, followed by identification of the hazard and see-and-avoid instructions.**
 - p. Upon request, clears flight crew to depart pad and taxi to the FAA Intersection "Spot", as assigned:
 - i. 13A & B – Ramp 3, Spot 10
 - ii. 13C, D, E – Ramp 3, Spot 11
 - iii. 13F & G – Ramp 3, Spot 12
4. KCAB Ramp Snow Removal and Storm Water Treatment Personnel
- a. Monitor Pad conditions for snow removal purposes.
 - b. Open/Close valves according to conditions.
 - c. Monitor and utilize vacuum vehicle for excess glycol overspray outside Deice Zone.

Alternate Pad Availability

- Pad 8: Wide-body Group V aircraft (e.g. 747-4)
- Pad 10: Upon request (emergency conditions only)
- Pad 2: Upon request (emergency conditions only)
- Pad 7: Upon request (emergency conditions only)
- Pad 12: Delta Private Jets

Deice Pad Locations and Assignments

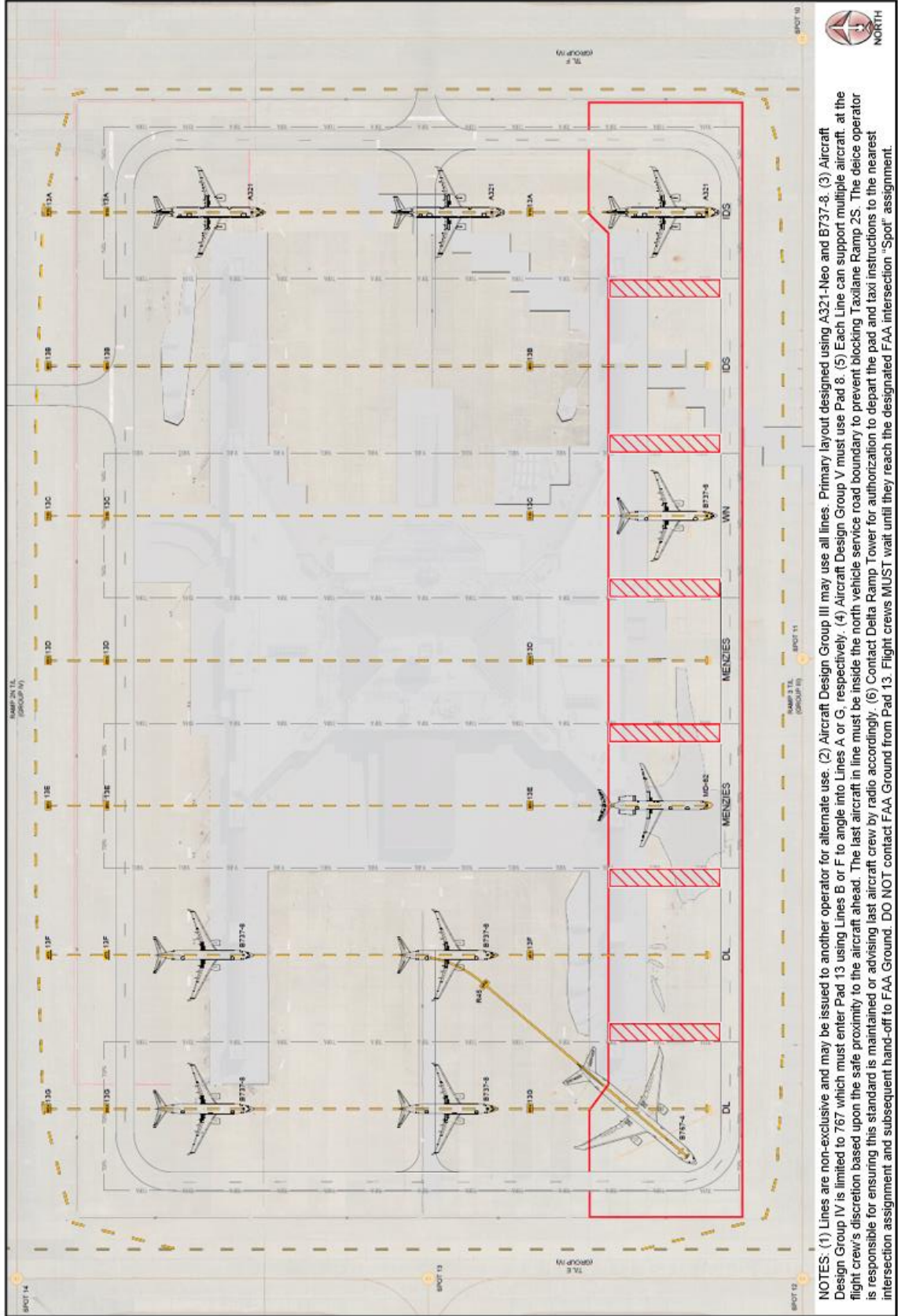
GRADUAL INTEGRATION OF SCHEDULED PASSENGER AIRLINES BEGINNING JANUARY 2018

Not for Navigational Purposes



Deice Pad 13, Lines A through G

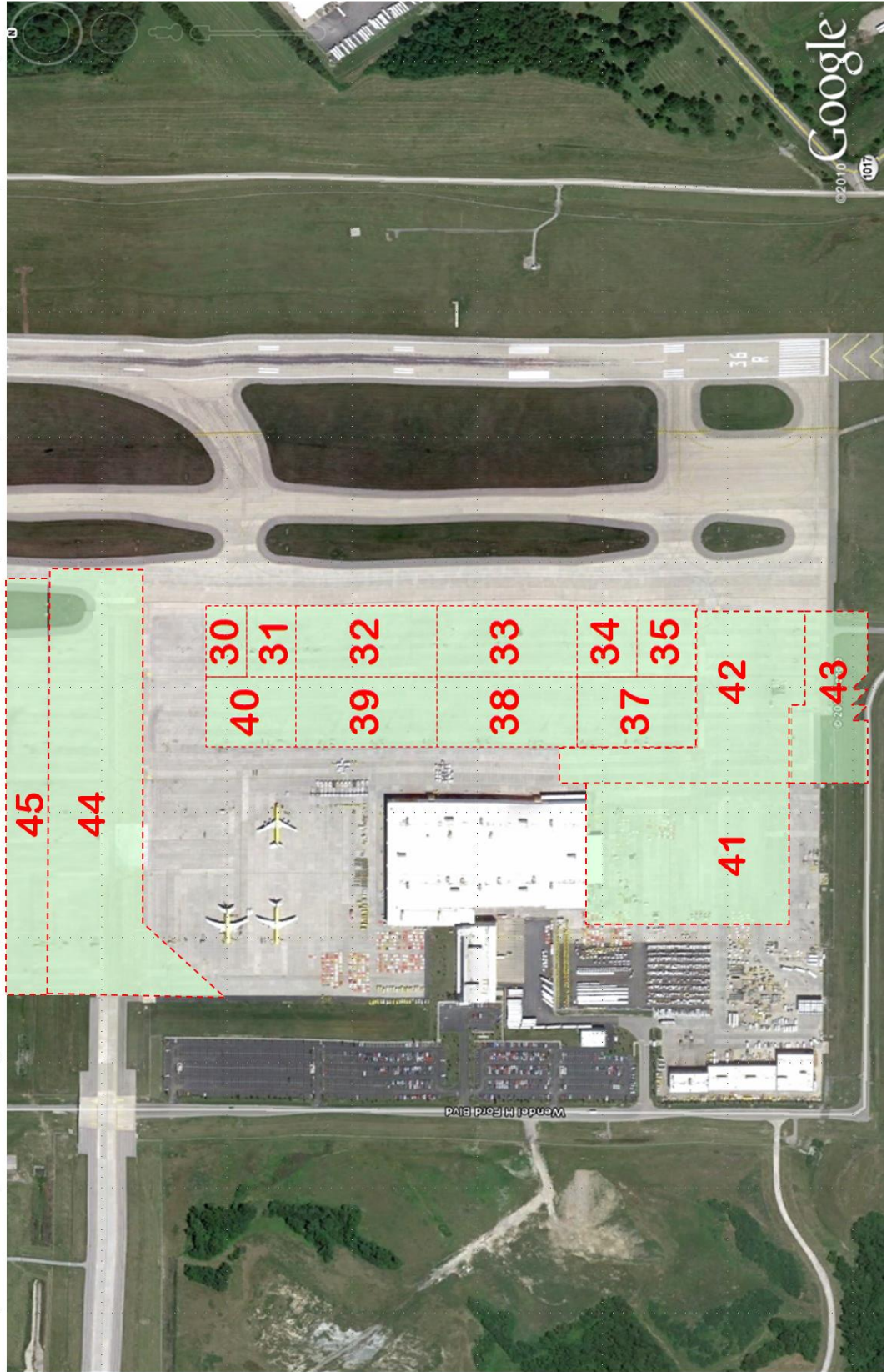
January 2018



NOTES: (1) Lines are non-exclusive and may be issued to another operator for alternate use. (2) Aircraft Design Group III may use all lines. Primary layout designed using A321-Neo and B737-8. (3) Aircraft Design Group IV is limited to 767 which must enter Pad 13 using Lines B or F to angle into Lines A or G, respectively. (4) Aircraft Design Group V must use Pad 8. (5) Each Line can support multiple aircraft. at the flight crew's discretion based upon the safe proximity to the aircraft ahead. The last aircraft in line must be inside the north vehicle service road boundary to prevent blocking Taxiway Ramp 2S. The deice operator is responsible for ensuring this standard is maintained or advising last aircraft crew by radio accordingly. (6) Contact Delta Ramp Tower for authorization to depart the pad and taxi instructions to the nearest intersection assignment and subsequent hand-off to FAA Ground. DO NOT contact FAA Ground from Pad 13. Flight crews MUST wait until they reach the designated FAA intersection "Spot" assignment.

Deice Pad Locations

AMAZON & DHL 2017-2018
 Not for Navigational Purposes



General Practices

Pre-Event Conference Calls

Tenant leaders have been invited to participate on Pre-Event Weather Conference Calls. If invited, you will receive an advance email briefing and call-in number. Participation on these calls has proven to be very helpful towards coordinating safe and efficient efforts across the Airport community; please ensure that your organization is represented. As personnel or roles change within your organization, please notify KCAB so that the invitee list may be updated.

Passenger Loading Bridges (PLB)

Concourse bridges are equipped with floor heat. This feature only heats the cab floor portion that is exposed to the elements and designed to prevent ice and snow build up on the exterior cab floor. Activating this feature may be done from the control console. The console button/switch will likely be labeled 'floor heat' or 'cab floor deice'. [Light off = Heat off. Light on = Heat on]. Staff should not turn off the heat feature anytime there is a chance of precipitation during the winter months. The feature will cycle on and off as needed anytime the temperature is below 40deg F.

Roll-up doors on the bridge exterior and access doors on the interior should be closed whenever possible. This will help retain heat in the Concourses and minimize temperature fluctuations throughout the facilities.

Snow Clearing, Ramp and Walkway Preventative Measures

As outlined during the annual Winter Operations coordination meeting with tenant leaders, KCAB's priority is with maintaining primary runways, taxiways, and roadways. As conditions permit, KCAB units will clear snow closer to the gate areas and buildings. The tenant responsibility is to clear and maintain leased and per-turn gates. Staff must shovel and plow snow away from the Concourses out to the service road where KCAB units will remove and pile in appropriate locations. KCAB has provided approved snow-melt product (NAC) to tenants to apply to walkways and ramp areas prior to events and to areas susceptible to refreezing. *Staff is not permitted to use any salt product on the Aircraft Operations Area (AOA) ramp at any time.* Supplies will be periodically checked and replenished.

During significant events, the pre-Event coordination call with tenant leaders will discuss planned times for KCAB large snow plow units to assist with gate area snow removal. Tenant staff must remove all aircraft support equipment (GSE, chocks, cones, etc.) away from the gate, positioning those items close to the Concourses. This allows for the plows to clear large paths in short time and without having to maneuver around obstacles.

Late Operations

Each airline/ground handler is required to notify TSA Operations Control Center well before regularly scheduled closing of late departing flights. TSA reserves the right to extend operating hours or close on-schedule.

For late arriving international flights required to clear Customs and after TSA FIS closure, the airline/ground handler must coordinate with Customs and Border Protection (CBP) as well as KCAB (7777). This is to ensure adequate staff is available to process (CBP) and exit/transport (KCAB) from Concourse B to the non-secure side of the Terminal.

Thank you in advance for your support in these collective efforts.